

SPECIAL CONDITIONS

- ❖ Bidder Shall Quote 100% quantities as required in BOQ.
- ❖ If the bidder does not possess the prototype approval for the offered material according to **PPMC-DS-01: 2026 (Amended to-date)**, as per approved specification, the bidder shall be bound to obtain the prototype approval from PPMC Department before start of mass production within 30 days of issuance of PO/Work order. The period of 30 days may be extended by MEPCO for any required period subject to the solid grounds/justification from the bidder. All expenses of testing charges will have to be borne by the manufacturer /contractor. Any change suggested during prototype testing for compliance of specification shall have to be incorporated without any extra price or claim. If the prototype sample fails, the material shall be improved and re-offered for prototype testing to PPMC department. The time taken for improvement in samples and resubmission of drawings will not entitle the manufacturer / contractor to claim extension in delivery period on this account.

APMS ordering code "APMS-MC-OTL" is applicable.

If prototype fails second time, the performance guarantee will be forfeited in favour of MEPCO besides other necessary actions as deemed necessary.

The successful Bidder shall complete the Installation of APMS along with accessories within the stipulated period of 60 days from issuance of PO/Work order.

- ❖ Bidder shall be responsible to synchronize all installed APMS with PITC MDM. Any equipment (if required) will be the responsibility of the successful bidder.
- ❖ The MDC (driver software), having perpetual license, must be complaint with latest PITC UDIL version (published at PITC's website pitc.com.pk). The successful bidder will be responsible for integrating all of the APMS with PITC's MDM.
- ❖ Hardware for HES/MDC will be provided by the successful bidder, including driver software without any additional cost.
- ❖ MEPCO will Provide the required SIMs for Communication.
- ❖ MEPCO reserves the right to delete any category of APMS / Allied accessories and their installation at the time of issuance of LOA / Work Order.
- ❖ MEPCO reserves the right to increase / decrease the P.O/ Work order quantities upto 15% at the time of issuance of Letter of Acceptance (LOA) / Work Order.

❖ **Work Execution Plan**

Within fifteen (15) days of issuance of Letter of Acceptance (LOA) and prior to

commencement of work, the successful bidder shall submit a detailed Work Execution Plan duly approved by its authorized representative. The Work Execution Plan shall include, but not be limited to: (i) Project implementation methodology; (ii) Detailed activity schedule with milestones; (iii) Resource deployment plan; (iv) Risk management and mitigation plan; (v) Quality assurance and quality control procedures; (vi) Cybersecurity implementation approach; (vii) Testing and commissioning methodology; (viii) Training and knowledge transfer plan; (ix) Detailed organization chart; and (x) Curriculum Vitae (CVs), qualifications, certifications, roles and responsibilities of all Key Personnel proposed for the project.

For data transfers b/w meter to MDC, the DLMS/COSEM certificates will suffice. However, to ensure that MDC has not manipulated any primary or derived electrical quantities coming from meter while transferring them to UDIL schema, the successful bidder will provide the certificate as per below format:

“It is certified that primary and derived electrical quantities from MDC schema to UDIL schema will be without any treatment. If any discrepancy is identified, the bidder will be responsible leading to revalidation of UDIL certificate or cancellation of UDIL as per decision taken jointly by MEPCO & PITC”.

During Testing, the successful bidder will have remote access to their MDC for fixing issues. However, once the UDIL complaint MDC is installed in production environment of PITC data center, the bidders will not have any remote access to their MDC. However, they can always visit PITC data center, with prior submission of Visit Request, mentioning the reason, and its subsequent approval. PITC team will supervise the activities performed by the vendor.

❖ The bidder shall be responsible for

- Conduct detailed site survey before installation.
 - Verify transformer ratings and field conditions.
 - Verify availability of mounting space and communication signals.
 - Coordinate with concerned MEPCO field staff. However, MEPCO will facilitate for provision of any required information by the bidder for installation.
- ❖ The successful bidder has to submit Latest UDIL compliance requirements to PITC and obtain UDIL compliance certificate from PITC within 14 days from the issuance date of Letter of Acceptance.

Following SOP will be observed for UDIL Testing:

1. Vendor will submit UDIL Performa with sample meters and other prerequisites.

2. PITC will start UDIL testing and report issues (if any) to vendor via official correspondence, who will fix them & intimate PITC. This iteration will continue for 7 days (max).

For the last 7 days PITC will perform end-to-end compliance/validation / stress testing & intimate the vendor about ultimate result (Pass or Fail).

- ❖ Performance security in shape of **Bank Guarantee / CDR** equal to 05% (Five percent) of the total value of contract / P.O (**including GST & PST**) shall be furnished with the acceptance of LOI within 14 days from any scheduled bank of Pakistan in favour of **CEO MEPCO**.

- ❖ **INSPECTION:**

Inspection of the material will be carried out at your premises by the Chief Engineer (M.I) Lahore or his authorized representative along with MEPCO representative. Notice in writing shall have to be given to the inspecting officer & copy to this office by you when the material against the order is ready for inspection. All reasonable facilities as provided in the specification or followed by the industry or trade in general shall have to be afforded to the inspecting officer by you at your expenses including travelling, boarding / lodging etc: for carrying out inspection.

Delivery period is the essence of the purchase order and delivery must be completed not later than the dates specified. 1st day of inspection or 15th day of inspection call whichever is earlier, shall be reckoned as date of delivery of Store to MEPCO Consignee provided the goods accepted for supply have been delivered within 20 days of issue of Inspection Certificate subject to the condition that the supplier / manufacturer offers the material for Inspection at least 15-days prior to the due date and the offer is not rejected due to being a fake call or material not conforming to the specification.

- ❖ **PAYMENT CLAUSE:**

- ❖ **Schedule No.1 Procurement of Material**

(This will be based on actual delivery of APMS/ Allied Material in Consignee Regional Stores (i.e., Multan, Bahawalpur, Rahim Yar Khan & Sahiwal).

100% payment of delivered goods will be made on delivery of material for schedule 1.

- ❖ **Schedule No.2 Installation & Services**

80% after complete installation and execution of work of schedule 2. verified by following MEPCO nominated officer (s) / Committee.

1. CE CSD
2. DG (IT)
3. Concerned SE

The payment will be made consignment wise. Each consignment will consist of 20% APMS installation. The concerned committee mentioned in bid document will verify the 20% APMS installation & commissioning. However, in each consignment 20% payment will be retained. which will be released after the committee report already mentioned above.

Remaining 20% payment will be released after Two (02) months successful operation verified by DG (IT).

Payment Regarding Material (as per Schedule 1)

The Payment will be made directly by the Chief Financial Officer MEPCO Multan or through irrevocable inland letter of credit at sight from scheduled bank of Pakistan. All charges relating to L/C opening and negotiation together with subsequent amendments shall be borne by the contractor. The payment / negotiation of L/C will be made on presentation of following documents.

- i) Invoice of supplied material in triplicate duly approved by Director (Procurement) and pre-audited by the office of CFO MEPCO.
- ii) Delivery Challan and GRN duly stamped and signed by the Regional Store Manager MEPCO Ltd. Concerned.
- iii) Warranty certificate / non-payment certificate.
- iv) Confirmation of Director (Procurement) Dist: MEPCO Ltd. Multan about acceptance of performance bond in case of first claim only.
- v) Inspection certificate issued by Chief Engineer (M.I) PEPCO or his authorized representative.
- vi) The payment of the Sales tax shall be made on presentation of following documents:
 - a. Sales tax invoice as per section-23 of Sales tax act 1990.
 - b. Sales tax cum payment Challan for the concerned monthly duly paid into Government treasury.
 - c. In case the manufacturers who pay lump sum Sales tax, they shall also submit an affidavit on non-judicial paper separately that paid Challan includes the above amount of Sales tax for supply of above mentioned invoices/items.

PARTIAL DELIVERIES AND PART PAYMENT ARE ALLOWED.

Payment Regarding Installation of APMS / Allied Accessories (As per Schedule 2)

The Payment will be made directly by the Chief Financial Officer MEPCO Multan or through irrevocable inland letter of credit at sight from scheduled bank of Pakistan. All charges relating to L/C opening and negotiation together with subsequent amendments shall be borne by the contractor. The payment / negotiation of L/C will be made on presentation of following documents.

- i) Invoice of supplied material in triplicate duly approved by Manager (Procurement) and pre-audited by the Finance Director MEPCO.
- ii) Warranty certificate / non-payment certificate.
- iii) Confirmation of Director (Procurement) Dist: MEPCO Ltd. Multan about acceptance of performance bond in case of first claim only.
- iv) For 80% payment, Verification / Completion Certificate Issued by MEPCO Committee & for remaining 20% payment, DG (IT) Verification report regarding TWO (02) months successful operation.
- v) The payment of the Sales tax shall be made on presentation of following documents:

- a. Sales tax invoice as per section-23 of Sales tax act 1990.
- b. Sales tax cum payment Challan for the concerned monthly duly paid into Government treasury.
- c. In case the manufacturers who pay lump sum Sales tax, they shall also submit an affidavit on non-judicial paper separately that paid Challan includes the above amount of Sales tax for supply of above mentioned invoices/items.

❖ **WARRANTY:**

Bidder will furnish a warranty certificate, certifying that the goods supplied conform exactly to the specifications laid down in the purchase order and are brand new and that in the event of the material being found defective or not conforming to the specification/particular governing supply at the time of delivery and for a period of Five (05) years, bidder will be held responsible for losses & that the unacceptable goods shall be substituted with the accepted goods at your expenses after receipt at ex-works. The damaged APMS / Allied Material under warranty period will be repaired by the manufacturers free of cost within 60 days of receipt of irrespective of the condition under intimation to Chief Engineer PPMC. The same will be returned to concern Regional Stores MEPCO & accordingly will be installed by the manufacturer after repair within 30 days as it receipts, otherwise, cost of material will be recovered from your bills which will be released on healthy stores.



The blacklisting of firms and contractors will be carried out as per Blacklisting Policy of MEPCO available at MEPCO website.



The parties agree that this agreement and any subsequent agreement (s) shall be governed by, applied to, interpreted and construed in accordance with the laws of the Islamic Republic of Pakistan.

- ❖ In relation to any legal action or proceedings rising out of or in connection with this agreement, the parties irrevocably submit to the exclusive jurisdiction of the competent courts of Law at Multan, Pakistan.
- ❖ PPRA Rules (Amended to-date) will prevail during the whole procurement process.
- ❖ This Tender is governed by General Conditions of Contract for Purchase by WAPDA Dated 12.08.1984 amended to-date & latest Purchase Procedure, Registration Procedure, PEPCO Procurement Guidelines / instructions and PPRA Rules 2004 (Amended to-date).
- ❖ The quoted FCS price shall be firm and final valid for 120 days after opening date of tender and not be escalated / enhanced / adjusted for any reason what so ever.
- ❖ The prices include the present duties, taxes and 0.5 % inspection fee. In case however the present duties and taxes are increased or new taxes / duties are imposed on finished goods by the Govt. during the currency of contract, the same will be paid extra on production of documentary evidence. In case of decrease in duties/ taxes by Govt., the price will be decreased accordingly.
- ❖ The material supplied by the manufacturer should have the embossing of P.O. No. & name of manufacturer as per relevant specifications.

- ❖ The conditional bids / rates shall not be accepted.

Installation Requirements

Safety Requirements

Vendor shall ensure:

- Shutdown permits from MEPCO
- Use of insulated tools
- PPE for all workers
- Barricading of work area
- Compliance with electrical safety standards
- Safe working at height procedures

Any accident or damage during installation shall be responsibility of vendor.

Earthing

Earthing of APMS shall be carried out as per strictly in accordance with PPMC Specification No. PPMC-DS-01:2026

- Proper earthing shall be provided to APMS enclosure.
- Door-body earthing continuity shall be ensured.
- Sensor assembly grounding shall be provided through 6mm² copper wire.

Cabling

- All control cables shall be routed through PVC flexible conduits.
- Proper ferruling and tagging shall be provided.
- No loose wiring shall be acceptable.

Cable terminations shall be properly crimped

Technical Specifications
SPECIFICATIONS- TECHNICAL PROVISIONS

1. GENERAL

- 1.1 All design, equipment, materials and workmanship shall comply with and be tested in accordance with requirements of the specifications. Equipment or parts which are not covered by the specifications shall comply with rules, codes and regulations of the international electro-technical commission or approved National Standards bodies.
- 1.2 The general intent of these specifications is to require the supply of equipment and materials equal or superior to those actually described herein. Unless otherwise stated, reference to the brand or manufacture, if made is only for the sake of comparison as to type, design, character or quality of the equipment and material desired and shall not be interpreted as eliminating other equipment and material of equal performance, quality and durability.
- 1.3 The offered APMS data (through vendor's MDC driver software) must be compliant to the latest Universal Data Integration Layer (UDIL), developed by PITC for multivendor interoperability, published at PITC website.
- 1.4 The LOI will be issued to most advantageous bidder. The successful bidder has to submit PITC UDIL compliance request and requirements for Tier-1 Certification to PITC within 14 days of issuance of LOI and obtain UDIL compliance Tier-1 certificate from PITC within 14 days as per PITC's SOP for UDIL Compliance Testing (from the submission of compliance requirements for Tier-I (extendible if both parties agreed), on latest PITC version applicable at the time of issuance of LOI. The performance guarantee shall be submitted within 14 days of issuance of UDIL certificate from PITC for Tier-1, then P.O will be issued.

The UDIL Compliance testing will comprise of two phases /Tiers as under:

a) UDIL Compliance Testing Tier-1 Certificate:

In this phase, the MDCs will be tested for UDIL compliance based on the request proforma submitted by the vendors and the additional checklist issued by MEPCO, derived from the PITC standard and duly vetted by PITC.

After successful completion of UDIL Compliance testing Tier-1 certificate will be issued.

b) UDIL Compliance Testing Tier-2 Certificate:

The Tier-2 Certificate shall be issued by a committee headed by the Director (Commercial), MEPCO, with the concerned Regional Manager (M&T), Director (IT) serving as members. The certificate shall be issued, in consultation with PITC, after 80% of the APMS have been installed and two successful billing cycles have been completed by MEPCO using the AMI solution.

- 1.5 The communication module shall be 4G and must be downward compatible to 2G without changing the SIM for remote metering system (PTA Compliant).
- 1.6 The bidder must have valid prototype approval for the offered material with 4G module according to relevant DDS and IEC standards (all amended to date). The successful bidder shall submit 3 Nos samples for Prototype Approval on 4G communication Module in case valid Prototype Approval as per WAPDA/NTDC/PPMC purchase procedure does not exist for the offered model/type. All tests shall be carried on the submitted prototype APMSs to ensure compliance to WAPDA/NTDC/PPMC and IEC specs. APMSs shall be subjected to all tests including type, routine and sample tests. Once approved such prototype approval shall be valid as per WAPDA/NTDC/PPMC purchase procedure.

(Maximum three months shall be allowed to the successful bidder which may be extended with the approval of MEPCO)

- 1.7 The supplied APMS will expose data and services as per specifications laid down in UDIL only. The APMS will be created in respective vendors' driver software to expose data and services in compliance with UDIL document. All necessary features for billing, instantaneous data, etc should be compliant with latest UDIL.
- 1.8 The successful bidder will ensure the appropriate security scheme implemented up to MDC. The bidder will be required to provide documents mentioning the mechanism for security of data from APMS to MDC.
- 1.9 The successful bidder will be responsible for provision of functionality of software in the APMS, security of software programming and re-programming in the field and will provide necessary backup warranty and training to officers/officials of MEPCO as recommended in the relevant clauses of standards. The bidder will also provide documents mentioning the mechanism for implementing security of software programming. Bidder will ensure that date/time of APMS will be synchronize with that of MDC and MDC date/time will be synchronized with Network Time Protocol (NTP). PITC will provide NTP server for synchronization of date/time of APMS with MDC.
- 1.10 Successful bidder(s) is/are required to provide facility / gadget for data retrieval for downloading through APMS optical port in case of damage of APMS, LCD/ Display wash or any critical issue. In case of damage of APMS, the security of EEPROM must be ensured and data should be readable from EEPROM. In this regard the bidder shall provide read only software on CD / DVD along with essential accessories to MEPCO M&T offices. Each APMS should have unique password. The list of APMS(s) along with their password should be provided to M&T offices.
- 1.11 The successful bidder will provide PC application for APMS configuration and mapping along with training to personnel from MEPCO AMI cell and M&T for APMS configuration and testing prior to its installation in the field.
- 1.12 MDC must support SIM identification, installed in APMS which should be identifiable through UDIL Service.
- 1.13 Vendor will provision hardware to support his quoted No of APMS(s) for PITC vetting. PITC will provide the facility to host hardware as per PITC's prevailing deployment architecture and MDC should have the capability to retain minimum 90 days data in its database. Vendors may approach PITC to understand hardware and MDC deployment architecture before the pre-bid conference.
- 1.14 MDC must be capable to handle all number of awarded APMS(s) concurrently.
- 1.15 MDC should be able to support retrieval of scheduled APMS data as per programmed / configurable interval (e.g 05 Minutes) for APMS. APMS would be declared muted if the last successful read was before 03 hours. Number of such muted APMS shall not be more than 2% at any point up to the warranty period within the system. MDC should be able to retrieve missing data from APMS(s) after restoration without compromising system performance also issues regarding error in data or missing data shall be treated as APMS mute. MEPCO will provide Consumers wise details where APMS are to be installed subsequently the SIMs will be provided on the basis of bidder's field survey for best network availability (signal strength and stability of signal strength over 24 hours) on all APMS(s). Missing Read means Missing of schedules and on demand data. Error in data means incomplete/wrong data receiving at MDC. This will be checked through MDM as vendor's MDC will be available at MDM.
- 1.16 In case of number of muted APMS(s) exceeds more than 2% as pointed out by Incharge AMI Cell MEPCO/PITC, an investigation shall be conducted into the matter and reasons other than declared scheduled communication outage by the Network provider, transformer damages, scheduled load shedding, cable breakdowns and ERO etc., shall be on Bidder's liability. If it is observed that the muted APMS(s) ratio is more than 2%, the Supplier will be responsible to take remedial measures which includes but not limited to replacement of such APMS(s), or any other remedy proposed by

the MEPCO in case if the issue is not identified on account of SIM and TELCO. Such enquiries / investigations shall be conducted in liaison with PITC by Incharge AMI Cell MEPCO, DCM & XEN M&T of Concerned Circle & Vendor headed by Director (I.T) MEPCO. The outcome of the investigation proceedings shall be binding upon the Vendor/MEPCO for taking remedial action and will be taken in view for the issuance of Project Completion/Acceptance Certificate by the Committee.

- 1.17** The successful bidder is required to configure APMS(s) during production for primary & secondary IPs, ports & Wakeup SIM numbers (which will be provided by MEPCO/PITC).
- 1.18** On demand reading should be retrieved and the response time of On Demand reading should not be more than two minute or any other frequency set by MEPCO
- 1.19** In case of any missing scheduled activity, the APMS must communicate any pending readings to the MDC immediately after restoration of supply/ elimination of communication error/ due to any reason/etc.
- 1.20** The APMS(s) should communicate at Signal Strength of -95dBm to -105dBm and vendors will get it tested also to the satisfaction of the MEPCO. If it is observed that the APMS modem signal strength is lower than the one mentioned above, the Supplier will be responsible to replace /repair the APMS under warranty. Retry Failure rate should not be more than 3 times. The Time out for each retry should not be more than 15 seconds.
- 1.21** The MDM interface of PITC shall be used. The bidder(s) provided MDC software will have perpetual license and will be bound to upgrade with the latest versions of UDIL.

Signature and seal of the
Manufacturer/Bidder