Standard Bidding Document

(52/27) Procurement and Installation of Asset Performance Management System (APMS) as per PPMC Specification No. PPMC-DS-01:2026 (Works)

National

Single Stage-One Envelope

July 01, 2026

Multan Electric Power Company (MEPCO) (Multan Electric Power Company (MEPCO)),Assistant Manager Procurement
MEPCO Complex, Wapda Colony,Khanewal Road, Multan City, Multan (District), Multan Division (Division), Punjab (Province).
Phone: +92-319-975-7793, Email: amproc&dist@mepco.com.pk

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REQUEST FOR BIDS

PROCUREMENT OF CIVIL WORKS

1. The **Multan Electric Power Company (MEPCO) (Multan Electric Power Company (MEPCO))** has reserved Funds for the procurement planned for FY **2026-27**. The **Multan Electric Power Company (MEPCO) (Multan Electric Power Company (MEPCO))** intends to apply part of the proceeds of this Fund to cover eligible payments under the contract for the "**(52/27) Procurement and Installation of Asset Performance Management System (APMS) as per PPMC Specification No. PPMC-DS-01:2026**" with the reference of "**P54248**".

2. The **Multan Electric Power Company (MEPCO) (Multan Electric Power Company (MEPCO))** invites sealed Bids from eligible Bidders for procurement of Works **((52/27) Procurement and Installation of Asset Performance Management System (APMS) as per PPMC Specification No. PPMC-DS-01:2026)** described in the bidding documents on **EPADS v2.0** .

3. **Single Stage-One Envelope** will be used by adopting **Least Cost Based Selection (LCBS)** Technique for the subject procurement, in line with the Public Procurement Rules, 2004 and any Regulations, Regulatory Guides, Procurement Guidelines or Instructions issued by the Authority from time to time.

4. All Bids must be accompanied by a Bid Security amount described in Bid Security Section in Bidding Document in the form of **Pay Order, Banker's Cheque, Call at Deposit, Bank Guarantee**. Or all bids must be accompanied by bid securing declaration in the format specified in the Bidding documents

5. E-Bidding documents, containing detailed terms & conditions, specifications and requirements etc. are available on **e-Pak Acquisition and Disposal System (EPADS)** at **https://epads.gov.pk/opportunities/federal/procurements/54248** for all the interested bidders registered on **EPADS v2.0**. Bidders are required to get

themselves registered on **EPADS v2.0** to participate in Bidding process.

6. The e-bids, prepared in accordance with the instructions in the e-Bidding documents, must be submitted through **EPADS v2.0** on or before **Friday, July 17, 2026 11:00 AM**. E-bids will be opened by using **EPADS v2.0** on the same day at **Friday, July 17, 2026 11:30 AM**. Manual submission of Bids shall not be entertained. Those vendor who have not yet registered on the new version of **EPADS v2.0**, may register themselves on **https://vendors.epads.gov.pk/**. A tutorial to explain the registeration process is available at **https://www.youtube.com/watch?v=MNW6T38v7tc.**

In terms of Rules 48 of Public Procurement Rules, 2004 Grievance Redressal Committee (GRC) is notified for the subject procurement and notification copy is available on the procuring agency's website and on Authority's website at (**www.ppra.org.pk**).

Multan Electric Power Company (MEPCO) (Multan Electric Power Company (MEPCO)), Assistant Manager Procurement
MEPCO Complex, Wapda Colony,Khanewal Road, Multan City, Multan (District), Multan Division (Division), Punjab (Province).
+92-319-975-7793
amproc&dist@mepco.com.pk

Instructions to Bidders

A. INTRODUCTION

1. **Scope of Bid**

1.1. The Procuring agency/Employer (PA), as indicated in the Bid Data Sheet (BDS) invites Bids for the execution of Works as specified in the BDS and Section V- Works Requirements. The name, identification, and number of lots (contracts) of this National/ International Competitive Bidding process are specified in the BDS.

2. **Source of Funds**

2.1. Source of funds as referred in Clause 2 of Bid Data Sheet.

3. **Eligible Bidders**

3.1. A bidder may be natural person, company or firm or public or semi-public agency of Pakistan or any foreign country, or any combination of them with a formal existing agreement (on Judicial Papers) in the form of a joint venture or consortium. In the case of a joint venture or consortium, all members shall be jointly and severally liable for the execution of the Contract in accordance with the terms and conditions of the Contract. The joint venture or consortium shall nominate a Lead Member as nominated in the BDS, who shall have the authority to conduct all business for and on behalf of any and all the members of the joint venture or consortium during the Bidding process, and in case of award of contract, during the execution of contract. Verifiable copy of the agreement that forms a joint venture, consortium or association shall be required to be submitted as part of the Bid.

Any bid submitted by the joint venture, consortium or association shall indicate the part of proposed contract to be performed by each party and each party shall be evaluated (or post qualified if required) with respect to its contribution only, and the responsibilities of each party shall not be substantially altered without prior written approval of the Procuring Agency and in line with any instructions issued by the Authority.

(The limit on the number of members of JV or Consortium may be prescribed

in BDS, in accordance with the guidelines issued by the PPRA).

3.2. The invitation for bids is open to all prospective bidders subject to any provisions of incorporation or licensing by the respective national/ international incorporating agency or statutory body established for that particular trade or business. Procuring agencies shall specify the registration/licensing requirements for the foreign bidder keeping in view the requirement of that business.

3.3. A Bidder shall not have a conflict of interest. All Bidders found to have a conflict of interest shall be disqualified. A Bidders may be considered to have a conflict of interest with one or more parties in this Bidding process, if they:

3.3.1. are associated or have been associated in the past, directly or indirectly with a firm or any of its affiliates which have been engaged by the Procuring agency/Employer to provide consulting services for the preparation of design or technical specifications of the works that are the subject of the bid; or

3.3.2. have controlling shareholders in common; or

3.3.3. receive or have received any direct or indirect subsidy from any of them; or

3.3.4. have the same legal representative for purposes of this Bid; or

3.3.5. have a relationship with each other, directly or through common third parties, that puts them in a position to have access to information about or influence on the bid of another bidder, or influence the decisions of the Procuring agency/Employer regarding this Bidding process; or

3.3.6. Submit more than one bid in this bidding process.

3.4. A Bidder may be ineligible if –

3.4.1. he is declared bankrupt or, in the case of company or firm, insolvent;

3.4.2. payments in favor of the bidder is suspended in accordance with the judgment of a court of law other than a judgment declaring bankruptcy and resulting (in accordance with the national laws) in the total or partial loss of the right to administer and dispose of its property;

3.4.3. the bidder is convicted, by a final judgment of a Court of Law or relevant Professional Statuary Body, of any offence involving professional conduct;

3.4.4. The bidder is debarred/ blacklisted by a national level Procuring agency/Employer and hence debarred due to involvement in corrupt and fraudulent practices, or performance failure or due to breach of bid securing declaration.

3.5. As and when required, bidders shall provide to the Procuring agency/Employer evidence of their eligibility, proof of compliance with the necessary legal requirements to carry out the contract effectively.

3.6. Bidders shall submit proposal relating to the nature, conditions and modalities of sub-contracting wherever the sub-contracting of any elements of the contract is envisaged.

4. **Eligible Material and Equipment**

4.1. All the material and equipment to be mobilized under the contract shall have their origin in eligible source countries, and all expenditures made under the contract will be limited to such materials and equipment. For this purpose, ineligible countries are stated in the section-IV titled as “Eligible Countries”.

B. BIDDING DOCUMENTS

5. **Contents of Bidding Documents**

5.1. The scope of Works, bidding procedures, and terms and conditions of the contract are prescribed in the bidding documents. In addition to the Invitation for Bids, the bidding documents which should be read in

conjunction with any addenda issued in accordance with ITB 7.1 include:

Section I -Invitation for Bids

Section II Instructions to Bidders (ITBs)

Section III Bid Data Sheet (BDS)

Section IV Eligible Countries

Section V Evaluation and Qualification Criteria

Section VI Works Requirements Technical Specifications & Schedule of Requirements

Section VII Standard Bidding Forms

Section VIII General Conditions of Contract (GCC)

Section IX Particular Conditions of Contract (PCC)

Section X Contract Forms

5.2. The bidder is expected to examine all instructions, forms, specifications, terms and conditions prescribed in the bidding documents. Failure to furnish all the information required in the bidding documents will be at the bidder’s risk and may result in the rejection of his bid.

6. **Clarification of Bidding Document, Pre-bid Meeting**

6.1. A prospective bidder requiring any clarification of the bidding document may notify the Procuring agency/Employer through EPADS.

6.2. The Procuring agency/Employer shall respond to the request for clarification in accordance with Rule 31 of the Public Procurement Rules 2004.

6.3. Should the Procuring Agency deem it necessary to amend the BIDDING document as a result of a clarification, it shall do so following the procedure under ITB 7.

6.4. If indicated in the BDS, the bidder’s designated representative is invited at the bidder’s cost to attend a pre-bid meeting at the place, date and time mentioned in the BDS. During this pre-bid meeting, prospective bidders may request clarification of the schedule of requirement, the evaluation criteria or any other aspects of the bidding documents.

6.5. Minutes of the pre-bid meeting, if applicable, including the text of the questions asked by bidders, including those during the meeting (without identifying the source) and the responses given, together with any responses prepared after the meeting will be uploaded on EPADS. Any modification to the bidding documents that may become necessary as a result of the pre-bid meeting shall be made by the Procuring agency/Employer exclusively through the use of an Addendum pursuant to ITB 7. Non-attendance at the pre-bid meeting will not be a cause for disqualification of a bidder.

6.6. The bidder is advised to visit and examine the Site of Works and its surroundings and obtain for itself on its own responsibility all information that may be necessary for preparing the bid and entering into a contract for construction of the Works. The costs of visiting the Site shall be at the bidder's own expense.

6.7. The bidder and any of its authorized personnel will be granted permission by the Procuring agency/Employer to enter upon its premises and lands for the purpose of such visit, but only upon the express condition that the bidder and its personnel will release and indemnify the Procuring agency/Employer from and against all liability in respect thereof, and will be responsible for death or personal injury, loss of or damage to property, and any other loss, damage, costs, and expenses incurred as a result of the inspection.

7. **Amendment of Bidding Documents**

7.1. The procuring agency may issue notification of any change, addition, modification or deletion in accordance with Rule 23 of the Public Procurement Rules 2004 i.e. Bidding Documents.

7.2. To give prospective bidders reasonable time in which to take an addendum/corrigendum into account in preparing their bids, the Procuring agency/Employer may, at its discretion, extend the deadline for the submission of bids:

Provided that the Procuring agency/Employer shall extend the deadline for submission of bid in pursuance of Rule 27 of the Public Procurement Rules 2004, i.e. Extension of time for submission of bids, if such an addendum is

issued within last three (03) days of the bid submission deadline.

C. PREPARATION OF BIDS

8. **Language of Bid**

8.1. The bid prepared by the bidder, as well as all correspondence and documents relating to the bid exchanged by the bidder and the Procuring agency/Employer shall be written in the English language unless specified in the BDS. Supporting documents and printed literature furnished by the bidder may be in another language provided they are accompanied by an accurate translation of the relevant pages in the English language unless specified in the BDS, in which case, for purposes of interpretation of the bidder, the translation shall govern.

9. **Documents Constituting the Bids**

9.1. The Bids prepared by the Bidder shall constitute of all the documents required in the BDS.

10. **Documents Establishing Eligibility of Material, Equipment and Works, their Conformity to Bidding Documents**

10.1. The bid prepared by the bidder shall constitute the following components: -

10.1.1. Documentary evidence established in accordance with ITB 10 that the material and equipment to be utilized by the Bidder for the executions of works are eligible material and equipment and conform to the Bidding Documents;

10.1.2. Documentary evidence established in accordance with ITB 11 that the bidder has been authorized to carry out the Construction works;

10.1.3. Documentary evidence established in accordance with ITB 11 that the bidder is eligible and/or qualified for the subject bidding process;

10.1.4. Form of Bid and Bid Prices completed in accordance with ITB 12 and 13;

10.1.5. Completed schedules as required, including priced Bill of Quantities in accordance with ITB 13.

10.1.6. Technical Proposal completed in all aspects in accordance with ITB-15.

10.1.7. Bid security or Bid Securing Declaration furnished in accordance with ITB 17;

10.1.8. Any other document required in the BDS.

10.2. In addition to the requirements, bids submitted by a JV shall include a copy of the Joint Venture Agreement entered into by all members. Alternatively, a letter of intent to execute a Joint Venture Agreement in the event of a successful bid shall be signed by all members and submitted with the bid, together with a copy of the proposed Agreement.

10.3. The bidder shall furnish, as part of its bid, all those documents establishing the eligibility in conformity to the terms and conditions specified in the bidding documents for all material, equipment and works which the bidder proposes to execute.

10.4. The documentary evidence of conformity of the material, equipment and works to the Bidding Documents may be in the form of literature, drawings, and data, and shall consist of:

10.4.1. a detailed description of the work methodology, approach, schedule and resources to be mobilized at site;

10.4.2. an item-by-item commentary on the Procuring agency/Employer’s Technical Specifications demonstrating substantial responsiveness of the material, equipment and works to those specifications, or a statement of deviations and exceptions to the provisions of the Technical Specifications;

10.4.3. any other procurement specific documentation requirement as stated in the BDS.

10.5. The required documents and other accompanying documents must be in English. In case any other language than English is used the pertinent translation into English shall be attached to the original version.

11. **Documents Establishing Eligibility and Qualification of the Bidder**

11.1. The bidder shall furnish, as part of its bid, all those documents establishing the bidder's eligibility to participate in the bidding process and/or its qualification to perform the contract if its bid is accepted.

11.2. The documentary evidence of the bidder's eligibility to bid shall establish to the satisfaction of the Procuring agency/Employer that the bidder, at the time of submission of its bid, is from an eligible country as defined in Section-IV titled as "Eligible Countries".

11.3. The documentary evidence of the bidder's qualification to perform the contract if its bid is accepted shall establish to the satisfaction of Procuring agency/Employer that:

11.3.1. The bidder has the financial and technical capability necessary to perform the Contract, meets the qualification criteria specified in Section-V, Evaluation and Qualification Criteria and BDS.

11.3.2. In the case of a bidder not doing business within Pakistan, the bidder is or will be (if awarded the contract) represented by a local bidder (Joint Venture) in accordance with the PEC works bylaws, and in case of award of works such foreign firm is required to participate in the execution of works to carry out its obligations as prescribed in the Conditions of Contract and /or Technical Specifications.

11.3.3. That the bidder meets the qualification criteria listed in Section-V, Evaluation and Qualification Criteria and BDS.

12. **Forms of Bid**

12.1. The Bidder shall fill the Form of Bids furnished in the bidding documents. The Bids Form must be completed without any alterations to its format and no substitute shall be accepted.

13. **Bid Prices**

13.1. The bid prices quoted by the bidder in the Standard bid Forms, Bill of Quantities and in the Price Schedules shall conform to the requirements specified below or exclusively mentioned hereafter in the bidding documents.

13.2. The bidder shall fill in rates and prices for all items of the Works described in the Bill of Quantities. If a Price Schedule shows items listed but not priced, their prices shall be construed to be included in the prices of other items in the Bill of Quantities and will not be paid for separately by the Procuring agency/Employer.

13.3. Items not listed in the Price Schedule shall be assumed not to be included in the bid, and provided that the bid is still substantially responsive in their absence or due to their nominal nature, the corresponding average price of the respective item(s) of the remaining substantially responsive bidder(s) shall be construed to be the price of those missing item(s):
Provided that:

13.3.1. where there is only one (substantially) responsive bidder, or

13.3.2. where there is provision for alternate proposals and the respective items are not listed in the other bids,
The Procuring agency/Employer may fix the price of missing items in accordance with market survey, and the same shall be considered as final price.

13.4. The Bid price to be quoted in the Form of Bid in accordance with ITB 12 shall be the total price of the bid.

13.5. Unless otherwise specified in the BDS and the Contract, the rates and prices quoted by the bidder are subject to adjustment during the performance of the Contract in accordance with the provisions of the

Conditions of Contract.

13.6. If so specified in ITB 1.1, bids may be invited for individual lots (contracts) or for any combination of lots (packages).

13.7. Prices quoted by the Bidder shall be fixed during the bidder's performance of the contract and not subject to variation on any account. A bid submitted with an adjustable price will be treated as non-responsive and shall be rejected, pursuant to ITB 27, unless otherwise price adjustment is permissible under Conditions of the Contract.

13.8. All duties, taxes, and other levies payable by the Contractor under the Contract, or for any other cause, as of the date twenty-eight (28) days prior to the deadline for submission of bids, shall be included in the rates and prices and the total bid price submitted by the bidder.

14. **Currencies of Bid and Payment**

14.1. Prices shall be quoted in Pakistani Rupees unless otherwise specified in the BDS. Comparison of bids and tie of bid shall be treated in accordance with the Rule 30(2) of Public Procurement Rules, 2004.

15. **Documents Comprising the Technical Proposal**

15.1. The bidder shall furnish a Technical Proposal including a statement of work methods, equipment, personnel, schedule and any other information as stipulated in Section VII – Standard Bid Forms, in sufficient detail to demonstrate the adequacy of the bidder's proposal to meet the work requirements and the completion time.

16. **Bid Validity Period**

16.1. Bids shall remain valid for the period specified in the BDS after the bid submission deadline prescribed by the Procuring agency/Employer. A bid valid for a shorter period shall be rejected by the Procuring agency/Employer as non-responsive. The period of bid validity will be determined from the complementary bid securing instrument i.e. the expiry period of bid security or bid securing declaration as the case may be.

16.2. Under exceptional circumstances, prior to the expiration of the initial Bids/Bid validity period, the Procuring Agency may request the Bidders' consent to an extension of the period of validity of their Bids/Bid. Such request for extension of the period of bid validity shall be carried out in accordance with Rule 26 of the Public Procurement Rules, 2004.

17. **Bid Security or Bid Securing Declaration**

17.1. Pursuant to ITB 11.1 unless otherwise specified in the BDS, the bidder shall furnish as part of its bid, a Bid Security in accordance with Rule 25 of the Public Procurement Rules, 2004 in the amount and currency specified in the BDS or Bid Securing Declaration as specified in the BDS in the format provided in Section VII (Standard Bidding Forms).

In case Procuring agency/Employer is inviting bids in lots / packages, the bidder shall be required to submit his bid security against the respective lot/ package for which he is submitting his bid.

Until the development of functionality of auto verification of financial instrument in EPADS, the scanned copy of bid security or bid securing declaration, as the case may be, shall be uploaded on E-PADS whereas the original instrument to be submitted to the procuring agency before closing of bid submission deadline,

17.2. The Bid Security shall be denominated in the local currency or in another freely convertible currency, and it shall be in the form specified in the **BDS** which shall be in any of the following:

17.2.1. A bank guarantee, an irrevocable letter of credit issued by a Scheduled bank in the form provided in the Bidding Documents or another form acceptable to the Procuring agency/Employer and valid for twenty-eight (28) days beyond the end of the validity of the Bid. This shall also apply if the period for Bid Validity is extended. In either case, the form must include the complete name of the bidder;

17.2.2. A cashier's or certified cheque; or

17.2.3. Another security as indicated in the **BDS**.

17.3. The Bid Security or Bid Securing Declaration shall be in accordance with the Form of the Bid Security or Bid Securing Declaration included in Section VII (Standard Bidding Forms) or another form approved by the Procuring agency/Employer prior to the bid submission.

17.4. The Bid Security shall be payable promptly upon written demand by the Procuring agency/Employer in case any of the conditions listed in ITB 17.9 are invoked.

17.5. Any bid not accompanied by a Bid Security or Bid Securing Declaration in accordance with ITB 17.1 or 17.3 shall be rejected by the Procuring agency/Employer and shall be declared as non-responsive bid, pursuant to ITB 27.

17.6. Unsuccessful bidders' Bid Security will be discharged or returned as promptly as possible, however in no case later than thirty (30) days after the expiration of the period of Bid Validity prescribed by the Procuring agency/Employer pursuant to ITB 16. The Procuring agency/Employer shall make no claim to the amount of the Bid Security, and shall promptly return the Bid Security document, after whichever of the following that occurs earliest:

17.6.1. The expiry of the Bid Security;

17.6.2. The entry into force of a procurement contract and the provision of a performance security (or guarantee), for the performance of the contract if such a security (or guarantee), is required by the Biding documents;

17.6.3. The rejection by the Procuring agency/Employer of all Bids;

17.6.4. The withdrawal of the bid prior to the deadline for the submission of bids, unless the biding documents stipulate that no such withdrawal is permitted.

17.7. The successful bidder's Bid Security will be discharged upon the bidder signing the contract pursuant to ITB 40, or furnishing the performance security (or guarantee), pursuant to ITB 41.

17.8. The Bid Security may be forfeited or the Bid Securing Declaration executed:

17.8.1. if a Bidder:

17.8.1.1. Withdraws its Bid during the period of Bid Validity as specified by the Procuring agency/Employer, and referred by the bidder on the Form of Bid except as provided for in ITB 16.2; or

17.8.2. In the case of a successful bidder, if the bidder fails:

17.8.2.1. to sign the contract in accordance with ITB 40; or

17.8.2.2. to furnish performance security (or guarantee) in accordance with ITB 41.

17.9. In case of Bid Security issued by the foreign bank is allowed by the Procuring agency/Employer, the same should be counter guaranteed by a corresponding bank in Pakistan. Furthermore, in case of joint venture, it should be in the name of Joint venture to ensure joint responsibility. In case the JV is not legally constituted at the time of bid submission, the bid security or bid securing declaration shall be in the names of all future members as named in the letter of bid.

18. **Withdrawal of Bids**

18.1. Before bid submission deadline, any bidder may withdraw, substitute, or modify its bid after it has been submitted by sending a written notice, duly signed by an authorized representative, and the corresponding must accompany the respective written notice.

19. **Format and Signing of Bid**

19.1. The Bidder shall prepare and submit Bids through EPADS with due diligence after carefully reading all the terms and condition before bid submission deadline.

D. SUBMISSION OF BIDS

20. **Submission of Bids through EPADS v2.0**

20.1. All bids shall be submitted through EPADS v2.0.

21. **Deadline for Submission of Bids**

21.1. All bids shall be received through **EPADS v2.0** not later than bid submission deadline as specified in the **BDS**.

21.2. The Procuring agency/Employer may, under exceptional circumstances and at its discretion, extend the deadline for the submission of bids, pursuant to Rule 27 of the Public Procurement Rules, 2004. Extension of Time for submission of bid, by amending the Bidding Documents in accordance with ITB 7, in which case all rights and obligations of the Procuring agency/Employer and bidders previously subject to the deadline will thereafter be subject to the new deadline.

22. **Substitution and Modification of bids**

22.1. A bidder may substitute or modify his bid after it has been submitted, provided that written notice of the substitution or modification of the bid, is received by the Procuring agency/Employer prior to the deadline for submission of bids.

22.2. Revised bid may be submitted after the substitution or modification made in the original bid in accordance with the provisions referred in **ITB 18** .

E. OPENING AND EVALUATION OF BIDS

23. **Opening of Bids**

23.1. The Procuring Agency will open bids in accordance with Rule 28 of the Public Procurement Rules, 2004 and as specified in the BDS.

24. **Confidentiality**

24.1. Information relating to the examination, clarification, evaluation and comparison of bids and recommendation of contract award shall not be disclosed to bidders or any other persons not officially concerned with such process until the time of the announcement of the respective evaluation report.

25. **Clarification of Bids**

25.1. Clarification of Bidding Documents shall be carried out in accordance with Rule 31 of the Public Procurement Rules, 2004.

25.2. The alteration or modification in the bid which in any case affect the following parameters will be considered as a change in the substance of a bid:

25.2.1. evaluation & qualification criteria;

25.2.2. required scope of work;

25.2.3. contract price;

25.2.4. all securities requirements;

25.2.5. tax requirements;

25.2.6. terms and conditions of bidding documents.

25.2.7. change in the ranking of the bidder

26. **Preliminary Examination of Bids**

26.1. Prior to the detailed evaluation of bids, the Procuring agency/Employer will determine whether each bid:

26.1.1. meets the eligibility criteria defined in **ITB 3** and **ITB 4**;

26.1.2. has been prepared as per the format and contents defined by the Procuring agency/Employer in the bidding documents;

26.1.3. has been properly signed;

26.1.4. is accompanied by the required securities; and

26.1.5. is substantially responsive to the requirements of the bidding documents.

The Procuring agency/Employer's determination of a bid's substantial responsiveness will be based on the contents of the bid itself.

26.2. A substantially responsive Bid is one which conforms to all the terms, conditions, and specifications of the Bidding Documents, without material deviation or reservation. A material deviation or reservation is one that: -

26.2.1. affects in any substantial way the scope, quality, or performance of the Works;

26.2.2. limits in any substantial way, inconsistent with the bidding documents, the Procuring agency/Employer's rights or the bidders' obligations under the Contract; or

26.2.3. if rectified, would affect unfairly the competitive position of other bidders presenting substantially responsive bids.

26.3. The Procuring agency/Employer will confirm that the documents and information specified under ITB 9, 10 and 11 have been provided in the bid. If any of these documents or information is missing, or is not provided in accordance with the Instructions to Bidders, the bid shall be rejected.

26.4. The Procuring agency/Employer may waive-off any minor informality, nonconformity, or irregularity in a bid which does not constitute a material deviation, provided such waiver does not prejudice or affect the relative ranking of any Bidder.

Explanation: A minor informality, non-conformity or irregularity is one that is merely a matter of form and not of substance. It also pertains to some immaterial defect in a Bid or variation of a bid from the exact requirements of the invitation that can be corrected or waived without being prejudicial to other bidders. The defect or variation is immaterial when the effect on quantity, quality, or delivery is negligible when contrasted with the total cost or scope of the works. The Procuring agency/Employer either shall give the bidder an opportunity to cure any deficiency resulting from a minor

informality or irregularity in a bid or waive the deficiency, whichever is advantageous to the Procuring agency/Employer. Examples of minor informalities or irregularities include failure of a bidder to –

26.4.1. *Submit the number of copies of signed bids required by the invitation;*

26.4.2. *Furnish required information concerning the number of its employees;*

26.4.3. *the firm submitting a bid has formally adopted or authorized, before the date set for opening of bids, the execution of documents by typewritten, printed, or stamped signature and submits evidence of such authorization and the bid carries such a signature.*

26.5. Provided that a Technical Bid is substantially responsive, the Procuring agency/Employer may request the bidder to submit the necessary information or documentation, within a reasonable period of time, to rectify nonmaterial nonconformities or omissions in the Technical Bid related to documentation requirements. Requesting information or documentation on such nonconformities shall not be related to any such aspect of the technical Proposal linked with the ranking of the bidders. Failure of the bidder to comply with the request may result in the rejection of its bid.

26.6. Provided that a Technical Bid is substantially responsive, the Procuring agency/Employer shall rectify quantifiable nonmaterial nonconformities or omissions related to the Financial Proposal. To this effect, the Bid Price shall be adjusted, for comparison purposes only, to reflect the price of the missing or nonconforming item or component.

26.7. If a bid is not substantially responsive, it will be rejected by the Procuring agency/Employer and may not subsequently be evaluated for complete technical responsiveness.

27. **Examination of Terms and Conditions; Technical Evaluation**

27.1. The Procuring agency/Employer shall examine the bid to confirm that all terms and conditions specified in the **GCC** and the **PCC** have been

accepted by the bidder without any material deviation or reservation.

For this purpose:

“Deviation” means departure from the requirements specified in the Bidding Document.

“Reservation” means setting of limiting conditions or withholding from complete acceptance of the requirements specified in the Bidding Document.

27.2. The Procuring agency/Employer shall evaluate the technical aspects of the bid submitted in accordance with ITB 30, to confirm that all requirements specified in Section VI – Works Requirement, Technical Specifications of the Bidding Documents have been met without material deviation or reservation.

27.3. If after the examination of the terms and conditions and the technical evaluation, the Procuring agency/Employer determines that the bid is not substantially responsive in accordance with ITB 27, it shall reject the bid.

28. **Correction of Arithmetic Errors**

28.1. Bids determined to be substantially responsive will be checked for any arithmetic errors. Errors will be corrected as follows: -

28.1.1. if there is a discrepancy between unit prices and the sub-total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail, and the sub-total price shall be corrected, unless in the opinion of the Procuring agency/Employer there is an obvious misplacement of the decimal point in the unit price, in which the total price as quoted shall govern and the unit price shall be corrected;

28.1.2. if there is an error in a total corresponding to the addition or subtraction of sub-totals, the sub-totals shall prevail, and the total shall be corrected; and

28.1.3. where there is a discrepancy between the amounts in figures and in words, the amount in words will govern.

28.1.4. Where there is discrepancy between grand total of price schedule and amount mentioned on the Form of Bid, the amount referred in Price Schedule shall be treated as correct subject to elimination of other errors.

28.2. The amount stated in the Bid will, be rectified by the Procuring agency/Employer in accordance with the above procedure for the correction of errors and, with, the concurrence of the bidder, shall be considered as binding upon the bidder. If the bidder does not accept the corrected amount, its bid shall be rejected after forfeiture of Bid Security or execution of the Bid Securing Declaration, as the case may be, in accordance with **ITB 41.3**.

29. **Conversion to Single Currency**

29.1. The unit rates and the prices shall be quoted by the bidder entirely in Pak rupees. A bidder expecting to incur expenditures in other currencies for inputs to the Works from outside the Procuring agency/Employer's country (referred to as the "Foreign Currency Requirements") shall indicate the same in the letter of bid-financial proposal. The proportion of the Bid Price (excluding Provisional Sums) needed by him for the payment of such Foreign Currency Requirements either (i) entirely in the currency of the Bidder's home country or, (ii) at the bidder's option, entirely in Pak rupees provided always that a bidder expecting to incur expenditures in a currency or currencies other than those stated in (i) and (ii) above for a portion of the foreign currency requirements, and wishing to be paid accordingly, shall indicate the respective portions in his bid. Comparison of bids quoted in different currencies and conversion of bids into a single currency shall be carried out in accordance with Rule 30(2) of the Public Procurement Rules, 2004**.**

30. **Evaluation of Bids**

30.1. The Procuring agency/Employer shall evaluate and compare only the bids determined to be substantially responsive, pursuant to **ITB 27**.

30.2. In evaluating the Technical Proposal of each Bid, the Procuring agency/Employer shall use the criteria and methodologies listed in the BDS

and in terms of works requirement. No other evaluation criteria or methodologies shall be permitted.

30.3. The Procuring agency/Employer's evaluation of a bid will take into account:

30.3.1. the bid price, excluding provisional sums and the provision, if any, for contingencies in the summary bill of quantities, but including day work items, where priced competitively;

30.3.2. converting the amount resulting from applying above, if relevant, to a single currency in accordance with ITB 29;

30.4. The estimated effect of the price adjustment provisions of the Conditions of Contract, applied over the period of execution of the Contract, shall not be taken into account in bid evaluation.

30.5. If these bidding documents allow bidders to quote separate prices for different lots, and the award to a single bidder of multiple lots, the methodology of evaluation to determine the lowest evaluated lot combinations in the Form of Bid, is specified in the **BDS**.

30.6. If the bid, which results in the Evaluated Bid Price (Successful Bid), is seriously unbalanced or front loaded in the opinion of the Employer, the Employer may require the Bidder to produce detailed price analyses for any or all items of the Bill of Quantities, to demonstrate the internal consistency of those prices with the construction methods and schedule proposed. After evaluation of the price analyses, taking into consideration the schedule of estimated Contract payments, the Employer may require that the amount of the performance security be increased at the expense of the Bidder to a level sufficient to protect the Employer against financial loss in the event of default of the successful Bidder under the Contract.

Explanation:

"Unbalanced" or "front-loaded" bids consist of deliberately submitting bids with artificially high prices or unit rates for the early stages of a construction project, offset by artificially low prices or unit rates for the later stages of the project, to improve the contractor's cash flow.

31. **Domestic Preference**

31.1. If the **BDS** so specifies, the Procuring agency/Employer will grant a margin of preference to the domestic contractor in line with the rules, regulations, regulatory guides or instructions issued by the Authority from time to time.

32. **Determination of Successful Bid**

32.1. The Procuring agency/Employer shall compare the evaluated bids in accordance with the predefined bidding procedure, of all substantially responsive bids to determine the Successful bidder.

33. **Qualification of Bidder**

33.1. The Procuring agency/Employer shall determine to its satisfaction whether the bidder is substantially responsive and whose bid is declared as Successful bid either continues to meet (if prequalification applies) or meets (if post-qualification applies) the qualifying criteria specified in Evaluation and Qualification Criteria.
Note: In case of international bidding, the parameters for incorporation or licensing within Pakistan may be fulfilled as part of post qualification.

33.2. The determination shall be based upon an examination of the documentary evidence of the bidder's qualifications submitted by the bidder, pursuant to **ITB 11**.

33.3. Prior to contract award, the Procuring agency/Employer will verify that the successful bidder (including each member of a JV) is not blacklisted/debarred. The Procuring agency/Employer will conduct the same verification for each sub-contractor proposed by the successful bidder.

34. **Sub-Contractors**

34.1. The bidder shall provide details regarding any specialized sub-contractor to the Procuring agency/Employer. In case change of sub-contractors, the bidder shall promptly notify the Procuring agency/Employer and obtain approval for replacement of sub-contractors.

34.2. Bidders may propose sub-contracting up to the percentage of total value of contracts or the volume of works as specified in the **BDS**.

35. **Abnormally Low Financial Bid**

35.1. A procuring Agency may reject abnormally low bids. The decision of the Procuring agency/Employer to reject a bid and reasons for the decision shall be recorded in the procurement proceedings and promptly communicated to the bidder concerned. Moreover, the Procuring agency/Employer shall not incur any liability solely by rejecting abnormally bid

Guidance for Procuring agency/Employer:

An abnormally low bid means, in the light of the Procuring agency/Employer's estimate and of all the bids submitted, the bid appears to be abnormally low by not providing a margin for normal levels of profit. In order to identify the Abnormally Low Bid (ALB) following approaches can be considered to minimize the scope of subjectivity:

35.1.1. Comparing the bid price with the cost estimate;

35.1.2. Comparing the bid price with the bids offered by other bidders submitting substantially responsive bids; and

35.1.3. Comparing the bid price with prices paid in similar contracts in the recent past either government- or development partner-funded.

35.2. The Procuring agency/Employer will determine to its satisfaction whether the bidder that is selected as having submitted the successful bid is qualified to perform the contract satisfactorily, in accordance with the criteria listed in **ITB 11**

35.3. The determination will take into account the bidder's financial and technical capabilities. It will be based upon an examination of the documentary evidence of the bidder's qualifications submitted by the bidder, pursuant to **ITB 11**, as well as such other information as the Procuring agency/Employer deems necessary and appropriate. Factors not included in these bidding documents shall not be used in the evaluation of the bidders' qualifications.

35.4. Procuring agency/Employer may seek “Certificate for Independent Price Determination” from the bidder and the results of reference checks may be used in determining award of contract.

Explanation: The Certificate shall be furnished by the bidder. The bidder shall certify that the price is determined keeping in view of all the essential aspects such as raw material, its processing, value addition, optimization of resources due to economy of scale, transportation, insurance and margin of profit etc.

35.5. An affirmative determination will be a prerequisite for award of the contract to the bidder. A negative determination will result in rejection of the bidder’s bid, in which event the Procuring agency/Employer will proceed to the next ranked bidder to make a similar determination of that bidder’s capabilities to perform satisfactorily.

F. AWARD OF CONTRACT

36. **Criteria of Award**

36.1. Subject to **ITB 36 and 37**, the Procuring agency/Employer will award the Contract to the bidder whose bid has been determined to be substantially responsive to the bidding documents and who has been declared as Successful Bidder, provided that such bidder has been determined to be:

36.1.1. eligible in accordance with the provisions of **ITB 3**;

36.1.2. is determined to be qualified to perform the Contract satisfactorily; and

36.1.3. Successful negotiations have been concluded, if any.

37. **Negotiations**

37.1. The Committee of the Procuring agency/Employer may negotiate with the Most Advantageous Bidder relating to the following areas:

37.1.1. a minor alteration to the technical (drawings, design technical specifications) details of the statement of works;

37.1.2. Methodology, work plan, staffing in view to streamline the work;

37.1.3. a minor amendment to the Particular conditions of Contract;

37.1.4. finalizing payment arrangements;

37.1.5. clarifying details that were not apparent or could not be finalized at the time of Bidding;

37.2. Where negotiation fails to result into an agreement, the Procuring agency/Employer may invite the next ranked bidder for negotiations. Where negotiations are commenced with the next ranked bidder, the Procuring agency/Employer shall not reopen earlier negotiations.

38. **Procuring agency's Right to reject All Bids**

38.1. The procuring agency has the right to reject all bids in accordance with Rule 33 of the Public Procurement Rules, 2004. However, the Authority (i.e. **PPRA**) may call from the Procuring agency/Employer the justification of those grounds.

39. **Notification of Award**

39.1. The procuring agency shall announce and publish the evaluation result in accordance with Rule 35 of the Public Procurement Rules, 2004.

39.2. Where no complaints have been lodged, the bidder whose bid has been accepted will be notified of the award by the Procuring agency/Employer prior to expiration of the bid validity period through EPADS. However, the Procuring agency/Employer shall not award any procurement contract at least for five (05) days after the announcement of final evaluation report. The notification letter (herein after and in the condition of the contract and contract form called “Letter of Acceptance” will specify the sum that the Procuring agency/Employer will pay the successful bidder in consideration for the execution and completion of the

works as prescribed by the Contract (hereinafter and in the Contract called the "Contract Price).

39.3. The notification of award will constitute the formation of the Contract, subject to the bidder furnishing the Performance Security (or guarantee) in accordance with **ITB 41** and signing of the contract in accordance with **ITB 40**.

39.4. Upon the successful bidder's furnishing of the performance security (or guarantee) pursuant to **ITB 41**, the Procuring agency/Employer will promptly notify each unsuccessful bidder, the name of the successful bidder and the Contract amount and will discharge the Bid Security or Bid Securing Declaration of the bidder(s) pursuant to **ITB 17**.

40. **Signing of Contract**

40.1. Promptly after notification of award, Procuring agency/Employer shall send the successful bidder the draft agreement, incorporating all terms and conditions as agreed by the parties to the contract.

40.2. Immediately after the Redressal of grievance by the **GRC**, and after fulfillment of all conditions precedent of the Contract Form, the successful bidder and the Procuring agency/Employer shall sign the contract.

40.3. Where no formal signing of a contract is required, work order issued to the bidder shall be construed to be the contract.

41. **Performance Security (or Guarantee)**

41.1. After the receipt of the Letter of Acceptance, the successful bidder, within the specified time, shall deliver to the Procuring agency/Employer a Performance Guarantee in the amount and in the form stipulated in the BDS and PCC, denominated in the type and proportions of currencies in the Letter of Acceptance and in accordance with the Conditions of Contract.

41.2. If the Performance Guarantee is provided by the successful bidder and it shall be in the form specified in the BDS which shall be in any of the following:

41.2.1. certified cheque, cashier's or manager's cheque, or bank draft;

41.2.2. irrevocable letter of credit issued by a scheduled bank of Pakistan or in the case of an irrevocable letter of credit issued by a foreign bank, the letter shall be confirmed or authenticated by a scheduled bank of Pakistan;

41.2.3. bank guarantee confirmed by a reputable local bank or, in the case of a successful foreign bidder, bonded by a foreign bank; or

41.2.4. surety bond callable upon demand issued by any reputable surety or insurance company.
Any Performance Guarantee submitted shall be enforceable in Pakistan.

41.3. Failure of the Most Advantageous Bidder to comply with the requirement of **ITB 40** shall constitute sufficient grounds for the annulment of the award and forfeiture of the Bid Security or declare blacklisted (in case bid securing declaration is submitted) in which event the Procuring agency/Employer may make the award to the next most advantageous bidder or reinitiate the procurement process afresh (as a case may be).

42. **Advance Payment**

42.1. Advance payment will be provided to the bidder in percentage and in the manner as agreed by the both parties in terms of Conditions of the Contract.

42.2. The Procuring agency/Employer will provide an advance payment as stipulated in the Conditions of Contract, subject to a maximum amount, as stated and/or Conditions of the Contract. The advance payment request shall be accompanied by an advance payment security (guarantee) in the form provided in Section X. For the purpose of receiving the advance payment, the bidder shall make and estimate of, and include in its bid, the expenses that will relate to the purchase of equipment, machinery, materials, and on the engagement of labor during the first month beginning with the date of the Procuring agency/Employer's "**Notice to Commence**" as specified in the **PCC**.

43. **General Performance of the Bidders**

43.1. The Procuring agency/Employer reserves the right to obtain information regarding performance of the bidders on their previously awarded contracts / works. The Procuring agency/Employer may seek information / report from the previous employer for consideration. However, the Procuring agency/Employer shall incorporate such parameters in the evaluation criteria and accordingly decide the fate of the bid submitted.

44. **Corrupt & Fraudulent Practices**

44.1. Procuring agencies (including beneficiaries of Government funded projects and procurement) as well as Bidders/Suppliers/Contractors under Government financed contracts, observe the highest standard of ethics during the procurement and execution of such contracts, and will avoid to engage in any corrupt and fraudulent practices.

G. GRIEVANCE REDRESSAL & COMPLAINT REVIEW MECHANISM

45. **Grievance Redressal**

45.1. Grievance Redressal shall be carried out in accordance with Rule 48 of the Public Procurement Rules, 2004 i.e. Redressal of grievances by the procuring agency and “Redressal of Grievances Regulations 2021”.

H. MECHANISM OF BLACKLISTING

46. **Mechanism of Blacklisting**

46.1. The Procuring agency/Employer shall proceed Blacklisting of Bidders/Contractors in accordance with Rule 19 of the Public Procurement Rules, 2004 i.e. Blacklisting and “Blacklisting and Debarment of Bidders or Contractors Regulations 2024.

Bid Data Sheet

Bids Data Sheet (BDS)

The following specific data for the procurement of Goods to be procured shall complement, supplement, or amend the provisions in the Instructions to Bidders (ITB). Whenever there is a conflict, the provisions herein shall prevail over those in ITB.

BDS Clause Number	ITB Number	Amendments of, and Supplements to, Clauses in the Instruction to Bidders
A. Introduction		
1	1.1	Name of Procuring Agency:**Multan Electric Power Company (MEPCO) (Multan Electric Power Company (MEPCO))** The subject of procurement is:**(52/27) Procurement and Installation of Asset Performance Management System (APMS) as per PPMC Specification No. PPMC-DS-01:2026** Expected commencement date: **Monday, August 17, 2026**
2.	2.1	Financial year for the operations of the Procuring Agency:**2026-27** Name and identification number of the Contract: **P54248**
3.	3.1	JV/Consortium or AssociationAllowed: **Yes** Number of JV/Consortium Members: **3**
B. Bidding Documents		

4.	**6.2 & 6.4**	The Bidders may seek clarifications through **EPADS v2.0**: Clarification Date: Monday, July 6, 2026 Pre-Bid Meeting: Friday, July 3, 2026 11:00 AM Venue: Office of Chief Supply Chain Officer MEPCO HQ Multan
5.	**7.2**	Any addendum, in case issued, shall be published on **Multan Electric Power Company (MEPCO) (Multan Electric Power Company (MEPCO))** website and on **EPADS v2.0**.
C. Preparation of Bids		
6.	**8.1**	List of documents required along with the bid: No
7.	**9.1**	The qualification criteria to establish the supply / production capability of the bidder. *see Eligibility Criteria*
8.	**11.2**	**Works and Their relateddocuments:** *See section Required Scope of Work*
9.	**11.1**	Price schedule will be provided according to the format defined and acquired. *see section price schedule.*
10.	**11.4**	**Specifications:** *see section of specifications.*

11.	**11.5 & 13.5**	The price shall be **Fixed**. The bid price shall be adjusted in accordance with Appendix provided – Formula for Price Adjustment.
12.	**14.1**	Currency of the Bids shall be : **PKR**
13.	**16.1**	The Bids/Bid Validity period shall be: **120 Days**
14.	**17.1**	The amount of Bid Security shall be as defined in Bid Security Section for items and lots given in **BDS 6**
15.	**17.2**	The Bid Security shall be in the form of: **Pay Order, Banker's Cheque, Call at Deposit, Bank Guarantee**
16.	**15.1**	Alternative Bids to the requirements of the bidding documents willnot be permitted.
D. Submission of Bids		
17.	**18.1 & 21.1**	Bid shall be submitted online on EPADS v2.0 whereas hard copy of the bid security should be submitted to the following; **MEPCO Complex, Wapda Colony,Khanewal Road, Multan City, Multan (District), Multan Division (Division), Punjab (Province).** Bids that are not submitted on EPADS v2.0 shall be disqualified. The deadline for Bids submission is: **Friday, July 17, 2026 11:00 AM**

E. Opening and Evaluation of Bids

18.	**24.1**	The Bids opening shall take place on **EPADS v2.0**. Day *:* ***Friday*** Date:***July 17, 2026*** Time *:* ***11:30 AM***
19.	**30.2**	Selection technique adopted will be: **Least Cost Based Selection (LCBS)** *see Evaluation Criteria*

F. Award of Contract

20.	**41.1 & 41.2**	The Performance guarantee shall: **5.00%**. The Performance Guarantee shall be acceptable in the form of:**Pay Order, Banker's Cheque, Call at Deposit, Bank Guarantee**
21.	**45.1**	Arbitrator shall be appointed by mutual consent of the both parties.

G. Review of Procurement Decisions

22.	**37**	Grievance against this procurement shall be submitted online on EPADS v2.0.

Eligibility Criteria

Bidder's Type	Required Registration
Any	FBR (NTN) FBR (GSTN) PEC

Eligibility Criteria	Document
1. Valid Registration from Pakistan Engineering Council (PEC) for execution of Electrical Works under relevant Category.	Yes
2. Certificate that General Conditions of Contract for purchases by PEPCO / WAPDA dated 12/08/1984 & latest purchase procedure PPRA-2004 (Amended to-date) are acceptable to the bidder and are hereby agreed to by the bidder.	Yes
3. Certificate that the material to be provided is in accordance with the approved Specifications of PPMC (Amended to-date).	Yes
4. Technical data of the quoted item (s) along-with PPMC standard specification (Amended to-date).	Yes
5. Certificate that the bidder shall obtain prototype approval as per approved Specification PPMC-DS-01: 2026 (Amended to-date) within 30 days from the issuance of Work Order.	Yes
6. Integrity Pact / Declaration of fees, commission and brokerage etc. payable by the suppliers of goods services and works in contracts worth Rs 10 Million or more.	Yes
7. Average Annual Turn Over of Last Three (3) years should be at least 120 Million. Bidder shall attach the audited financial document of last (3) years.	Yes

8. Certificate that the firm is neither blacklisted / debarred by WAPDA / DISCOs / GENCOs/ NTDC at present.	Yes
9. Certificate that the Bid Validity, Bid Security, Delivery Period & Payment terms/conditions conform to the tender requirement.	Yes
10. Certificate that Warranty of material installed should be as per PPMC-DS-01: 2026 (Amended to-date)	Yes

Evaluation Criteria

Least Cost Based Selection (LCBS)

Jobs/Lots

Jobs Without Lots :

Job	Delivery Schedule	Quantity	Bid Security
GRAND TOTAL (Total Schedule 1+ Total Schedule 2) (Inclusive of all taxes / duties & 0.5% inspection charges & without GST & PST)	Address: MEPCO Complex, Wapda Colony,Khanewal Road, Multan City, Multan (District), Multan Division (Division), Punjab (Province). Schedule: 60 Days from the issuance date of P.O / Work Order (as per PPMC specification NO. PMMC-DS-01:2026) Quantity: 1341/Qty	1341/Qty	3000000 PKR

Related Services :

No

Work Specifications and Market Rates

Jobs Without Lots :

Job: GRAND TOTAL (Total Schedule 1+ Total Schedule 2) (Inclusive of all taxes / duties & 0.5% inspection charges & without GST & PST)

Specifications / Requirements:

Sr. No	Schedule	Description	Rate	Amount
1	Schedule 1	Plant and Mandatory Spare Parts Supplied from within the Employer's Country	175423.4116	235242795
2	Schedule 2	Installation & other Services	35000	46935000
			GRAND TOTAL:	Rs282,177,795.00

Scope of Work

MEPCO (hereinafter called the “Employer”) wishes to receive Bids on EPC/Turnkey basis for the scope of work which includes, but shall not be limited to:

Procurement & installation of 1341NOS APMS (ASSET PERFORMANCE MANAGEMENT SYSTEM) on High AT&C Loss Feeders.

The Works to be executed under this Contract comprise, Construct, Manufacture, Supply and Install on EPC/Turnkey basis.

MEPCO intends to install Asset Performance Management System (APMS) on Pole Mounted Distribution Transformers for transformer level monitoring, protection, load management, energy auditing and remote operation through HES/MDC system in accordance with PPMC Specification No. PPMC-DS-01:2026.

The vendor shall supply, install, test, commission and integrate APMS equipment complete in all respects on distribution transformers of different capacities including associated accessories, HES/MDC integration and communication setup.

The successful Bidder will be expected to complete the Works within the stipulated period of 60 days from issuance of work order as specified in these Bidding Documents.

Bidders must quote prices for the complete scope of work. Any Bid covering partial scope of work will be non-responsive.

Price Schedule

For Individual Jobs

#	Job Title	Quantity	Unit Price (PKR)	Total Price (PKR)	Delivery Location	Delivery Period / Year	Country of Origin
1							
2							

For Lots

#	Lot Title	Total Lot Price (PKR)	Country of Origin
1	[Lot 1 Title]		

PUBLIC PROCUREMENT REGULATORY AUTHORITY
(PPRA)
EPADS

General Conditions of Contract

A. General

1. **Definitions**

1.1. Unless the context otherwise requires, the following terms whenever used in this Contract shall have the same meaning and shall be interpreted as indicated

1.1.1. “Applicable Law” means the laws and any other instruments having the force of law in the Government’s Country, or in such other country as may be specified in the Special Conditions of the Contract (SC), as they may be issued and in force from time to time;

1.1.2. “The Contract” means an agreement enforceable by law;

1.1.3. “The Contract Price” means the price payable to the Contractor under the Contract for the full and proper performance of its contractual obligations;

1.1.4. “The Services” means the work to be performed by the Contractor pursuant to this Contract and as prescribed in the Specifications and Schedule of Activities included in the Contractor’s Bid;

1.1.5. “Ancillary Services” means those services ancillary to the provision of Services, such as transportation and insurance, and any other incidental services, such as installation, commissioning, provision of technical assistance, training, and other such obligations of the Contractor covered under the Contract;

1.1.6. “GCC” means the General Conditions of Contract contained in this section;

1.1.7. “SCC” means the Special Conditions of Contract by which the GCC may be amended or supplemented;

1.1.8. **“**Day” means calendar day unless indicated otherwise;

1.1.9. “Effective Date” means the date on which this Contract comes into force and effect;

1.1.10. “The Contractor” means the individual or corporate body whose Bids to provide the Services has been accepted by the Procuring Agency;

1.1.11. “The Project Site,” where applicable, means the place or places named in Bid Data Sheet and technical Specifications;

1.1.12. “Government” means the Government of Pakistan;

1.1.13. “Local Currency” means the currency of Pakistan;

1.1.14. “In Writing” means communicated in written form with proof of receipt;

1.1.15. “Completion Date” means the date of completion of the Services by the Contractor as certified by the Procuring Agency;

1.1.16. “Foreign Currency” means any currency other than the currency of the country of the Procuring Agency;

1.1.17. “Party” means the Procuring Agency or the Contractor, as the case may be, and “Parties” means both of them;

1.1.18. "Service" means any object of procurement other than goods or works;

1.1.19. “Subcontractor” means any entity to which the Bidder subcontracts any part of the Services.

2. **Applicable Law**

2.1. The contract shall be governed and interpreted in accordance with the laws of Pakistan, unless otherwise specified in SCC.

3. **Language**

3.1. The Contract as well as all correspondence and documents relating to the Contract exchanged between the Contractorand the Procuring Agency, shall be written in the **English language** unless otherwise stated in the **SCC** . Supporting documents and printed literature that are part of the Contract may be in another language provided these are accompanied by an accurate translation of the relevant passages in English, in which case, for purposes of interpretation of the Contract, this translation shall govern.

4. **Notices**

4.1. Any notice, request, or consent made pursuant to this Contract shall be in writing and shall be deemed to have been made when delivered in person to an authorized representative of the Party to whom the communication is addressed, or when sent by registered mail, telex, telegram, or facsimile to such Party at the address specified in the **SCC**.

5. **Location**

5.1. The Services shall be performed at such locations as the Procuring Agency may approve and as specified in **SCC.**

5.2. A {DOCUMENTS}

6. **Authorized Representatives / Authority of Member in charge**

6.1. Any action required or permitted to be taken, and any document required or permitted to be executed, under this Contract by the Procuring Agency or the Contractor may be taken or executed by the officials specified in the **SCC**.

B. Commencement, Completion, Modification, and Termination of Contract

7. **Effectiveness of Contract**

7.1. This Contract shall come into effect on the date the Contract is signed by both parties and such other later date as may be stated in the **SCC.**

8. **Commencement of Services**

8.1. The Contractor shall confirm availability of Key Experts and begin carrying out the Services not later than the number of days after the Effective Date specified in the **SCC.**

9. **Program schedule**

9.1. Before commencement of the Services, the Contractor shall submit to the Procuring Agency for approval a Program showing the general methods, arrangements, order and timing for all activities. The Services shall be carried out in accordance with the approved Program as updated.

10. **Starting Date/Expiration Date**

10.1. The Contractor shall start carrying out the Services Five (05) days after the date the Contract becomes effective, or at such other date as may be specified in the **SCC.**

10.2. Unless terminated earlier pursuant to Clause **GCC 14** hereof, this Contract shall expire at the end of such time period after the Effective Date as specified in the **SCC.**

11. **Entire Agreement**

11.1. This Contract contains all covenants, stipulations and provisions agreed by the Parties. No agent or representative of either Party has authority to make, and the Parties shall not be bound by or be liable for, any statement, representation, promise or agreement not set forth herein.

12. **Modification**

12.1. Any modification or variation of the terms and conditions of this Contract, including any modification or variation of the scope of the Services, may only be made by written agreement between the Parties. However, each Party shall give due consideration to any modification(s) or variation(s) made by the other Party.

12.2. In cases of any modification(s) or variation(s), the prior written consent of the Procuring Agency is required.

13. **Force Majeure**

13.1. **Definition**
For the purposes of this Contract, “Force Majeure” means an event which is beyond the reasonable control of a Contractor and which makes a Contractor’s performance of its obligations under the Contract impossible or so impractical as to be considered impossible under the circumstances.

13.2. **No Breach of Contract**
The failure of a Party to fulfill any of its obligations under the contract shall not be considered to be a breach of, or default under, this Contract in so far as such inability arises from an event of Force Majeure, provided that the Party affected by such an event (a) has taken all reasonable precautions, due care and reasonable alternative

measures in order to carry out the terms and conditions of this Contract, and (b) has informed the other Party as soon as possible about the occurrence of such an event.

13.3. **Extension of Time**
Any period within which a Contractor shall, pursuant to this Contract, complete any action or task, shall be extended for a period equal to the time during which such Party was unable to perform such action as a result of Force Majeure.

13.4. **Payments**
During the period of their inability to perform the Services as a result of an event of Force Majeure, the Contractor shall be entitled to continue to be paid under the terms of this Contract, as well as to be reimbursed for additional costs reasonably and necessarily incurred by them during such period for the purposes of the Services and in reactivating the Service after the end of such period.

14. **Termination**

14.1. **By the Procuring Agency**
The Procuring Agency may terminate this Contract in case of the occurrence of any of the events specified in paragraphs (a) through (e) of this Clause. In such an occurrence the Procuring Agency shall give at least thirty (30) calendar days' written notice of termination to the Contractor in case of the events referred to in (a) through (d); at least sixty (60) calendar days' written notice in case of the event referred to in (e);

14.1.1. If the Contractor fails to remedy a failure in the performance of its obligations hereunder, as specified in a notice of suspension;

14.1.2. If the Contractor becomes (or, if the Contractor consists of more than one entity, if any of its members becomes) insolvent or bankrupt or enter into any agreements with their creditors for relief of debt or take advantage of any law for the benefit of debtors or go into liquidation or receivership whether compulsory or voluntary;

14.1.3. If the Contractor fails to comply with any final decision reached as a result of arbitration proceedings;

14.1.4. If, as the result of Force Majeure, the Contractor is unable to perform a material portion of the Services for a period of not less than sixty (60) calendar days;

14.1.5. If the Procuring Agency, in its sole discretion and for any reason whatsoever, decides to terminate this Contract;

14.2. **By the Contractor**
The Contractor may terminate this Contract, by not less than thirty (30) calendar days' written notice to the Procuring Agency, in case of the occurrence of any of the events specified in paragraphs (a) through (d) of this Clause.

14.2.1. If the Procuring Agency fails to pay any money due to the Contractor pursuant to this Contract and not subject to dispute within forty-five (45) calendar days after receiving written notice from the Contractor that such payment is overdue;

14.2.2. If, as the result of Force Majeure, the Contractor is unable to perform a material portion of the Services for a period of not less than sixty (60) calendar days;

14.2.3. If the Procuring Agency fails to comply with any final decision reached as a result of arbitration;

14.2.4. If the Procuring Agency is in material breach of its obligations pursuant to this Contract and has not remedied the same within forty-five (45) days (or such longer period as the Bidder may have subsequently approved in writing) following the receipt by the Procuring Agency of the Contractor's notice specifying such breach.

C. Obligations of the Contractor

15. **General**

15.1. **Standard of Performance**

15.1.1. The Contractor shall perform the Services and carry out the Services with all due diligence, efficiency and economy, in accordance with generally accepted professional standards and practices, and shall observe sound management practices, and employ appropriate technology and safe and effective equipment, machinery, materials and methods. The Contractor shall always act, in respect of any matter relating to this Contract or to the Services, as a faithful adviser to the Procuring Agency, and shall at all times support and safeguard the Procuring Agency's legitimate interests in any dealings with the third parties;

15.1.2. The Contractor shall employ and provide such qualified and experienced Experts and Sub-Contractors as are required to carry out the Services.

15.2. **Law Applicable to Services**

The Contractor shall perform the Services in accordance with the Contract and in accordance with the Law of Pakistan and shall take all practicable steps to ensure that any of its Experts and Sub-Bidders, comply with the Applicable Law.

16. **Conflict of Interests**

16.1. **Contractor Not to Benefit from Commissions and Discounts**

The remuneration of the Contractor shall constitute the Contractor's sole remuneration in connection with this Contract or the Services, and the Contractor shall not accept for their own benefit any trade commission, discount, or similar payment in connection with activities pursuant to this Contract or to the Services or in the discharge of their obligations under the Contract, and the Contractor shall use their best efforts to ensure that the Personnel, any Subcontractors, and agents of either of them similarly shall not receive any such additional remuneration.

16.2. **Contractor and Affiliates Not to be Otherwise Interested in Project**

The Contractor agree that, during the term of this Contract and after its termination, the Contractor and its affiliates, as well as any Subcontractor and any of its affiliates, shall be disqualified from providing Services (other than the Services and any continuation thereof) for any project resulting from or closely related to the Services.

16.3. **Prohibition of Conflicting Activities**
Neither the Bidder nor its Subcontractors nor the Personnel shall engage, either directly or indirectly, in any of the following activities:

16.3.1. during the term of this Contract, any business or professional activities in the Government's country which would conflict with the activities assigned to them under this Contract;

16.3.2. during the term of this Contract, neither the Contractor nor their Subcontractors shall hire public employees in active duty or on any type of leave, to perform any activity under this Contract;

16.3.3. after the termination of this Contract, such other activities as may be specified in the **SCC.**

17. **Insurance to be Taken Out by the Contractor**

17.1. The Contractor(a) shall take out and maintain, and shall cause any Subcontractors to take out and maintain, at its (or the Sub-contractors', as the case may be) own cost but on terms and conditions approved by the Procuring Agency, insurance against the risks, and for the coverage, as shall be specified in the **SCC**; and (b) at the Procuring Agency's request, shall provide evidence to the Procuring Agency showing that such insurance has been taken out and maintained and that the current premiums have been paid.

18. **Contractor's Actions Requiring Procuring Agency's Prior Approval**

18.1. The Contractor shall obtain the Procuring Agency's prior approval in writing before taking any of the following actions:

18.1.1. appointing such members of the Personnel not provided by the Contractor;

18.1.2. changing the Program of activities; and

18.1.3. any other action that may be specified in the **SCC.**

19. **Reporting Obligations**

19.1. The Contractor shall submit to the Procuring Agency the reports and documents in the numbers, and within the periods as prescribed by the Procuring Agency.

20. **Liquidated Damages**

20.1. **Payments of Liquidated Damages**
The Contractor shall pay liquidated damages to the Procuring Agency at the rate per day stated in the **SCC** for each day that the Completion Date is later than the Intended Completion Date. The total amount of liquidated damages shall not exceed the amount defined in the **SCC**. The Procuring Agency may deduct liquidated damages from payments due to the Contractor. Payment of liquidated damages shall not affect the Contractor's liabilities.

20.2. **Correction for Over-payment**
If the Intended Completion Date is extended after liquidated damages have been paid, the Procuring Agency shall correct any overpayment of liquidated damages by the Contractor by adjusting the next payment certificate. The

Contractor shall be paid interest on the overpayment, calculated from the date of payment to the date of repayment, at the rates specified in **SCC.**

20.3. **Lack of performance penalty**
If the Contractor has not corrected a Defect within the time specified in the Procuring Agency's notice, a penalty for Lack of performance will be paid by the Contractor. The amount to be paid will be calculated as a percentage of the cost of having the Defect corrected, assessed as specified in the Contractor

21. **Performance Guarantee**

21.1. Within the time stipulated in the acceptance letter from the Procuring Agency, the successful Bidder shall furnish the Performance Guarantee in shape and amount **specified in SCC.**

21.2. The proceeds of the Performance Guarantee shall be payable to the Procuring agency as compensation for any loss resulting from the Supplier's failure to complete its obligations under the Contract.

21.3. The Performance Guarantee shall be denominated in the currency of the Contract, or in a freely convertible currency acceptable to the Procuring agency and shall be in the acceptable form as specified in **SCC**.

21.4. The Performance Guarantee will be discharged by the Procuring agency and returned to the Supplier not later than thirty (30) days following the date of completion of the Supplier's performance obligations under the Contract, including any warranty obligations, unless otherwise **specified in SCC.**

22. **Sustainable Procurement**

22.1. The Contractor shall conform to the sustainable procurement contractual provisions, if and as specified in the **SCC.**

D. Contractor's Personnel

23. **Description of Personnel**

23.1. The titles, agreed job descriptions, minimum qualifications, and estimated periods of engagement in the carrying out of the Services of the Contractor's Key Personnel. The Key Personnel listed by title as well as by name are hereby approved by the Procuring Agency.

24. **Removal and / or Replacement of Personnel**

24.1. Except as the Procuring Agency may otherwise agree, no changes shall be made in the Key Personnel. If, for any reason beyond the reasonable control of the Contractor, it becomes necessary to replace any of the Key Personnel, the Contractor shall provide as a replacement a person of equivalent or better qualifications.

24.2. If the Procuring Agency finds that any of the Personnel have (i) committed serious misconduct or have been charged with having committed a criminal action, or (ii) have reasonable cause to be dissatisfied with the performance of any of the Personnel, then the Contractor shall, at the Procuring Agency's written request specifying the grounds thereof, provide as a replacement a person with qualifications and experience acceptable to the Procuring Agency.

24.3. The Contractor shall have no claim for additional costs arising out of or incidental to any removal and/or replacement of Personnel.

E. Obligations of the Procuring Agency

25. **Change in the Applicable Law**

25.1. If, after the date of this Contract, there is any change in the Applicable Law with respect to taxes and duties which increases or decreases the cost of the Services rendered by the Contractor, then the remuneration and reimbursable expenses otherwise payable to the Contractor under this Contract shall be increased or decreased accordingly by agreement between the Parties, and corresponding adjustments shall be made to the amounts referred in the **SCC.**

26. **Services and Facilities**

26.1. The Procuring Agency shall make available to the Contractor and the Experts, for the purposes of the Services and free of any charge, the services, facilities and property described in the Terms of Reference, at the times and in the manner specified in the Terms of Reference.

26.2. In case that such services, facilities and property shall not be made available to the Contractor, the Parties shall agree on (i) any time extension that it may be appropriate to grant to the Contractor for the performance of the Services, (ii) the manner in which the Contractor shall procure any such services, facilities and property from other sources, and (iii) the additional payments, if any, to be made to the Contractor as a result thereof.

F. Payments to the Contractor

27. **Contract Price**

27.1. The price payable shall be in Pakistani Rupees unless otherwise specified in the **SCC**.

28. **Terms and Conditions of Payment**

28.1. Payments will be made to the Contractor according to the payment schedule stated in the **SCC** and as per actual invoice submitted by the Contractor.

28.2. Unless otherwise stated in the **SCC**, the advance payment shall be made against the provision by the Contractor of a bank guarantee for the same amount, and shall be valid for the period stated in the **SCC.** Any other payment shall be made after the conditions listed in the **SCC** for such payment have been met, and the Contractor have submitted an invoice to the Procuring Agency specifying the amount due.

29. **Quality Control Identifying Defects**

29.1. The principle and modalities of Inspection of the Services by the Procuring Agency shall be as indicated in the **SCC.** The Procuring Agency shall check the Contractor’s performance and notify him of any Defects that are

found. Such checking shall not affect the Contractor's responsibilities. The Procuring Agency may instruct the Contractor to search for a Defect and to uncover and test any service that the Procuring Agency considers may have a Defect. Defect Liability Period is as defined in the **SCC**.

29.2. A {INSPECTION}

30. **Correction of Defects, and Lack of Performance Penalty**

30.1. The Procuring Agency shall give notice to the contractor of any Defects before the end of the Contract. The Defects liability period shall be extended for as long as Defects remain to be corrected.

30.2. Every time notice a Defect is given; the contractor shall correct the notified Defect within the length of time specified by the Procuring Agency's notice.

30.3. If the contractor has not corrected a Defect within the time specified in the Procuring Agency's notice, the Procuring Agency will assess the cost of having the Defect corrected, the contractor will pay this amount, and a Penalty for Lack of Performance.

31. **Settlement of Disputes Amicable Settlement**

31.1. The Parties shall use their best efforts to settle amicably all disputes arising out of or in connection with this Contract or its interpretation.

32. **Dispute Settlement**

32.1. **Arbitration**

If any dispute of any kind whatsoever shall arise between the procuring agency and the contractor in connection with or arising out of the Contract, including without prejudice to the generality of the foregoing, any question regarding its existence, validity or termination, or the execution of the contract, the parties shall seek to resolve any such dispute or difference by mutual consultation. If the parties fail to resolve such a dispute or difference even after negotiations or mediation, then the dispute shall be referred within fourteen (14) days in writing by either party to the Arbitrator, with a copy to the other party.

Any dispute in respect of which a notice of intention to commence arbitration has been given, in accordance with **GCC sub-clause 32.1**, shall be finally settled by arbitration. Arbitration may be commenced prior to or after completion of the Contract. Arbitration proceedings shall be conducted in accordance with Arbitration Act 1940. Notwithstanding any reference to arbitration herein, the parties shall continue to perform their respective obligations under the Contract unless otherwise agreed. The Procuring Agency shall continue to pay the Contractor any undisputed amounts due under the Contract during the resolution of any dispute.

Special Conditions of Contract

SECTION VIII. SPECIAL CONDITIONS OF CONTRACT

The following Special Conditions of Contract shall supplement the General Conditions of Contract. Whenever there is a conflict, the provisions herein shall prevail over those in the Conditions of Contract. The corresponding clause number of the GCC is indicated in parentheses.

Number of GC Clause

Amendments of, and Supplements to, Clauses in the General Conditions of Contract

Number of GC Clause 1

Definitions

The Procuring Agency is: Multan Electric Power Company (MEPCO) (Multan Electric Power Company (MEPCO)), Assistant Manager Procurement MEPCO Complex, Wapda Colony,Khanewal Road, Multan City, Multan (District), Multan Division (Division), Punjab (Province).

The Supplier is:

The title of the subject procurement is: (52/27) Procurement and Installation of Asset Performance Management System (APMS) as per PPMC Specification No. PPMC-DS-01:2026

Number of GC Clause 2

Applicable/Governing Law:

The Contract shall be interpreted in accordance with the laws of Islamic Republic of Pakistan

Number of GC Clause 3

Language:

The language of the Contract, all correspondence and communications to be given, and all other documentation to be prepared and supplied under the Contract shall be in **English.**

Number of GC Clause 4

Notices:

The addresses for the notices are:

Procuring Agency:

Multan Electric Power Company (MEPCO) (Multan Electric Power Company (MEPCO)), Assistant Manager Procurement
MEPCO Complex, Wapda Colony,Khanewal Road, Multan City, Multan (District), Multan Division (Division), Punjab (Province).
+92-319-975-7793
amproc&dist@mepco.com.pk

Contractor/ Bidder:

[Name, address and telephone number]

The Contractor/ Bidder's Representative(s)

[Name, address, telephone number and e-mail address]

Number of GC Clause 6.1

The Authorized Representatives are:

For the Procuring Agency:

Multan Electric Power Company (MEPCO) (Multan Electric Power Company (MEPCO)), Assistant Manager Procurement
MEPCO Complex, Wapda Colony,Khanewal Road, Multan City, Multan (District), Multan Division (Division), Punjab (Province).
+92-319-975-7793
amproc&dist@mepco.com.pk

For the Bidder:

Name: ……

Designation: ……..

Address: ……..

Number of GC Clause 7

Effectiveness of the contract

The Contractor/Bidder shall be effective within ….. days from the date of signature of the Contract by both parties

Number of GC Clause 8

Commencement of Contract:

The Contractor/Bidder shall provide Non-Consultancy Services from the effective date of contract.

Number of GC Clause 10.2

Expiration of Contract:

The time period shall be ……

Number of GC Clause 14

Termination

In the event of termination of the contract due to any reason as already defined in the General Conditions of Contract, the Bidder shall be responsible for providing to the Authority the Goods till the time of alternate arrangements.

Number of GC Clause 16

Conflict of Interest:

The Procuring Agency reserves the right to determine on a case-by-case basis whether the Bidder should be disqualified from providing goods or services due to a conflict of a nature described in Clause GCC 17.

Number of GC Clause 20

Liquidated Damages

If the Bidder fails to provide services as required under the contract or in case of any data loss/data breach or any incident compromising the data security or other such failures related to any services, the Bidder shall pay to the Procuring Agency as Liquidated Damages at a rate of **0.07%** to **10.00%** of the Contract value, in accordance with the extent of performance failure & the cost of investigating such incidents as judged by the Authority.

Number of GC Clause 21

Performance Guarantee:

The amount of performance guarantee shall be **5.00%** of the contract price in acceptable form of **Pay Order, Banker's Cheque, Call at Deposit, Bank Guarantee**

Number of GC Clause 27

Currency of Payment:

All the payment to be released to the contractor/Bidder shall be in Pakistani Rupees.

Number of GC Clause 28

Payment terms:

Payment will be made to the Bidder against the procured Goods and services according to the actual invoice or running bills submitted by the Bidder against the services provided within the time given in the conditions of the contract.

Number of GC Clause 29

Identifying Defects:

The Authority reserves the right at any time to inspect the premises of the provider to inspect the goods and monitor the goods being provided.

Inspections & Tests Requirements

For being Brand New, bearing relevant reference numbers of the equipment (Certificate from supplier)

For Physical Fitness having No Damages (Certificate from supplier)

For the Country of Origin as quoted by the Supplier (Certificate from manufacturer)

For conformance to specifications and performance parameters, through Prior to delivery inspection (Inspection Report by Procurement Committee / Inspection Team)

For successful operation at site after complete installation, testing and commissioning of the equipment (Installation, Testing and Commissioning Report by Procurement Committee / Inspection Team)

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.

APMS with magnetic connector, non- motorized MCCB & with oil temperature and level monitoring is required to be quoted in the tender

The Bidder shall provide an inspection call for each concerned material when material is ready. All materials shall be inspected by MEPCO Authorized representative along with M.I PPMC representative in accordance with the latest PPMC Specifications (Amended to date)

In case the Bidder is not the manufacturer of the offered item, the Bidder shall submit a valid Manufacturer's Authorization Letter from the original manufacturer of the relevant material/item along with the bid. The authorization letter shall clearly authorize the Bidder to supply the offered material and shall remain valid for the for the duration of the contract. The bidder will also be responsible for warranty of material of the original manufacturer.

Delivery & Documents

Copies of the Supplier’s invoice showing Goods’ description, quantity, unit price, and total amount;

Original and two copies of the usual transport document (for example, a negotiable bill of lading, a non-negotiable sea waybill, an inland waterway document, an air waybill, a railway consignment note, a road consignment note, or a multimodal transport document) which the buyer may require to take the goods;

Copies of the packing list identifying contents of each package;

Insurance Certificate;

Manufacturer’s or Supplier’s Valid Warranty Certificate;

Inspection Certificate issued by the Nominated Inspection Agency (if any), and the Supplier’s Factory Inspection Report;

Certificate of Origin.

The above documents would be required even if the equipment has already been imported and is available with the supplier ex-stock

The delivery period shall be reckoned from the date of issuance of purchase order / Work Order.

Number of GC Clause 31

Following is the guidance for Dispute Resolution

i. If any dispute of any kind whatsoever shall arise between the Authority and the Bidder in connection with or arising out of the Contract... (full clause unchanged)

ii. At future of negotiation the dispute shall be resolved through mediation...

iii. At failure of mediation, arbitration under Arbitration Act 1940...

iv. Cost sharing equally...

v. Proceedings may commence before/after completion...

Notwithstanding any reference to the arbitration herein, the parties shall continue to perform their respective obligations under the Contract.

Rules of procedure for arbitration proceedings:

Any dispute between the Authority and a Bidder shall be referred to arbitration under the laws of Pakistan including Arbitration Act 1940.

Place of Arbitration and Award:

The arbitration shall be conducted in English language and place shall be Islamabad. The award shall be final and binding.

Bid Securing Declaration

Form 9: Bid Securing Declaration

Date: *[insert date (as day, month and year)]*

Bid No.:***P54248***

To: **Multan Electric Power Company (MEPCO) (Multan Electric Power Company (MEPCO)), Assistant Manager Procurement MEPCO Complex, Wapda Colony,Khanewal Road, Multan City, Multan (District), Multan Division (Division), Punjab (Province).**

We, the undersigned, declare that:

We understand that, according to your conditions, Bids must be supported by a Bid Securing Declaration.

We accept that we will be blacklisted and henceforth cross debarred for participating in respective category of public procurement proceedings for a period of (not more than) six months, if fail to abide with a bid securing declaration, however without indulging in corrupt and fraudulent practices, if we are in breach of our obligation(s) under the Bid conditions, because we:

1. have withdrawn or modified our Bid during the period of Bid Validity specified in the Form of Bid;

2. Disagreement to arithmetical correction made to the Bid price; or

3. having been notified of the acceptance of our Bid by the Procuring Agency during the period of Bid Validity, (i) failure to sign the contract if required by Procuring Agency to do so or (ii) fail or refuse to furnish the Performance Security or to comply with any other condition precedent to signing the contract specified in the Bidding Documents.

We understand this Bid Securing Declaration shall expire if we are not the successful

Bidder, upon the earlier of (i) our receipt of your notification to us of the name of the successful Bidder; or (ii) twenty-eight (28) days after the expiration of our Bid.

Contract Form

SECTION IX: CONTRACT FORMS

THIS AGREEMENT made the _____ day of _____ 20_____ between **Multan Electric Power Company (MEPCO) (Multan Electric Power Company (MEPCO)), Assistant Manager Procurement MEPCO Complex, Wapda Colony,Khanewal Road, Multan City, Multan (District), Multan Division (Division), Punjab (Province).**

(hereinafter called "the Procuring Agency") of the one part and *[name of Bidder]* of *[city and country of Bidder]* (hereinafter called "the Bidder") of the other part:

WHEREAS the Procuring Agency invited Bids for provision of goods, viz., **(52/27) Procurement and Installation of Asset Performance Management System (APMS) as per PPMC Specification No. PPMC-DS-01:2026 (*P54248*)** and has accepted a Bids by the Bidder for the provision of Goods in the sum of *[contract price in words and figures]* (hereinafter called "the Contract Price").

NOW THIS CONTRACT WITNESSETH AS FOLLOWS:

1. In this Contract words and expressions shall have the same meanings as are respectively assigned to them in the Conditions of Contract referred to.

2. The following documents shall be deemed to form and be read and construed as part of this Contract, In the event of any ambiguity or conflict between the Contract Documents listed below, the order of precedence shall be the order in which the Contract Documents are listed below:-

1. This form of Contract;
2. the Form of Bids and the Price Schedule submitted by the Bidder;
3. the Schedule of Requirements;
4. the Technical Specifications;
5. the Special Conditions of Contract;
6. the General Conditions of the Contract;
7. the Procuring Agency's Letter of Acceptance; and
8. [*add here: any other documents*]

3. In consideration of the payments to be made by the Procuring Agency to the Bidder as hereinafter mentioned, the Bidder hereby covenants with the Procuring Agency to provide the Goods related services and to remedy defects therein in conformity in all respects with the provisions of the Contract.

4. The Procuring Agency hereby covenants to pay the Bidder in consideration of the provision of Goods and the remedying of defects therein, the Contract Price or such other sum as may become payable under the provisions of the contract at the times and in the manner prescribed by the contract.

IN WITNESS whereof the parties hereto have caused this Contract to be executed in accordance with their respective laws the day and year first above written.

Signed, sealed, delivered by _____the _____ (for the Procuring Agency)

Witness to the signatures of the Procuring Agency:

……

Signed, sealed, delivered by _____the _____ (for the Procuring Agency)

Witness to the signatures of the Bidder: ……

Integrity Pact

Integrity Pact

DECLARATION OF FEES, COMMISSION AND BROKERAGE ETC. PAYABLE BYTHE SUPPLIERS OF GOODS, SERVICES & WORKS IN CONTRACTS WORTH RS.10.00 MILLION OR MORE

Contract Number: Contract Value: Contract Title:

Dated:

[Name of Supplier] hereby declares that it has not obtained or induced the procurement of any contract, right, interest, privilege or other obligation or benefit from Government of Pakistan or any administrative subdivision or agency thereof or any other entity owned or controlled by it (GoP) through any corrupt business practice.

Without limiting the generality of the foregoing [Name of Supplier] represents and warrants that it has fully declared the brokerage, commission, fee etc. paid or payable to anyone and not given or agreed to give and shall not give or agree to give to anyone within or outside Pakistan either directly or indirectly through any natural or juridical person, including its affiliate, agent, associate, broker, consultant, director, promoter, shareholder, sponsor or subsidiary, any commission, gratification, bribe, finder's fee or kickback, whether described as consultations fee or otherwise, with the object of obtaining or inducing the procurement of a contract, right, interest, privilege or other obligation or benefit in whatsoever form from GoP, except that which has been expressly declared pursuant hereto.

[Name of Supplier] certifies that it has made and will make full disclosure of all agreements and arrangements with all persons in respect of or related to the transaction with GoP and has not taken any action or will not take any action to circumvent the above declaration, representative or warranty.

[Name of Supplier] accepts full responsibility and strict liability for making and false declaration, not making full disclosure, misrepresenting fact or taking any action likely to defeat the purpose of this declaration, representation and warranty. It agrees that any contract, right interest, privilege or other obligation or benefit obtained or procured as aforesaid shall, without prejudice to any other right and remedies available to GoP under any law, contract or other instrument, be voidable at the option of GoP.

Notwithstanding any rights and remedies exercised by GoP in this regard, [Name of Supplier] agrees to indemnify GoP for any loss or damage incurred by it on account of its corrupt business practices and further pay compensation to GoP in an amount equivalent to ten time the sum of any commission, gratification, bribe, finder's fee or kickback given by [Name of Supplier] as aforesaid for the purpose of obtaining or inducing the procurement of any contract, right, interest, privilege or other obligation or benefit in whatsoever form from GoP.

Performance Guarantee Form

Performance Guarantee Form

To: **Multan Electric Power Company (MEPCO) (Multan Electric Power Company (MEPCO)), Assistant Manager Procurement MEPCO Complex, Wapda Colony,Khanewal Road, Multan City, Multan (District), Multan Division (Division), Punjab (Province).**

WHEREAS *[name of Bidder]* (hereinafter called "the Bidder") has undertaken, in pursuance of Contract No. *[reference number of the contract]* dated *[insert date]* for provision of Goods*(*hereinafter called "the Contract").

AND WHEREAS it has been stipulated by you in the said Contract that the Bidder shall furnish you with a Bank Guarantee by a reputable bank for the sum specified therein as security for compliance with the Bidder's performance obligations in accordance with the Contract.

AND WHEREAS we have agreed to give the Bidders guarantee:

THEREFORE, WE hereby affirm that we are Guarantors and responsible to you, on behalf of the Bidder, up to a total of *[amount of the guarantee in words and figures]*, and we undertake to pay you, upon your first written demand declaring the Bidder to be in default under the Contract and without cavil or argument, any sum or sums within the limits of *[amount of guarantee]* as aforesaid, without your needing to prove or to show grounds or reasons for your demand or the sum specified therein.

This guarantee is valid until the: *[insert date]*

Signature and seal of the Guarantors

_____

[name of bank or financial institution]

_____

[address]

_____

[date}

Annexure

Transformer Detail

Information (Read-Only)

See Form Under Additional Forms and Documents: **Transformer Detail** (page number: 76)

BOQ to be filled by the bidder

Each Entry of BOQ should be Properly filled signed and stamped by the bidder amount of Schedule 1 & 2 must match with quoted price by the bidder.

Technical Submission (Vendor)

Document Required

See Form Under Additional Forms and Documents: **BOQ to be filled by the bidder** (page number: 77)

Special Conditions

Bidder must signed and stamped the Special Conditions

Technical Submission (Vendor)

Document Required

See Form Under Additional Forms and Documents: **Special Conditions** (page number: 79)

APMS Technical Specification

Information (Read-Only)

See Form Under Additional Forms and Documents: **APMS Technical Specification** (page number: 83)

Procurement Forms

Average Annual Turnover

Average Annual Turn Over of Last Three (3) years should be at least 120Million. Bidder shall attach the audited financial document of last (3) years.

See Form Under Additional Forms and Documents: **Average Annual Turnover** (page number: 139)

PUBLIC PROCUREMENT REGULATORY AUTHORITY
(PPRA)
EPADS

Additional Forms and Documents

Detail of Transfomrers						
Sr No	Circle					Grand Total
		25	50	100	200	
1	RYK	87	21	3	1	**112**
2	DG khan	74	11	8	1	**94**
3	RYK	49	4	2	0	**55**
4	RYK	39	27	15	12	**93**
5	DG Khan	9	5	2	0	**16**
6	RYK	157	26	1	1	**185**
7	RYK	19	13	3	0	**35**
8	RYK	58	14	2	0	**74**
9	RYK	107	34		0	**141**
10	RYK	94	31	2	1	**128**
11	D.G.Khan	99	84	19	3	**205**
12	D.G.Khan	3	2	8	13	**26**
13	D.G.Khan	48	30	14	0	**92**
14	D.G.Khan	20	11	2	1	**34**
15	D.G.Khan	35	12	4	0	**51**
Total		**898**	**325**	**85**	**33**	**1341**

Schedules of Rates and Prices

Schedule 1: Plant and Mandatory Spare Parts

Item	Description	Quantity	Rate per unit on FCS basis inclusive of all taxes / duties & 0.5% inspection charges & without GST (Rs.)	Total Price[a]	Applicable GST
1	2	3	4	5 = 3 x 4	6
1	APMS (Asset Performance Management System) for 200KVA Ratings along with allied material required for installation	33 Nos			
2	APMS (Asset Performance Management System) for 100KVA Ratings along with allied material required for installation	85 Nos			
3	APMS (Asset Performance Management System) for 50KVA Ratings along with allied material required for installation	325 Nos			
4	APMS (Asset Performance Management System) for 25KVA Ratings along with allied material required for installation	898 Nos			
5	4-Core 61/0.103 for 200Kva(33*15M) As per PPMC/NTDC Approved Specification (Amended to-date)	495 Meter			
6	4-Core 37/0.083 for 100Kva(85*15M) As per PPMC/NTDC Approved Specification (Amended to-date)	1275 Meter			
7	4-Core 19/0.083 for 50Kva(325*15M) As per PPMC/NTDC Approved Specification (Amended to-date)	4875 Meter			
8	4-Core 19/0.052 for 25Kva(898*15M) As per PPMC/NTDC Approved Specification (Amended to-date)	13470 Meter			
9	D Fuse Fittings along with respective fuse size (As per PPMC/NTDC Approved Specification (Amended to-date)) (The quantity refers to complete D-Fuse fitting set containing three legs, including all associated components required for installation).	1341 Sets			
10	ACSR Dog Conductor for 11KV Jumpering (10m/transformer) and allied P.G Connector etc. As per PPMC/NTDC Approved Specification (Amended to-date)	13410 Meter			
11	PC Desktop (Tower) Complete Branded (HP/DELL or equivalent). Intel Core i5 14th Generation or higher with Minimum (16 GB DDR5 or higher RAM and 256 GB NVMe M.2 SSD + 1 TB Sata Hard Drive) along with LED.	09Nos			

In

Schedule 2: Installation and Other Services

Item	Description	Quantity				Unit Price[a] *(Excluding PST)*				Total Price[a] *(Excluding PST)*			
						25kVA	50kVA	100KVA	200KVA	25kVA	50kVA	100KVA	200KVA
1	2	3				4	5	6	7	8 = 3 x 4	9 = 3 x 5	10 = 3 x 6	11 = 3 x 7
		25kVA	50kVA	100KVA	200KVA								
1	Installation, Testing & Commissioning of APMS and D-Fuse Fittings with 11KV Jumpering and allied accessories on Distribution Transformers	898	325	85	33								

LOCAL CURRENCY

GRAND SUMMERY

Schedule No.	Title	Total Amount (Without GST & PST)
		1
1	**Plant and Mandatory Spare Parts Supplied from Within the Employer's Country**	
2	**Installation and Other Services**	
GRAND TOTAL (Total Schedule 1+ Total Schedule 2)		

Note: Unit rates quoted in Schedule 1 shall be inclusive of all taxes / duties & 0.5% inspection charges & without GST (Rs.) & in Schedule 2 Excluding PST. Bid evaluation will be conducted on the basis of prices excluding GST and PST.
GST & PST shall be applicable separately in accordance with the prevailing laws and regulations of the Government of Pakistan.

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 MDM interface of PITC shall be used. In case of development of MEPCO's own MDM in future, the integration of supplied MDC will be carried out by the bidder within the warranty period of MDC. The bidder(s) provided MDC software will have perpetual license and will be bound to upgrade with the latest versions of UDIL.

- HES/MDC software should be perpetual.

- 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**.**

- 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.

- 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., Bahawalpur & D.G Khan).

  90% payment of delivered goods will be made on delivery of material for schedule 1. Remaining 10% payment will be released after successful installation of delivered goods verified by following MEPCO nominated officer (s) / Committee.

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

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

  80% after complete installation and execution of work of schedule 2. verified by the above-

mentioned Committee in Schedule 1.

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) Certificate of the Committee for remaining 10% of payment.
vii) 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 30 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

- 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.

Power Planning & Monitoring Company

Office of Chief (Technical Services), Office # 112, Evacuee Trust Complex, Agha Khan Road, F-5/1, Islamabad. Tel: +92 51 92 1301-302, Email: tufail.ahmed@ppmc.gov.pk

No. **183-208** / TS / PPMC / 12 Dated: 27 / 04 / 2026

All Chief Executive Officers DISCOs
CEO K-Electric, Karachi
CEO Barqiat, AJK Electricity Department
CEO Water & Power Department, Gilgit Baltistan

Subject: **REVISED PPMC SPECIFICATION NO. PPMC-DS-01:2026 OF ASSET PERFORMANCE MANAGEMENT SYSTEM (APMS) FOR POLE MOUNTED DISTRIBUTION TRANSFORMERS**

Enclosed please find herewith a copy of revised PPMC Specification No. PPMC-DS-01:2026 of Asset Performance Management System (APMS) for pole mounted Distribution Transformers, duly approved by Managing Director PPMC for your information, record and implementation. The same shall be applicable with effect from the date of approval by Specification Review Committee, i.e., 23.04.2026.

Engr. Tufail Ahmed Shaikh
Chief (Technical Services)

Cc:

1. CEO Power Information Technology Company (PITC)
2. Mr. Talha Khalid, Chief (Policy & Strategic Planning) PPMC (Member SRC)
3. Mr. Naveed Qaiser, Chief Financial Officer PPMC (Member SRC)
4. Mr. Mubashar Jalal, Chief (Monitoring & Reporting) PPMC (Member SRC)
5. Chief Engineer (Material Inspection) PPMC, Lahore
6. All Members of Technical Working Group
7. All Chief / Directors Material Management / Supply Chain Management
8. All Energy meter manufacturers
9. All LT Circuit Breaker Suppliers / manufacturers
10. All Industrial Panel manufacturers
11. All LT CT manufacturers
12. SO to MD PPMC

POWER PLANNING AND MONITORING COMPANY

SPECIFICATION (PPMC-DS-01:2026)

Asset Performance Management System (APMS) for Pole Mounted Distribution Transformers

Document Change Record

NGC document change record

Version	Document No.	Dated	Effective date of Application	Remarks
1.0	DDS-76:2007	2007	2007	1st Release
1.1	Amendment-1	2010	2010	Amendment
2.0	DDS-76:2023	2023	2023	2nd Release
2.1	Amendment-1	2024	2024	Amendment

PPMC document change record

Version	Document No.	Dated	Effective Date of Application	Remarks
1.0	PPMC-DS-01	2026	23-04-2026	1st Release

This specification has been prepared with due deliberations with technical working groups of DISCOs and Manufacturers.

PREPARED BY:		DRAWINGS BY:
		
Engr. Zaryab Hassan Specialist (D&S)	Engr. Yasir Arshad Asst. Specialist (D&S)	Engr. Amir Hamza Asst. Specialist (D&S)

REVIEWED AND CHECKED BY:

Engr. Sakhawat Ali Team-lead (D&S)

APPROVED BY:			
			
Engr. Talha Khalid Chief Policy and Strategic Planning	Mr. Mubashir Jalal Chief Monitoring and Reporting	Mr. Naveed Qaiser Chief Financial Officer, Planning Support & RA	Engr. Tufail Ahmed Shaikh Chief Technical Services **(Convener)**

Members of Technical Working Group (TWG) from Power Sector

Signed to the extent of UDIL Compliance as National Interoperability Standard, only.

Muhammad Hanif
DG (EA), PITC

Mr. Majid Jatoi
Director General MIRAD HESCO

Mr. Zubair Akhtar
General Manager (TSW) IESCO

Mr. Muhammad Boota Goraya
Chief Engineer (T&G) GEPCO

Mr. Sardar Sajid Nawaz
Operation Director HAZECO

Mr. Nisar Sarwar
Chief (TS) LESCO

Mr. Jamshed Ali
Addl. CE GSC/MM TESCO

Mr. Asad Iqbal
Addl. CE PS&C PESCO

Mr. Syed M Tayyab
Senior Lead (NE) KE

Mr. M Asghar Khan Ghallu
Chief Strategic Planner MEPCO

Mr. Abid Rasheed
Director General MIRAD FESCO

Mr. Muhammad Zulqarnain
Manager P&F MIRAD QESCO

Mr. Mushtaq Ahmed Abbasi
Customer Service Director SEPCO

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FOREWORD

The Federal Cabinet, Government of Pakistan vide its decision dated 27.10.2021 ratified the decision of Cabinet Committee on Energy (CCoE) meeting held on 08.10.2021, as per which the development of uniform Design & Standards for distribution sector of Pakistan is one of the core functions of PPMC.

Subsequently, in pursuance of Federal Cabinet decision, the Ministry of Energy (Power Division) vide notification dated 06.02.2026 has transferred the functions relating to the design, standards and specifications of 11 kV and below from NGC to PPMC.

In pursuance of the Ministry of Energy (Power Division) Notification dated 06.02.2026, whereby the functions related to development of uniform design, standards and specifications for distribution sector of Pakistan have been entrusted to Power Planning and Monitoring Company (PPMC) as it was performing before 2011 under then PEPCO (now PPMC).

Subsequent to this transition, Lahore Electric Supply Company (LESCO) vide its letter No. 1729-36 dated 11.02.2026, carried out a proof of concept (PoC) of the Asset Performance Management System (APMS) with additional features of oil temperature and oil level monitoring on distribution transformers. The PoC was undertaken through educational purchase orders to evaluate field performance, operational effectiveness and integration aspects of the enhanced system. Furthermore, LESCO through DG (MIRAD) letter No. 2508-14 dated 14.04.2026, proposed amendments and highlighted key technical and operational considerations based on field experience, including system integration challenges, monitoring limitations and the need for improved control and protection coordination.

Accordingly, the agenda for revision of the APMS specification was placed before the 1st Specification Review Committee (SRC) meeting vide No. TS/PPMC/DS/02-001 dated 18.02.2026. During the meeting held on 19.02.2026, and in line with the approved Minutes of Meeting, the initiation of the revision of the Asset Performance Management System (APMS) specification was duly considered and formally approved by the competent forum, taking into account LESCO's requirements and the need to strengthen existing standards. Thereafter, the draft specification was extensively deliberated with Technical Working Groups (TWGs) comprising representatives from all Distribution Companies (DISCOs), PITC, and K-Electric, ensuring incorporation of collective field experience, operational requirements, and practical considerations across utilities. Also, in alignment with the Ministry of Energy (Power Division) letter No. 12(23)/2018-DISCO-I dated 24.06.2025 regarding adoption of e-SIM technology in smart energy meters, provision for both embedded SIM (eSIM) and conventional physical SIM-based communication modules have been incorporated. However, mechanism of adoption e-SIM needs to be developed and implemented.

Following detailed consultations and incorporation of stakeholder inputs, the specification was subsequently approved in the 3rd SRC meeting held on 22.04.2026 held vide No DS-SRC-02 dated 22-04-2026.

This specification, titled *"Asset Performance Management System (APMS) for Pole Mounted Distribution Transformers,"* has then been developed in continuation of the earlier specification DDS-76:2023 (amended to date), incorporating necessary improvements in light of field feedback and evolving sectoral needs.



The present revision introduces enhanced functionalities, including optional oil temperature and oil level monitoring through dedicated sensor assemblies, improved control philosophy through coordinated operation of MCCB and magnetic contactor, and clearly defined requirements for installation, operation, and safety. A significant addition is the introduction of a structured ordering code framework, enabling DISCOs and K-Electric to select configurations in line with their specific operational requirements. This modular approach provides flexibility in procurement while maintaining standardization and interoperability across the power distribution network.

The revised specification has been formulated in response to the evolving needs of Pakistan's power distribution sector, with particular emphasis on improved monitoring, protection, control, and reduction of technical and commercial losses. In this context, APMS is envisioned as a critical tool for transformer-level energy audit, enabling enhanced visibility of system performance and facilitating a gradual transition from feeder-level to transformer-level load management. This targeted approach supports more efficient network operation, minimizes indiscriminate interventions, and helps safeguard compliant consumers.

While earlier specifications established a foundational framework, certain limitations were identified in terms of flexibility, feature integration, clarity of requirements, and alignment with current international practices. The present revision addresses these gaps through the introduction of structured ordering codes, enhanced monitoring capabilities and alignment with relevant IEC and international standards, while also accounting for local environmental and operational conditions.

The specification emphasizes standardization, safety, reliability, and lifecycle performance, while ensuring adaptability to future technological advancements and avoiding vendor-specific dependencies. However, the effective realization of APMS benefits is contingent upon proper and continuous monitoring by utilities. Timely analysis of system data and appropriate operational response are essential for achieving improvements in loss reduction, asset protection, and service delivery. It is imperative that all protection features integrated within the APMS remain enabled and fully functional at all times.

This document has been developed through extensive consultations with DISCOs, K-Electric, and industry stakeholders. Recognizing that field conditions and technologies continue to evolve, the specification is intended to remain a dynamic document. All utilities are strongly encouraged to provide feedback based on field performance, particularly regarding operational effectiveness, reliability, load management outcomes, and impact on losses.

PPMC adopts an inclusive approach towards standard development and welcomes input from all stakeholders, including utility personnel, manufacturers, and field engineers. Feedback and suggestions may be shared with the office of Design and Standards, PPMC, through the designated email address (feedback.pds@ppmc.gov.pk), with reference to relevant clauses and supporting data where available. This collaborative approach will ensure that the specification continues to evolve as a robust, practical, and forward-looking document aligned with international best practices.

1. SCOPE

1.1 This specification covers Asset Performance Management System (APMS) for Pole Mounted Distribution Transformers

1.2 APMS shall provide following salient features and services for Distribution Transformers on their LT side after incorporating other components of Advance Metering Infrastructure (AMI) network:

a. Real time monitoring and Operation/Controlling
b. Preventive actions against damage of distribution transformers
c. Load disconnection during Fault/ Abnormal Conditions
d. Energy auditing
e. Scheduling of Load Management
f. Human/Equipment Safety

1.3 This specification covers APMS to be used on the LT side of following distribution transformers:

a. 25 kVA Pole Mounted Distribution Transformer
b. 50 kVA Pole Mounted Distribution Transformer
c. 100 kVA Pole Mounted Distribution Transformer
d. 200 kVA Pole Mounted Distribution Transformer
e. 250 kVA Pole Mounted Distribution Transformer
f. 400 kVA Pole Mounted Distribution Transformer
g. 500 kVA Pole Mounted Distribution Transformer
h. 630 kVA Pole Mounted Distribution Transformer

1.4 This specification introduces an optional Oil Temperature and Oil Level Monitoring feature for the Asset Performance Management System (APMS) installed on pole mounted distribution transformers; The feature shall be realized through integration of a dedicated Oil Temperature and Oil Level Sensor Assembly connected to the SMCD directly or through a suitable controller

1.5 This specification introduces:

a. Ordering code provisions,
b. Sensor installation requirements,
c. Controller technical requirements (if used)

1.6 This specification also introduces use of Magnetic Contactor with MCCB for switching operations only.

2. APPLICABLE SPECIFICATIONS AND STANDARDS

2.1 The APMS shall be designed, manufactured, tested and supplied in accordance with (PPMC-PPMC-DS-01:2026 and latest IEC/International/National standards listed in **clause 2.3.**

2.2 In case the requirements laid down herein differ from those given in International/IEC Standards or other local specifications, the requirements listed herein shall prevail.

2.3 Following specifications and latest IEC/ International standards shall be applied:

DDS-50:2007 (amended to date)	3-Phase Multi-rate (TOD/TOU) Solid-State LT/HT Static Energy Meter
DDS-98:2011 (amended to date)	Specification for Advance Metering Infrastructure
DDS-110:2012 (amended to date)	Meter Data Collection (MDC) Server to be used in AMI
UDIL (latest version)	Universal Data Integration Layer-Multivendor compliant AMI in Pakistan
DDS-80:2007 (amended to date)	LT Current Transformer for metering
IEC 62052-11	Electricity Metering Equipment- General requirements
IEC 62053-21	Electricity Metering Equipment- Static Meters for AC Active Energy (classes 0.5, 1 and 2)
IEC 60947-2	Low voltage switchgear and control-gear – Part 2
IEC 61869-2	Instrument Transformers – Part 2: Additional requirements for current transformers
IEC 60076-22-1	Power transformer and reactor fittings – Protective devices
IEC 60529	Degrees of protection provided by enclosures (IP Code)
IEC 60068-2-2	Environmental testing – Dry heat test
IEC 61439-1	Low-voltage switchgear and control gear assemblies- General Rules
DDS-84:2020	Distribution transformers
IEC-60947-4-1	Low voltage switchgear: contactors and motor starters-electromechanical contactors and motor starters
ISO 2859-1	Sampling procedures for inspection by attributes
IEC 60751	Industrial platinum resistance thermometers and platinum temperature sensors
ISO/IEC 17025	International standard for testing and calibration laboratories

3. ORDERING CODE

3.1 Following ordering codes are applicable for procurement of APMS.

Ordering Code	Description
APMS-CB-S-***	Standard APMS with motorized MCCB
APMS-CB-OTL-***	APMS with motorized MCCB and with oil Temperature and level monitoring
APMS-MC-S-***	Standard APMS with Magnetic Contactor and non-motorized MCCB
APMS-MC-OTL-***	APMS with Magnetic Contactor, non-motorized MCCB and with oil Temperature and level monitoring

*** 025, 050, 100, 200, 250, 400, 500 & 630 (025 depicts 25 kVA, 050 depicts 50 kVA, 100 depicts 100 kVA, 200 depicts 200 kVA, 250 depicts 250 kVA, 400 depicts 400 kVA, 500 depicts 500 kVA and 630 depicts 630 kVA)

4. DEFINITIONS

4.1 **Molded case circuit-breaker (MCCB):**

A mechanical switching device capable of making, carrying and breaking currents under normal circuit conditions and under pre-defined conditions, making, carrying for a given time, and breaking currents under abnormal conditions such as those of short circuits

4.2 **Rated voltage for MCCB:**

The rated voltage of a circuit breaker is the value of voltage which designates it and to which the operating conditions during making or breaking of current.

4.3 **Rated nominal current for MCCB:**

The rated nominal current of a circuit breaker is the value of current which the circuit breaker can carry under test conditions.

4.4 **Rated frequency for MCCB:**

The rated frequency of a circuit breaker is the service frequency for which the circuit breaker is designed.

4.5 **Ambient temperature:**

The average temperature of the air surrounding the complete APMS Unit.

4.6 **Rated short time current of MCCB:**

The rated short time current of a circuit breaker is the value of prospective short circuit current which the circuit breaker shall be required to carry in the closed position for a specified time and under the test conditions specified.

4.7 **Breaking capacity of MCCB:**

A value of prospective breaking current that a switching device can break at a stated voltage under prescribed condition of use and behavior.

4.8 **Making capacity of MCCB:**

A value of prospective making current that a switching device can make at a stated voltage under prescribed condition of use and behavior.

4.9 **Short time withstand current:**

Current that a circuit or a switching device in the closed position can carry during a specified short time under prescribed conditions of use and behavior.

4.10 **Rated short-circuit breaking capacity for MCCB:**

The rated short-circuit breaking capacity (I_{cs}) for an MCCB, is the maximum prospective symmetrical fault current that the MCCB can safely interrupt under specified test conditions without sustaining damage.

4.11 **Rated short-circuit making capacity MCCB:**

The rated short-circuit making capacity (I_{cm}) for an MCCB, is the maximum prospective symmetrical fault current that the MCCB can withstand for a brief period without sustaining damage during the circuit closing operation.

4.12 **Short time delay:**

Any intentional delay in operation within the limits of the rated short time withstand current.

4.13 **Magnetic contactor:**

A Magnetic Contactor is an electrically controlled switch that uses an electromagnet to open and close a circuit.

4.14 **Static meter:**

A type of electronic energy meter that measures energy consumption using solid-state electronic components, without any moving parts.

4.15 **APMS-CB-OTL:**

Configuration of APMS with MCCB incorporating an Oil Temperature and Oil Level Monitoring System consisting of a sensor assembly and controller (if used).

4.16 **APMS-MC-OTL:**

Configuration of APMS with Magnetic Contactor and MCCB incorporating an Oil Temperature and Oil Level Monitoring System consisting of a sensor assembly and controller (if used)

5. SERVICE CONDITIONS

5.1 System Conditions:

System Nominal Voltage	415 V
System Highest Voltage	10% of Nominal Voltage
Nominal Frequency	50 Hz

5.2 Climate Conditions:

Ambient Temperature	Maximum	55°C
	Maximum mean over any 24 Hours	40°C
	Mean in any year	30°C
	Minimum	-25°C
Relative Humidity	Up to 100%	
Altitude (above sea level)	Up to 3000 meters	

6. MAJOR COMPONENTS OF APMS

6.1 Asset Performance Management System (APMS) shall be comprised of following components

a. Smart Metering and Controlling Device (SMCD)
b. Current Transformers (CTs)
c. Molded Case Circuit Breaker (MCCB)
d. Magnetic Contactor (optional as per ordering code)
e. APMS Enclosure

7. SMART METERING AND CONTROLLING DEVICE (SMCD)

7.1 Smart Metering and Controlling Device (SMCD) shall be in accordance with Specifications DDS-50:2007, DDS-98:2011, DDS-110:2012 (all amended to-date).

7.2 It shall measure, record and display MDI, kWh, kVARh, Power Factor and other specified quantities in compliance with the specifications given in Clause 7.1.

7.3 Metering Accuracy Class shall be 0.5S for kWh and 1.0 for kVARh.

7.4 In addition to above, it shall fulfill following specified requirements:

a. It shall have Communication Module with minimum 4G/GSM/GPRS technology incorporating a SIM card/e-SIM.

b. It shall be able to communicate metering and other data stored in its memory and receive commands/write operations from Head-End System / MDM in accordance with the specifications mentioned in Clause 2 and the requirements stated herein.

c. Auxiliary components/ports essentially required for its Communication with both Head-End System / MDM and MCCB or Magnetic Contactor (whichever is applicable) shall also be provided.

d. It shall have optical communication port which shall perform functions of data reading/writing and parameterization of data. It should be disabled by default however, it can be enabled remotely through HES/MDM as per requirement of concerned utility.

7.5 It should be equipped with a battery. The battery type shall be lithium thionyl chloride (LiSOCl2) having minimum capacity of 2000 mAh.

a. Battery manufacturing origins shall be:
   i. Japan (Toshiba, Maxell, Mitsubishi and Panasonic)
   ii. USA (Tadiran, Ultralife and Sonnenchein)
   iii. Germany (Geyer and Varta)
   iv. France (Saft)
   v. South Korea (Xeno)

b. Operational Life of battery shall be minimum five (05) years.

c. Without any Power, the backup battery shall maintain the time, calendar and multi-rate program for a continuous period of at least 5 years.

d. Low Battery indication shall be displayed when minimum 25% battery life is left.

e. Storage/Shelf life of battery shall be more than 15 years.

f. The manufacturing year of Battery should not be more than eighteen (18) Months at the time of offering APMS.

7.6 Super capacitor will be provided for Real-Time Clock (RTC) to maintain date and time for at least 07 days in absence of power.

7.7 In the absence of power, LCD display shall be 'On demand' through scroll buttons.

7.8 It shall have provision for following abnormal conditions:

a. Over Voltage
b. Under Voltage
c. Phase Over Current
d. Overload Condition
e. Voltage Unbalance
f. Current Unbalance
g. High Apparent Power
h. High Oil Temperature
i. Low Oil Level
j. Sensor Fault

7.9 Write provision for two (02) setting levels i.e., Alarm and Tripping shall be available for conditions specified in Clause 7.8, Sr. No. (**a** to **d** and **h**). Write provision for one (01) setting level i.e., Alarm shall be available for Sr. No. (**e** to **g** and **i to j**).

7.10 Threshold values of Alarm and Tripping functions and corresponding time settings shall be user programmable locally through optical port or remotely through head-End system/MDM. Once programmed, these function values shall be stored in its memory.

7.11 It shall perform normal operations and tripping operations of MCCB on the basis of programmed threshold values. Events, i.e., Alarm and Tripping shall be communicated to Head-End System/MDM.

7.12 At least 20 events, Alarm and Tripping, for each abnormal condition given in clause 7.8 and normal switching of MCCB/ Magnetic Contactor with date and time stamp shall be provided before rollover.

7.13 It shall be DLMS/COSEM compliant.

7.14 PCB must have conformal coating.

7.15 SMCD manufacturers shall possess valid prototype approval after fulfilling the requirements of this specification and qualifying prototype testing from Design & Standards department, PPMC.

8. CURRENT TRANSFORMER (CT)

8.1 Current Transformers used in APMS shall have following technical parameters as per IEC 61869-2:

Transformer Ratings	CT Ratio	Accuracy Class	VA Burden
25 kVA	50/5A	0.5	2.5 VA (min)
50 kVA	100/5A	0.5	2.5 VA (min)
100 kVA	200/5A	0.5	2.5 VA (min)
200 kVA	400/5A	0.5	2.5 VA (min)
250 kVA	400/5A	0.5	2.5 VA (min)
400 kVA	600/5A	0.5	2.5 VA (min)
500 kVA	800/5A	0.5	2.5 VA (min)
630 kVA	1000/5A	0.5	2.5 VA (min)

8.2 CT error limits shall be as under:

Ratio Error (± %) at Current (% of Rated)				Phase Displacement (± Minutes) at Current (% of Rated)			
5	20	100	120	5	20	100	120
1.5	0.75	0.5	0.5	90	45	30	30

8.3 The temperature rise test shall be performed at 120% of rated current as per IEC 61869-2 (latest available)

8.4 Dimensional requirements for the base plate are given in the drawings. Other CT dimensions should be so that they can be adequately fixed on bus bars.

8.5 Other than the requirements stated above, the technical parameters and testing criteria shall be in accordance with DDS-80:2007 (amended to date).

8.6 CT manufacturers shall possess valid prototype approval after fulfilling the requirements of this specification and qualifying for prototype testing from the office of Design & Standards (D&S) PPMC.

9. MOLDED CASE CIRCUIT BREAKER (MCCB)

FOR MOTORIZED MCCB WITH RESIDUAL CURRENT (ORDERING CODES APMS-CB)

9.1 MCCB shall provide protection for the following protection functions:

a. Adjustable Overload Protection with long inverse time delay trip and trip characteristic with inverse time curves.

b. Adjustable Short Circuit Protection with definite trip time delay.

c. Adjustable Short Circuit with instantaneous trip

d. Adjustable Residual Current Protection.

9.2 MCCB shall be 3P+N type in compliance of latest IEC-60947-2 standard and the requirements given in this specification.

9.3 It can have thermal-magnetic mechanism or electronic/Microprocessor based mechanism.

9.4 It should be equipped with a motor-operated mechanism for switching purpose.

9.5 The motor-operated mechanism shall have quick make, quick break action. The charging time will not be counted in making time.

9.6 Two position indications ON-OFF shall be available on MCCB or its Motor Operator.

9.7 An "Auto/Manual" switch shall be provided on MCCB or its Motor Operator. When set to "manual" position it shall lock out the remote control.

9.8 Necessary auxiliary contacts/communication ports/control circuits etc. shall be used between MCCB and SMCD for communication between them.

9.9 The communication cables shall be carried through PVC spiral/flexible conduits. These shall have proper tagging and ferruling for easy traceability through cable ducts.

9.10 It shall have adjustable long time pick up current (overload/thermal) settings from at-least 0.7 to 1.0 times of MCCB current rating and also adjustable long-time delay settings.

9.11 It shall have adjustable short time pick up current (short circuit/ magnetic) settings of the current rating and definite time trip delay/setting. The magnetic pickup range is 5-10 x I_n.

9.12 It shall have adjustable Instantaneous pick-up current settings and MCCB shall trip instantaneously within 50msec.

9.13 The minimum pick up settings value of adjustable residual current shall be ≤30mA. Its operating characteristics shall be as per IEC 60947-2 (clause B.4.2.4.1).

9.14 MCCB technical parameters are given below: -

Rated Voltage:	415/430 V
Rated Frequency:	50 Hz
Rated Nominal Current:	
25 kVA APMS:	50-60 A
50 kVA APMS:	100 A
100 kVA APMS:	200 A
200/250 kVA APMS:	400 A
400/500 kVA APMS	800 A

630 kVA APMS	1200 A
Rated Symmetrical Breaking Capacity:	25 kA (minimum)
Rated Making Capacity:	2x Rated Symmetrical Breaking Current (min)

Note: If higher rating is to be used considering the unavailability of said ratings, approval from Design and Standards (D&S) is to be sought.

9.15 Type test reports from independent ILAC accredited international labs or STL approved labs shall be provided. The type test report will be as per latest IEC standard IEC-60947-2 (latest) with additional characteristics given herein.

NON-MOTORIZED MCCB (ORDERING CODES APMS-MC)

9.16 MCCB shall provide protection for the following protection functions:

a. Overload Protection with long inverse time delay trip and trip characteristic with inverse time curves.
b. Short Circuit protection with instantaneous trip.

9.17 MCCB shall be 3P type in compliance with the latest IEC-60947-2 standard and the requirements given in this specification.

9.18 The MCCB shall be manually operated by quick make and quick break mechanism.

9.19 The MCCB shall be mechanically trip-free. ON-OFF breaker position shall be provided with breaker handle/ knob.

9.20 To minimize the effect of arcing, the breaker shall be fitted with arc quenching chamber.

9.21 MCCB technical parameters are given below: -

Rated Voltage:	415/430 V
Category	A
Rated Frequency:	50 Hz
Rated Nominal Current:	
25 kVA APMS:	50-60 A
50 kVA APMS:	100 A
100 kVA APMS:	200 A
200/250 kVA APMS:	400 A
400/500 kVA APMS	800 A
630 kVA APMS	1200 A
Rated Symmetrical Breaking Capacity:	25 kA (minimum)
Rated Making Capacity:	2x Rated Symmetrical Breaking Current (min)

Note: If higher rating is to be used considering the unavailability of said ratings, approval from Design and Standards (D&S) is to be sought.

9.22 The breaker shall be equipped with adjustable magnetic/instantaneous /electronic (microprocess based) trip units/Fixed at $10I_n$ as mentioned in table below. The magnetic/instantaneous (I_i) or electronic settings shall be in steps or continuously be adjustable in range specified below

Rated Current (Amps)	Magnetic Trip Setting Range (Amps)
40	Fixed- 400A
60	Fixed- 600A
80	Fixed- 800A
160	Min 800-1600A
200	Min 1000-2000A
250	Min 1250-2500A
400	Min 2000-4000A
800	Min 4000-8000A
1200	Min 6000-12000A

9.23 The adjustable and instantaneous time lag release settings shall be completely independent of each other.

9.24 MCCB shall trip instantaneously within 50msec.

9.25 Type test reports from independent ILAC accredited international labs or STL approved labs shall be provided. The type test report will be as per latest IEC standard IEC-60947-2 (latest) with additional characteristics given herein.

10. MAGNETIC CONTACTOR

10.1 The Magnetic Contactor shall be used only with ordering codes APMS-MC along with non-motorized MCCB.

10.2 Magnetic Contactor shall be of industrial grade suitable for 415-430 V, 50 Hz system, 3P configuration and coil Voltage of 220-240V AC.

10.3 The Magnetic Contactor shall be rated, Type-2 co-ordination and the AC-6a rating shall be demonstrated either by direct transformer switching test or by derivation from AC-3 rating in accordance with IEC 60947-4-1

10.4 Minimum durability should be mentioned in following quantities in type test reports,

a. Mechanical: minimum 1,000,000 operations.
b. Electrical durability at AC 6a duty: according to IEC standard.

10.5 The contactor shall comply with making and breaking performance requirements as per IEC 60947-4-1 for AC-6a duty.

a. The device shall be capable of safely making and breaking currents under:
   i. Normal operating conditions
   ii. Inductive load switching

b. The making and breaking capacities shall be verified through type tests in accordance with IEC provisions.

10.6 Other technical parameters shall match or exceed Transformer rating and be electrically interlocked with control logic to prevent chattering. Interlocking is required between control logic and switching devices to prevent unintended repeated operations (chattering). This applies to SMCD–contactor–MCCB interaction.

10.7 Contactor should not be used as a protective device. Short-circuit and Overload shall be provided by MCCB and operational based control and voltage based control shall be provided by contactor in ordering codes APMS-MC. It is recommended that LT line should be well protected where ordering codes APMS-MC are used and avoided where frequent faults occur on LT lines.

10.8 Contactor coil shall be protected by surge suppressor / RC snubber and contactor coil shall be controlled through an intermediate control interface (relay/driver circuit). Direct energization is avoided to protect SMCD output contacts.

10.9 Type test reports from independent ILAC accredited international labs or STL approved labs shall be provided. The type test report will be as per latest IEC standard IEC-60947-4-1 (latest) with additional characteristics given herein.

10.10 Drawings shall be approved with consultation with DISCOs and OEMs while considering for induction into the system against respective ordering codes (APMS-MC)

11. APMS ENCLOSURE

11.1 Enclosure body and door shall be made from high grade steel sheet of 1.6 mm and 2.3 mm thickness respectively.

11.2 Copper Busbars shall have 98% IACS conductivity and tin plated with minimum thickness of 20 microns.

11.3 Busbars shall have rectangular cross-section with

a. 050mm² (min) area for 25 kVA
b. 100mm² (min) area for 50 kVA
c. 150mm² (min) area for 100 kVA
d. 300mm² (min) area for 200/250 kVA
e. 600mm² (min) area for 400/500 kVA (2x riveted busbars per phase may be used)
f. 800mm² (min) area for 630kVA (2x riveted busbars per phase may be used)

11.4 Busbars shall be covered with heat shrink LV grade insulation sleeves except the connection points.

11.5 Busbars shall be mounted on Bakelite/ polymer insulators.

11.6 Following clearances shall be maintained in air within the enclosure:

a. Phase to phase 50 mm
b. Phase to earth 25 mm

(where such clearances cannot be maintained like MCCB/Contactor terminals, insulated separators/sleeves shall be used)

11.7 Gland sizes are,

a. For 025 kVA APMS PG-16 (8 Nos)
b. For 050 kVA APMS PG-21 (8 Nos)
c. For 100 kVA APMS PG-30 (8 Nos)
d. For 200/250 kVA APMS PG-42 (8 Nos)
e. For 400/500 kVA APMS PG-42 (16 Nos)
f. For 630 kVA APMS PG-42 (16 Nos)

11.8 Type tested Bimetallic Lugs (Not provided with APMS) shall be used for incoming and outgoing cable connections corresponding to the size/cross sectional area of the cables used by DISCOs,

11.9 Mounting of SMCD shall be made on two mounting brackets as per dimensions given in the attached drawings

11.10 Mounting of components i.e., MCCB, contactor (if used) and busbars shall be made on the back plate. No equipment shall be directly mounted on enclosure walls.

11.11 A window of 150x100mm shall be provided and placed on the front door for SMCD display reading. Transparent polycarbonate sheet of 5 mm thickness overlapped on the window by 15mm on all sides shall be fixed on the inner side. It shall be made dust/waterproof using Neoprene Rubber packing.

11.12 Interior and exterior of enclosure surface shall be painted with powder coating paint. Finished color shall be light grey (RAL 7032) and paint thickness shall be 0.100mm minimum at any point on surface. The paint shall be applied as,

a. The surfaces of the MS plate shall be thoroughly cleaned and sand blasted to prepare the metal surface for painting.
b. All the interior and exterior surfaces of the enclosure shall be thoroughly cleaned through the process of degreasing and phosphating to prepare the metal surface for painting. Good quality pretreatment is a mandatory requirement.
c. Oven baked powder coating paint having durable weather resistant properties suitable to be used in coastal area shall be applied.

11.13 Steel sheets and all structural joints shall be welded/bolted together so that entire enclosure is rigid and self-supporting.

11.14 Two MS bolted connectors shall be provided on the outside of enclosure for earthing purposes.

11.15 A flexible tinned copper strap of 6mmSq shall be used for electrical connectivity between door and body for earthing purposes.

11.16 Enclosure door shall have strong hinges, gutter arrangement and Neoprene rubber gasket. Louvers shall be provided on both sides of the APMS enclosure for cross ventilation as per attached drawings. Vermin proofing shall also be ensured.

11.17 Locking and sealing arrangement of enclosure shall be provided on the outside of door. The earthing terminal of hot dip galvanized MS material with zinc coating of minimum 30 microns.

11.18 Color coding for phase/neutral wiring, CT output wiring, Busbar sleeves shall be red, yellow, blue and black.

11.19 Control and Power circuit diagrams shall be engraved and printed with black color on stainless steel/powder coated Al plate fixed inside the APMS door. All the components shall be shown through symbols in the diagram.

11.20 Following information shall be painted on the APMS enclosure:

a. "APMS for 25 kVA/ 50 kVA/ 100 kVA/ 200kVA/ 250 kVA/ 400 kVA/ 500 kVA/ 630 kVA Transformer" with black color paint on the front door
b. "Danger Symbol" with red color paint on both side walls.

11.21 Following information shall be engraved and printed with black color on a stainless-steel/powder coated Al nameplate and fixed on the front of APMS enclosure:

a. APMS Designed for 25 kVA/ 50 kVA/ 100 kVA/ 200kVA/ 250 kVA/ 400 kVA/ 500 kVA/ 630 kVA Distribution Transformer.
b. Serial No.
c. Rated Voltage (V)
d. Rated Current (A)
e. MCCB Rating (A)
f. Magnetic Contactor Rating (A) (if applicable)
g. CT Ratio
h. Year of Manufacturing
i. P.O No. & Date
j. Warranty Expiry Date
k. Name of Supplier/ Manufacturer
l. Name of DISCO
m. Manufacturer of OTL (for OTL ordering codes only)
n. Low Oil level and Normal Recovery Point (for OTL ordering codes only)
o. Ordering Code

11.22 **Enclosure Tests**

Following tests shall be carried out on the enclosure.

11.22.1 **Visual Inspection**

APMS enclosure shall be visually inspected for any defects mentioned below:

Examination	Defects
Material	Enclosure components not made from specified material.
Finish	Nuts, bolts and washers not galvanized. Busbars not tin-plated. There shall be no dents/rust on the enclosure.
Construction & Dimensions	Enclosure design not in accordance with the drawings. Component missing, improper fittings or not fulfilling Dimensional requirements.
Markings	Markings/ name plate is incomplete or missing.

11.22.2 **Galvanizing Test of Nuts & Bolts and Earthing Terminal**

Nuts, bolts, DA bolts and washers shall be tested in accordance with WAPDA Specification P-82:81 (amended to-date)

11.22.3 **Bus bar Test**

Copper Bus bars shall have electrical conductivity of 98% IACS and Tin coating of 20microns.

11.22.4 **Bakelite/polymer Insulation Tests**

Bakelite/polymer insulator shall withstand 8kV (min) for one minute.

11.22.5 **Temperature rise test**

The temperature rise test shall be carried out on completely assembled APMS enclosure according to IEC 61439-1

11.22.6 **IP class test**

The verification of IP class (IPx5) shall be tested according to IEC 60529.

11.22.7 **Paint Thickness test**

Paint thickness shall be tested using paint thickness gauge and it shall not be less than 0.100mm minimum at any point on surface.

11.23 4x double arming bolts DA-14 (As per PD 56b) along with 2X powder coated channels (As per drawing) for mounting arrangement shall be provided along with the enclosure by APMS manufacturer.

12. APMS-OTL

12.1 In case of APMS-***-OTL, followings conditions are to be met by sensor and controller:

Parameter	Requirement
Operating Temperature Range of sensor	−20 °C to + 125 °C
Temperature Accuracy of sensor	Minimum ±2 °C (or class C or better)
Pressure Withstand of sensor	Minimum 6 PSI continuous (Part inside transformer). 15 PSI (30 minutes)
Sensor IP class	IP65
Controller enclosure IP Class (if used)	IP54

Oil Compatibility	Parts inside transformer must be compatible with transformer mineral oil
Max power consumption of sensor & controller (if used)	≤ 5 W
Protection requirements (for controller)	Reverse polarity protection Overvoltage protection (120% of Un)
Protection breaker (for controller if used)	≤ 1 A
PCB requirement (controller)	Conformal coating
Environmental compliance	IEC 60068-2-2 (Dry Heat test)

12.2 The sensor assembly shall be installed through the transformer oil filling plug and shall fit the oil plug arrangement specified in DDS-84:2020 without modification to the transformer tank.

12.3 Sensor installation shall ensure oil sealing using oil resistant gasket compatible with transformer mineral oil

12.4 Manufacturer shall define:

a. Low Oil Level Alarm Point
b. Normal Oil Level Recovery Point

12.5 In case of sensor failure, wiring disconnection or controller malfunction, APMS shall generate a sensor fault event.

12.6 Temperature sensor accuracy shall be ±2 °C or as per class C or better.

12.7 Installation of the sensor shall not reduce BIL of transformers. Transformers shall remain compliant with IEC 60076-3.

12.8 The external sensor wiring (pilot wires) connecting the Oil Temperature and Oil Level Sensor Assembly to the APMS/SMCD shall be provided in the form of a robust flexible capillary-type conduit/tubing (5 meters). The capillary conduit shall be metallic, flexible and mechanically protected. It should come inside APMS enclosure from below through a suitable gland.

12.9 The sensor assembly/body should be grounded with transformer body (1.5-meter flexible copper wire of 6mmsq shall also be provided).

13. FUNCTIONAL REQUIREMENTS OF APMS

13.1 This specification covers minimum level of functional requirements for design, materials, manufacturing, testing and performance of APMS for 25 kVA, 50 kVA, 100 kVA, 200 kVA, 250 kVA, 400 kVA, 500 kVA and 630 kVA rated Distribution transformers.

13.2 APMS shall have functional characteristics as mentioned in clause 13.3 to 13.11.

13.3 It shall communicate all metering data and events as per latest specifications and must be stored inside meter which will be communicated to HES/MDM upon connection as per requirement (As per clause 17.1).

13.4 It shall be able to record, report and perform following switching operations of MCCB or Magnetic Contactor (as per respective ordering code requirements) i.e., disconnection/reconnection:

a. Operation Remotely through Head-End / MDM
b. Operation through SMCD (Independent of Head-End System / MDM)
c. Operation through local electrical means (Push buttons)
d. Operation through local mechanical means (Toggle/Operating Handle) only for MCCB.

13.5 It shall record, report and perform specified functions against following abnormal conditions through Head-End / MDM for testing purposes, range of testing values are specified with each condition:

a. Over Voltage (up to 20%, higher than Transformer rated voltage)
b. Under Voltage (up to 20%, lower than Transformer rated voltage)
c. Phase Over Current (up to 20%, higher than per phase rated current)
d. Overload Condition (up to 20%, higher than Transformer rated load)
e. Voltage Unbalance (up to 20%, of Transformer rated voltage between phases)
f. Current Unbalance (up to 20%, of per phase rated current between phases)
g. High Apparent Power (up to 20%, higher than Transformer rated kVA rating)
h. High Temperature (100^{o}C)
i. Low Oil Level (binary values)
j. Sensor fault (binary values)

13.6 Write provision for two (02) setting levels i.e., Alarm and Tripping against conditions specified in Clause 13.5, Sr. No. (**a** to **d** & **h**) shall be available. For conditions specified in Clause 13.5, Sr. No. (**e** to **g** & **i to j**) write provision for one (01) setting level i.e., Alarm shall be available.

13.7 Threshold values of these Alarm and Tripping functions and their corresponding time settings shall be user programmable from Head-End system/MDM. Alarm and Tripping shall occur based on these threshold values. Default Values against different parameters mentioned in clause 7.8 shall be provided by the respective utility/DISCO at the time of placing purchase order.

13.8 Performing Load shedding according to preset time schedule shall be provided.

13.9 SMCD shall be programmed bi-directional by default (in white color).

13.10 Tripping events shall be recorded and reported for short circuit and Residual protection (for ordering codes APMS-CB).

13.11 The APMS with OTL feature shall:

a. Measure transformer oil temperature
b. Monitor transformer oil level
c. Generate alarms for sensor fault condition
d. Transmit parameters to backend system
e. Integrate with HES and MDM systems
f. All sensors shall have temperature accuracy certificate from ISO/IEC17025 Lab and functional test reports on oil level monitoring (OEM/APMS provider).

14. PROTOTYPE APPROVAL

14.1 Supplier/manufacturer shall submit one (01) complete APMS unit, technical data and three (03) sets of drawings for prototype approval in the office of Design and Standards, PPMC.

14.2 All the testing arrangements including boarding, lodging and daily allowance shall be borne by manufacturer.

14.3 All the type testing shall be carried out at an independent accredited laboratory under witnessing of D&S PPMC engineer(s).

14.4 Testing Lab instruments should be calibrated from ILAC/PNAC/STL accreditation bodies.

14.5 Manufacturers shall submit satisfactory field performance of APMS from end user for renewal of prototype (if product is provided to DISCOs). If no product is provided to DISCOs, prototype test compliance can be submitted.

14.6 Following tests shall be performed during prototype testing on complete enclosure: -

a. Visual Examination & Verification of dimensions (as per specified drawings)
b. Verification of Components (as per specified drawings)
c. Power Frequency Test of 2.5 kV shall be applied between all four busbars and between ground for one (01) minute.
d. Enclosure Tests as per Clause 11.22.
e. Complete Functionality Tests of APMS as per Clause 13 (10 Nos. operations against each pre-defined operating condition, Normal and abnormal).

14.7 The firm shall possess testing setup for functionality tests of APMS including three phase Current Injection set with adjustable features. The routine tests can be performed In-House.

14.8 For APMS-OTL, manufacturer shall demonstrate compatibility with DDS-84:2020 (amended to date) oil plug arrangement, successful communication with MDC and compliance with all certification requirements.

14.9 Following prototype tests shall be carried out on APMS-OTL sensor and controller assembly only with condition given in clause 14.3.

Sr. No.	Test Name	Standard / Reference	Test Description	Acceptance Criteria
1	Temperature Measurement Accuracy Test	Comparison with calibrated standard	Sensor tested across full operating temperature range	Accuracy within ±2 °C
2	Oil Level Functional Test	Visual method	Verification of oil level alarm and recovery levels using a small sealed tank	Correct Low Oil Alarm and Normal Recovery Point as per datasheet
3	Pressure Withstand Test	Calibrated pressure Gauge	Sensor exposed to internal pressure conditions using a small sealed tank (simulation of transformer pressure conditions)	Withstand 15 PSI for 30 minutes then 6 PSI for 24hours without leakage
4	IP Class verification Test (Sensor)	IEC 60529	Verification of ingress protection of sensor	Minimum IP65
5	IP Class verification Test (Controller)	IEC 60529	Verification of controller enclosure's IP class	Minimum IP54
7	Environmental Temperature Test	IEC 60068 series	Operation under extreme temperature conditions (temperature range is for part inside transformer.	Reliable operation between −20 °C to +125 °C

			Test to be conducted using a small sealed tank.	
8	Dry Heat Test	IEC 60068-2-2	Controller subjected to elevated temperature	No degradation in performance
9	Power Consumption Test	Power analyser	Measurement of OTL assembly power consumption	≤ 5 Watts

14.10 Compatibility certificate is required for sensor assembly with different transformer manufacturers stating that this does not reduce BIL.

14.11 Only PPMC approved sensor assemblies shall be used. (protocols attached in Annex-A).

14.12 Prototyped APMS-CB-OTL doesn't require re-prototyping for APMS-CB-S. However, APMS-CB-S cannot be used as APMS-CB-OTL unless prototyped so. Likewise, APMS-MC-OTL doesn't require re-prototyping for APMS-MC-S. However, APMS-MC-S cannot be used as APMS-MC-OTL unless prototyped so

14.13 For APMS-MC ordering codes, if manufacturer(s) offers their product, the drawings shall be approved as per components and dimensions shall be decided accordingly.

14.14 The validity of Prototype approval will be five (5) years unless there is any change in design or as per PPMC Prototype/Type test Policy.

14.15 The manufacturer must be ISO-9001 and ISO 14001 certified.

15. MASS PRODUCTION TESTS

Following routine and sample tests shall be performed on APMS

15.1 **Routine Tests**

The supplier/manufacturer of APMS shall perform following routine tests on each APMS at their premises and shall maintain its proper record to submit on demand: -

a. Visual Examination & Verification of dimensions (as per approved drawings)
b. Verification of Components (as per approved drawings)
c. Power Frequency Test
d. Complete Functionality Tests of APMS as per Clause 13.
e. For APMS-OTL, following tests are added,

Sr. No.	Test Name	Test Description	Acceptance Criteria
1	Visual Inspection	Inspection of sensor, controller and enclosure	No physical defects
2	Wiring Inspection	Inspection of internal wiring arrangement	Proper dressing and routing in wiring ducts
3	Functional Test	Verification of sensor output and controller response	Correct readings and signal transmission
4	Alarm Generation Test	Verification of alarm signals	Correct alarm for low oil level and temperature
5	Fail-Safe Test	Simulation of sensor disconnection or failure	Distinct Sensor Fault Alarm generated
6	Communication Test	Verification of data transmission	Successful communication with APMS controller

15.2 **Sample Tests**

Following sample tests of APMS during mass production shall be carried out by Material Inspection, PPMC:-

a. Visual Examination & Verification of dimensions, components (as per approved drawings) and calibration certificates (equipment, sensor assemblies)
b. Power Frequency Test (2.5KV)
c. Conductivity test of busbars.
d. Wiring inspection.
e. Fail safe test.
f. Communication verification on MDC.
g. Paint thickness test (0.100mm minimum at any point on surface)
h. Galvanizing test
i. Tin plating test. (=>20 Microns)
j. Bakelite dielectric test. (8kV)
k. Alarm generation test

16. SAMPLING, ACCEPTANCE AND REJECTION

16.1 **General:**

16.1.1 All inspections shall be carried out under the supervision of the Purchaser/Inspection Authority (MI, PPMC) unless otherwise specified.

16.1.2 Sample Quantities.

Offered Quantity	No of Samples
Up-to 25	3
Up-to 50	5
Up-to 90	8
Up-to 150	13
Up-to 280	20
Up-to 500	32
Up-to 1200	50
Up-to 3200	80
Up-to 10000	125
Up-to 35000	200

16.2 **Inspection & Acceptance Table:**

Sr. No.	Test Description	Remarks	Acceptance/rejection
1	Visual Examination & Verification of Dimensions	As per approved drawings	i. If more than one sample fails, then the lot shall be rejected. ii. If only one sample out of the selected samples fails, then re-sampling of double size shall be made. The failure shall be documented and with reasons and acknowledgement from all parties. iii. In case, if any other sample from re-sampling fails, whole LOT shall be rejected and it would be documented and acknowledged by all parties.
2	Power Frequency Test (2.5 kV)	No breakdown or flashover	
3	Complete Functionality Test of APMS along with alarm generation	Full operational verification	
4	Wiring Inspection	Ferruling, termination, routing	
5	Fail Safe Test	Mandatory zero failure	
6	Communication Verification on MDC	Data transmission & integration	
7	Paint Thickness Test	Corrosion protection	
8	Galvanizing Test (1 item from each sample)	Zinc coating compliance	
9	Tin Plating Test (≥20 µm) (1 item from each APMS)	Conductivity & corrosion	
10	Bakelite Dielectric Test (1 item from each APMS)	No breakdown / puncture	

Note: The rejected sample during first sampling shall be rectified before acceptance of LOT.

17. INTEROPERABILITY

17.1 For the purpose of ensuring interoperability, the APMS shall be fully compliant with DLMS/COSEM. Furthermore, for deployments where metering data is managed through the Meter Data Management (MDM) system of Power Information Technology Company, the APMS, associated MDC and communication interfaces shall mandatorily comply with the requirements of the Universal Data Integration Layer (UDIL) latest version and shall be duly certified by PITC ensuring seamless integration, standardized data exchange and avoidance of vendor-specific dependencies.

18. PACKING

Each APMS Unit shall be supplied duly packed to withstand rigors of rail/road transportation. The Glands shall not be damaged. DA bolts, Chanels for mounting arrangements shall also be provided. Moreover, it shall be protected against entry of moisture, rainwater and dust by covering with suitable bubble wrap sheet.

19. WARRANTY

19.1 The complete APMS, including all associated components such as MCCB, SMCD, Magnetic Contactor, OTL sensor assembly, and enclosure (as applicable per the ordering code), shall be warranted for a period of five (05) years from the date of supply or completion of the specified duty cycles (for MCCB and Magnetic Contactor), whichever comes earlier. In the absence of recorded duty cycle data, the warranty period shall be considered five (05) years from the date of supply.

19.2 During the warranty period, the manufacturer/supplier shall be responsible for rectification or replacement of any defective components arising due to design, material or workmanship issues at no additional cost to the purchaser. The fault evaluation report shall jointly be made with representative of DISCO, MI and D&S to ascertain the root cause.

19.3 The warranty shall cover all electrical, mechanical and communication components including battery performance as per specified operational life.

Annex – A

PPMC APPROVAL PROTOCOL FOR SENSOR ASSEMBLY

A- Type Approval (Mandatory Before OTL Prototype for OTL OEM)

Documents Required:

1. Design drawings
2. Mounting arrangement (DDS-84 compatibility)
3. Material specifications
4. Calibration procedure

Type Tests (Mandatory)

Test	Standard	Purpose
Accuracy test (±2°C) (Sensor & controller)	ISO/IEC 17025	Standard governing calibration of equipment against a traceable reference standard.
Pressure test (6 PSI / 15 PSI)	DDS-84:2020 (to date)	Tank conditions
Temperature endurance (-20 to 125°C)	IEC 60068-2-1 / 2-2	Environmental suitability (correct readings)
IP test (IP65)	IEC 60529	Dust + water protection
Vibration test	IEC 60068	Field robustness

Impulse test (with sensor installed) on at-least 2x Transformers (25kVA) of different manufacturers or as per D&S PPMC requirements	IEC 60076-3
Functional test (low level / high temp alarms)	Operational
Fitment verification	OEM certification

PPMC APPROVAL PROTOCOL FOR CONTROLLER (if used)

Test	Standard	Purpose
Power consumption	IEC 60076-22-1 <5Watts	Efficiency
Dry heat test	IEC 60068-2-2	Thermal endurance
IP test (IP54)	IEC 60529	Enclosure protection
EMC test	IEC 61000 series	Interference immunity

Note: All tests shall be performed at an independent Lab

Annex-B

SCHEDULE OF TECHNICAL DATA

1. APMS:

Sr. No.	Description	Offered Value	Compliance	Remarks
1	Manufacturer Name			
2	Type / Model / Designation			
3	Applicable Standards (DDS / IEC)			
4	Rated Voltage (V)			
5	Rated Frequency (Hz)			
6	APMS Rating (25/50/100/200/400/630 kVA)			
7	Degree of Protection (Enclosure IP)			
8	Ambient Temperature Range			
9	Maximum Altitude			
10	Functional Compliance (as per Clause 13)			
11	Alarm & Tripping Logic Details			
12	Field Performance Evidence			
13	Compliance with PPMC-DS-01:2026			
14	Weight			

2. MCCB MOTORIZED WITH EARTH LEAKAGE PROTECTION.

Sr. No.	Description	Offered Value	Compliance	Remarks
1	Manufacturer Name			
2	Model / Frame Size			
3	Standard (IEC 60947-2) compliance			
4	Rated Voltage (V)			
5	Rated Current (In)			
6	Number of Poles (3P / 3P+N)			
7	Breaking Capacity (Icu, kA)			
8	Service Breaking Capacity (Ics, % of Icu)			
9	Making Capacity (Icm)			
10	Thermal Setting Range (Ir)			
11	Magnetic Setting Range (Im)			
12	Short Time Delay (if applicable)			
13	Residual Protection (Yes/No, value)			

14	Type of Trip Unit (Thermal-Magnetic / Electronic)			
15	Motorized Operation (Yes/No)			
16	Auto/Manual Mode Availability			
17	Auxiliary Contacts / Communication Interface			
18	Mechanical Endurance			
19	Electrical Endurance			
20	Type Test Reports (ILAC Lab)			
21	Compliance with PPMC-DS-01:2026			
22	Weight			

3. MCCB NON-MOTORIZED.

Sr. No.	Description	Offered Value	Compliance	Remarks
1	Manufacturer Name			
2	Model / Frame Size			
3	Standard (IEC 60947-2) compliance			
4	Rated Voltage (V)			
5	Rated Current (In)			
6	Number of Poles (3P)			
7	Breaking Capacity (Icu, kA)			
8	Service Breaking Capacity (Ics, % of Icu)			
9	Making Capacity (Icm)			
10	Thermal Setting Range (Ir)			
11	Magnetic Setting Range (Im)			
14	Type of Trip Unit (Thermal-Magnetic / Electronic)			
18	Mechanical Endurance			
19	Electrical Endurance			
20	Type Test Reports (ILAC Lab)			
21	Compliance with PPMC-DS-01:2026			
22	Weight			

4. MAGNETIC CONTACTOR

Sr. No.	Description	Offered Value	Compliance	Remarks
1	Manufacturer Name			
2	Model / Type			
3	Standard (IEC 60947-4-1)			
4	Rated Operational Voltage (V)			
5	Rated Frequency (Hz)			
6	Rated Current (AC 6a duty)			
7	Utilization Category (AC 6a)			
8	Coil Voltage (V)			
9	Mechanical Endurance (operations)			
10	Electrical Endurance (AC 6a duty)			
11	Making Capacity			
12	Breaking Capacity			
13	Surge Protection (RC / MOV)			
14	Electrical Interlocking with MCCB			
15	Coordination Type (Type 2)			
16	Type Test Reports (ILAC Lab)			
17	Compliance with PPMC-DS-01:2026			
18	Weight			

5. SMCD

Sr. No.	Description	Offered Value	Compliance	Remarks
1	Manufacturer Name			
2	Model / Type			
3	Standards (DDS-50, 98, 110 / IEC 62052/53) compliant			
4	Accuracy Class (kWh / kVARh)			
5	Communication Technology			
6	DLMS/COSEM Compliance (Yes/No)			
7	Optical Port Availability			
8	Auxiliary Ports (MCCB Interface)			
9	Battery Type & Capacity			
10	Battery Backup Duration			
11	RTC Backup (Supercapacitor)			
12	Event Logging Capacity			
13	Alarm & Trip Configurability			
14	Remote Operation Capability			
15	Firmware Upgrade Capability			

16	PTA Compliance (for communication)			
17	Type Approval (PPMC)			
18	DLMS Certification Attached			
19	Weight			

6. OTL (OIL TEMPERATURE & LEVEL ASSEMBLY)

Sr. No.	Description	Offered Value	Compliance	Remarks
1	Manufacturer Name			
2	Model / Type			
3	Applicable Standards (IEC 60751, IEC 60068, IEC 60529)			
4	Temperature Measurement Range (°C)			
5	Temperature Accuracy (± °C)			
6	Drift over Time			
7	Oil Level Detection Method			
8	Pressure Withstand (PSI)			
9	Sensor IP Rating			
10	Controller IP Rating			
11	Operating Temperature Range			
12	Power Consumption			
13	Mounting Arrangement (DDS-84 compatible)			
14	Fail-Safe Feature (Yes/No)			
15	Calibration Certificate (ISO/IEC 17025 lab)			
16	Type Test Reports			
17	Transformer Compatibility Certificate			
18	PPMC Approval Status			
19	Weight			

LIST OF DRAWINGS

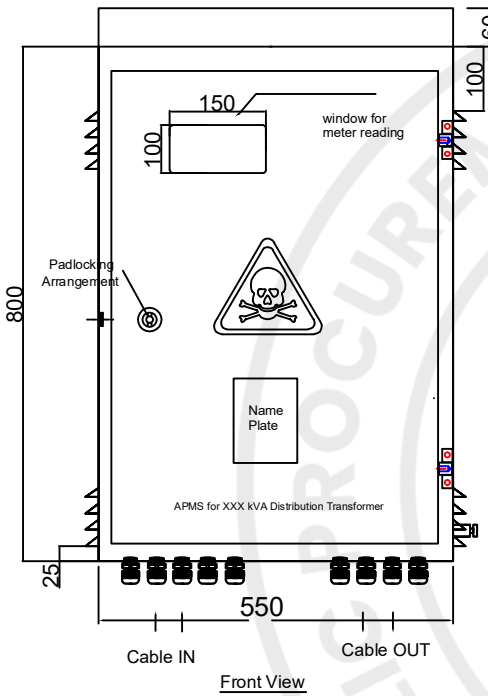
Sr No.	Drawing No.	Drawing Title
01	APMS/PPMC/D&S/01	Enclosure Unit for 25/50/100 kVA
02	APMS/PPMC/D&S/02	Enclosure Unit for 200/250 kVA
03	APMS/PPMC/D&S/03	Enclosure Unit for 400/500,630 kVA
04	APMS/PPMC/D&S/04	Internal Components Arrangement
05	APMS/PPMC/D&S/05	Base Plate for 25/50/100 kVA
06	APMS/PPMC/D&S/06	Base Plate for 200/250 kVA
07	APMS/PPMC/D&S/07	Base Plate for 400/500,630 kVA
08	APMS/PPMC/D&S/08	Air Vent for 25/50/100 kVA
09	APMS/PPMC/D&S/09	Air Vent for 200/250,400/500,630 kVA
10	APMS/PPMC/D&S/10	Meter Support Channel
11	APMS/PPMC/D&S/11	Rating Plate
12	APMS/PPMC/D&S/12	Earthing Terminal
13	APMS/PPMC/D&S/13	Current Transformer
14	APMS/PPMC/D&S/14	Insulator
15	APMS/PPMC/D&S/15	Circuit Diagram with magnetic Contactor
16	APMS/PPMC/D&S/16	Circuit Diagram with magnetic Contactor
17	APMS/PPMC/D&S/17	Magnetic Contactor Arrangement
18	APMS/PPMC/D&S/18	Tolerance Sheet

Power Planning and Monitoring Company (PPMC)
DESIGN AND STANDARDS (D&S)

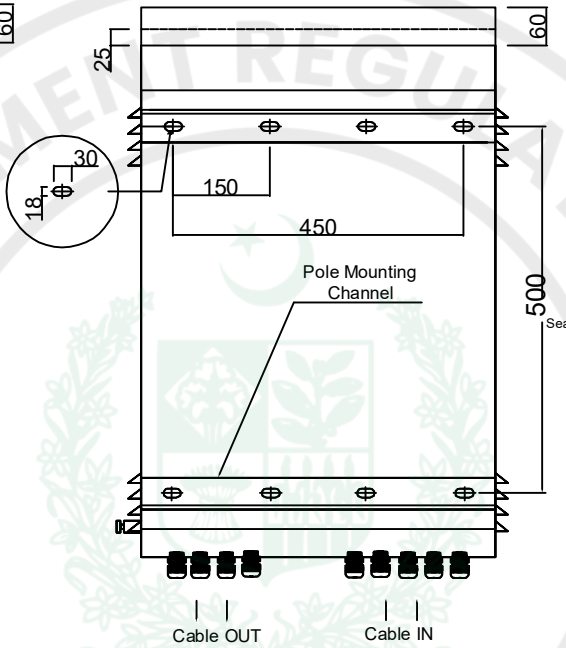
Drawn By:	Checked By:	Verified By:		
ENGR.AAMIR HAMZA ASST.SPECIALIST (D&S)	ZARYAB HASSAN SPECIALIST (D&S)	SAKHAWAT ALI TEAM LEAD (D&S)	Scale:	NTS
			Revision Nos:	0/0
			Date :	17/04/2026

PPMC

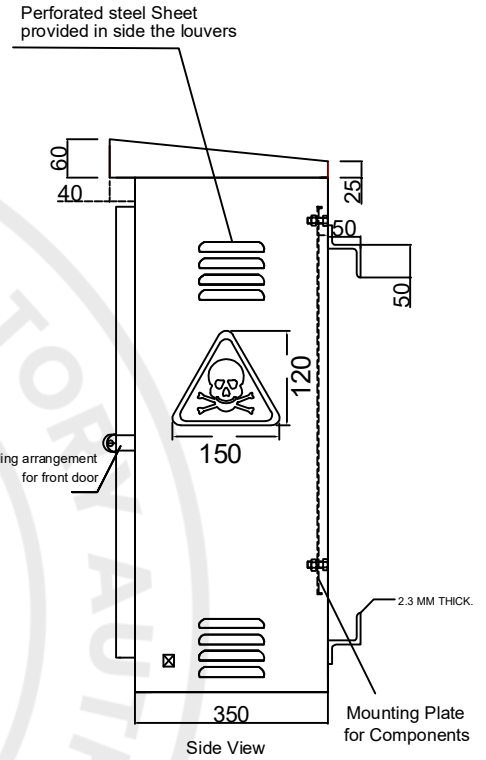
Product :	Asset Performance Management System For 25kVA,50kVA,100kVA,200/250kVA,400/500kVA and 630kVA Transformer
Drawing Title:	LIST OF DRAWINGS
Reference :	PPMC-DS-01
Drawing No.	APMS/PPMC/D&S/ 00 OF 18



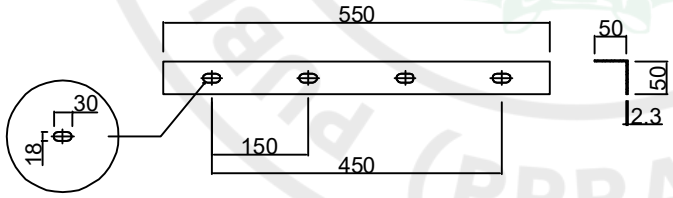
Front View



Back View



Side View



Pole Mounting Channel (2 NOS)

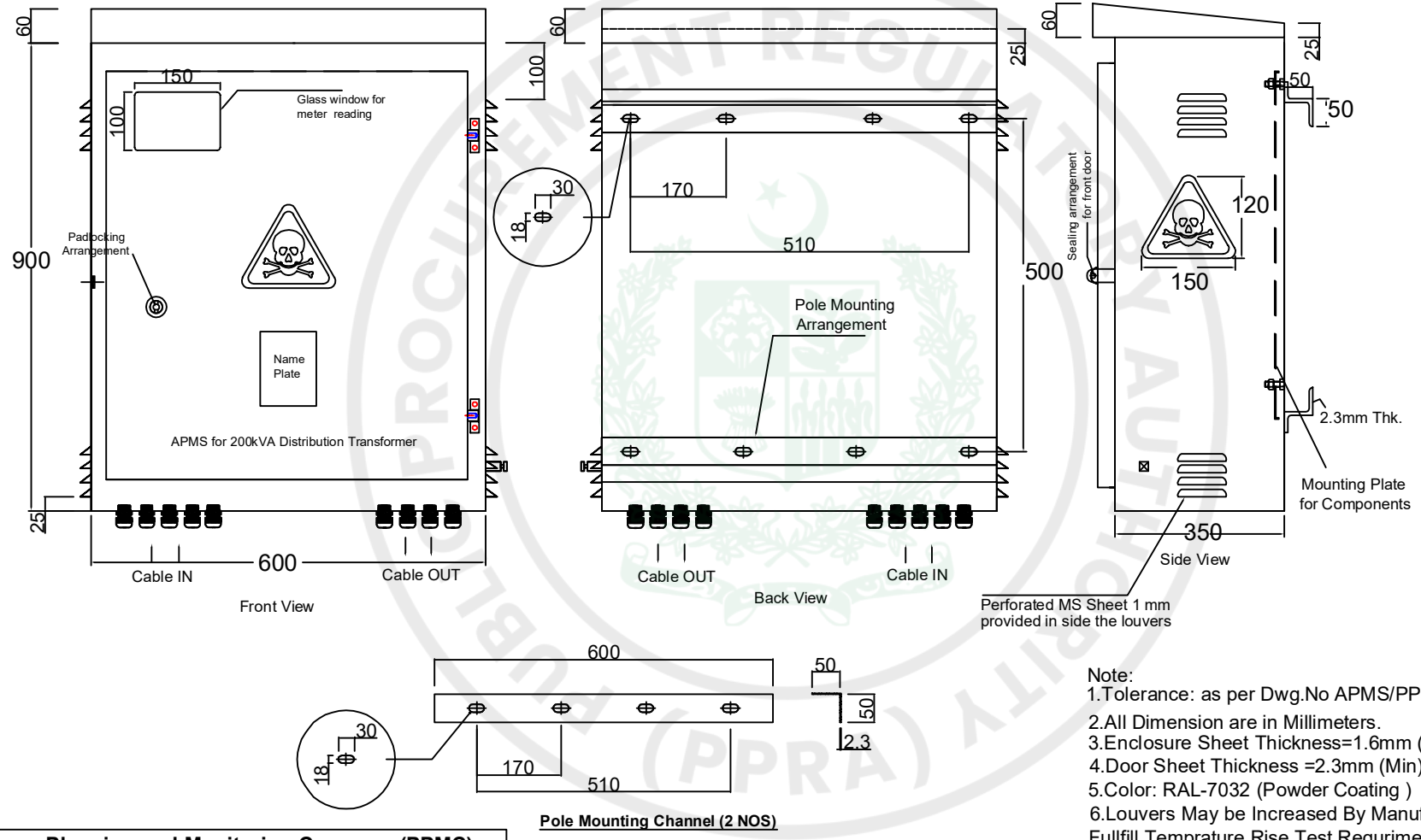
Note:
1.Tolerance: as per Dwg.No APMS/PPMC/D&S/18
2.All Dimension are in Millimeters.
3.Enclosure Sheet Thickness=1.6mm (Min)
4.Door Sheet Thickness =2.3mm (Min)
5.Color: RAL-7032 (Powder Coating)
6.Louvers May be Increased By Manufactures To Fullfill Temprature Rise Test Requriments.

Power Planning and Monitoring Company (PPMC)
DESIGN AND STANDARDS (D&S)

Drawn By:	Checked By:	Verified By:	Scale:	NTS
ENGR.AAMIR HAMZA ASST.SPECIALIST (D&S)	ZARYAB HASSAN SPECIALIST (D&S)	SAKHAWAT ALI TEAM LEAD (D&S)	Revision Nos:	0/0
			Date :	17/04/2026

PPMC

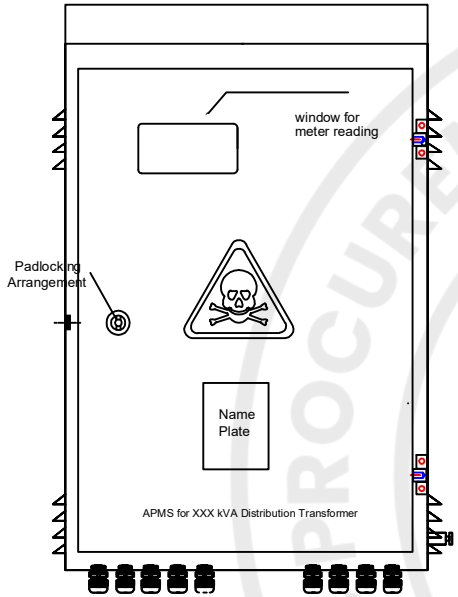
Product :	Asset Performance Management System For 25kVA,50kVA,100kVA Transformer
Drawing Title:	Enclosure Unit
Reference :	PPMC-DS-01
Drawing No.	APMS/PPMC/D&S/01 OF 18



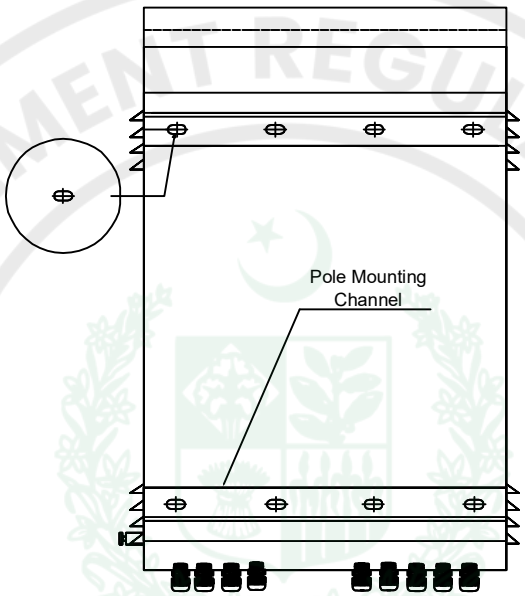
Note:
1.Tolerance: as per Dwg.No APMS/PPMC/D&S/18
2.All Dimension are in Millimeters.
3.Enclosure Sheet Thickness=1.6mm (Min)
4.Door Sheet Thickness =2.3mm (Min)
5.Color: RAL-7032 (Powder Coating)
6.Louvers May be Increased By Manufactures To Fullfill Temprature Rise Test Requriments.

Power Planning and Monitoring Company (PPMC)
DESIGN AND STANDARDS (D&S)

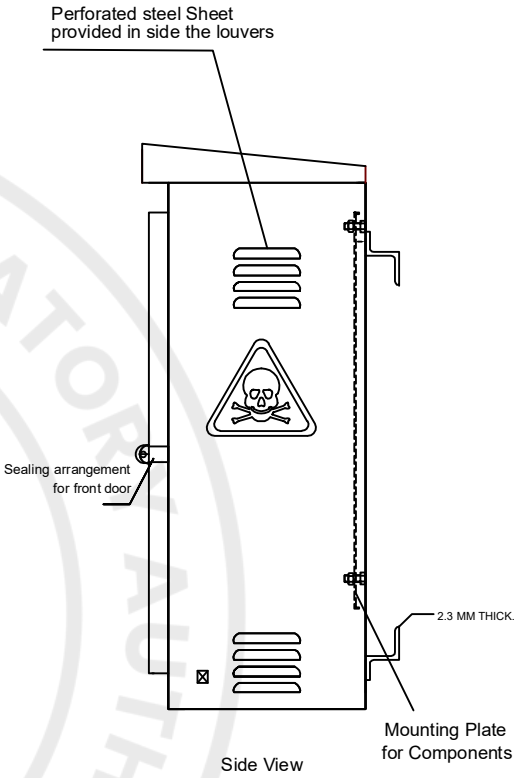
Drawn By:	Checked By:	Verified By:	Scale:	NTS	PPMC	Product :	Asset Performance Management System For 200/250 kVA Transformer
ENGR.AAMIR HAMZA ASST.SPECIALIST (D&S)	ZARYAB HASSAN SPECIALIST (D&S)	SAKHAWAT ALI TEAM LEAD (D&S)	Revision Nos:	0/0		Drawing Title:	Enclosure Unit
			Date :	17/04/2026		Reference :	PPMC-DS-01
						Drawing No.	APMS/PPMC/D&S/ 02 OF 18



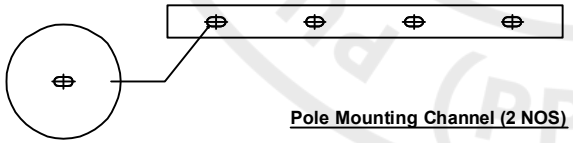
Front View



Back View



Side View



Pole Mounting Channel (2 NOS)

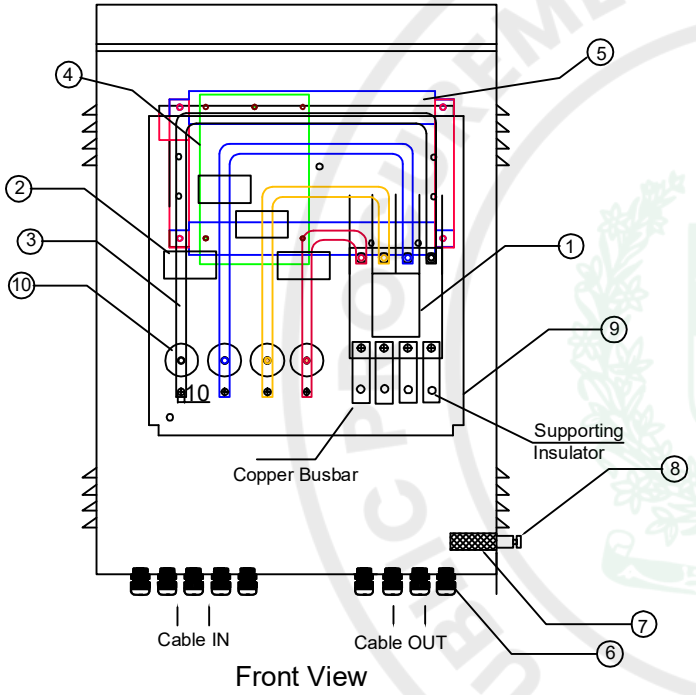
Note:
1.Tolerance: as per Dwg.No APMS/PPMC/D&S/18
2. This Indicative drawing is for reference only. Detailed dimensional arrangement shall be made as per the prototype.

Power Planning and Monitoring Company (PPMC)
DESIGN AND STANDARDS (D&S)

Drawn By:	Checked By:	Verified By:		
ENGR.AAMIR HAMZA ASST.SPECIALIST (D&S)	ZARYAB HASSAN SPECIALIST (D&S)	SAKHAWAT ALI TEAM LEAD (D&S)	Scale:	NTS
			Revision Nos:	0/0
			Date :	17/04/2026

PPMC

Product :	Asset Performance Management System For 400/500kVA, 630kVA Transformer
Drawing Title:	Enclosure Unit
Reference :	PPMC-DS-01
Drawing No.	APMS/PPMC/D&S/ 03 OF 18



Front View

LEGEND

1- MCCB
2- LT CTs
3- Copper Bus Bars
4- Smart Metering and Control Device
5- Channel for Meter Support
6- Cable Glands
7- Copper braided wire for door earthing
8- Earthing Terminal
9- Mounting Plate for Components
10- Busbar Support Insulators

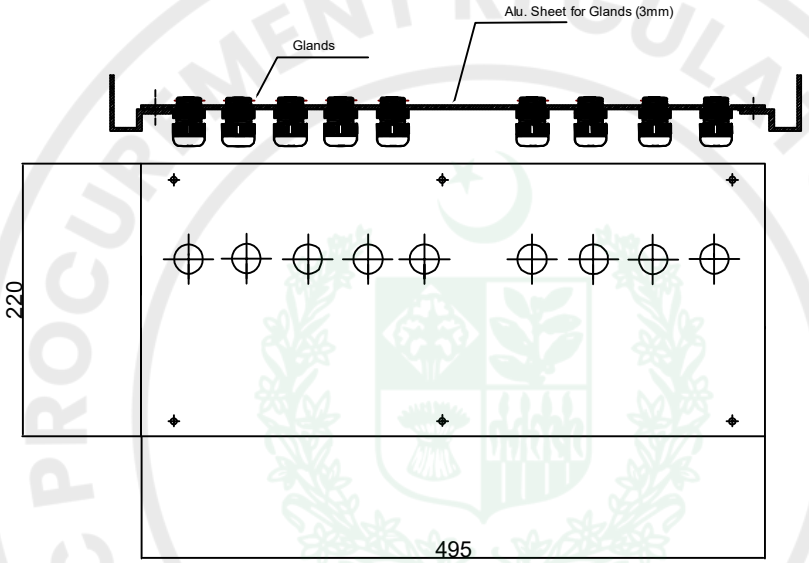
Note:
1.Tolerance: as per Dwg.No APMS/PPMC/D&S/18
2. Detailed dimension and Holes Position shall be as per approved Prototype

Power Planning and Monitoring Company (PPMC)
DESIGN AND STANDARDS (D&S)

Drawn By:	Checked By:	Verified By:		
ENGR.AAMIR HAMZA ASST.SPECIALIST (D&S)	ZARYAB HASSAN SPECIALIST (D&S)	SAKHAWAT ALI TEAM LEAD (D&S)	Scale:	NTS
			Revision Nos:	0/0
			Date :	17/04/2026

PPMC

Product :	Asset Performance Management System For 25kVA,50kVA,100kVA,200/250kVA,400/500kVA and 630kVA Transformer
Drawing Title:	Internal Components Arrangement
Reference :	PPMC-DS-01
Drawing No.	APMS/PPMC/D&S/ 04 OF 18



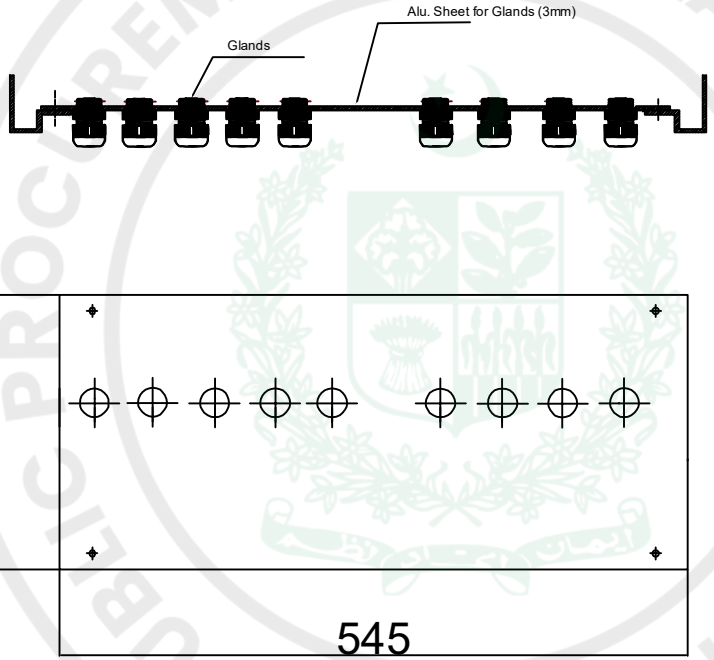
Note:
1.Tolerance: as per Dwg.No APMS/PPMC/D&S/18
2.All Dimension are in Millimeters.
3.Gland Material = PVC
4. Holes Positions Can Be Changed But Will Be Fixed Once Prototype is Approved.

Power Planning and Monitoring Company (PPMC)
DESIGN AND STANDARDS (D&S)

Drawn By:	Checked By:	Verified By:		
ENGR.AAMIR HAMZA ASST.SPECIALIST (D&S)	ZARYAB HASSAN SPECIALIST (D&S)	SAKHAWAT ALI TEAM LEAD (D&S)	Scale:	NTS
			Revision Nos:	0/0
			Date :	17/04/2026

PPMC

Product :	Asset Performance Management System For 25kVA,50kVA,100kVA Transformer
Drawing Title:	Base Plate
Reference :	PPMC-DS-01
Drawing No.	APMS/PPMC/D&S/ 05 OF 18



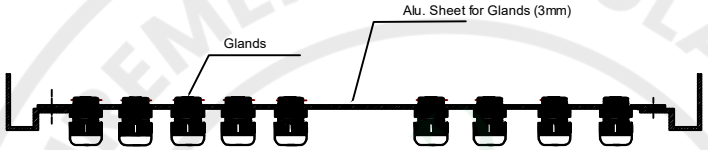
Note:
1.Tolerance: as per Dwg.No APMS/PPMC/D&S/18
2.All Dimension are in Millimeters.
3.Gland Material = PVC
4. Holes Position Can Be Changed But Will Be Fixed Once Prototype is Approved.

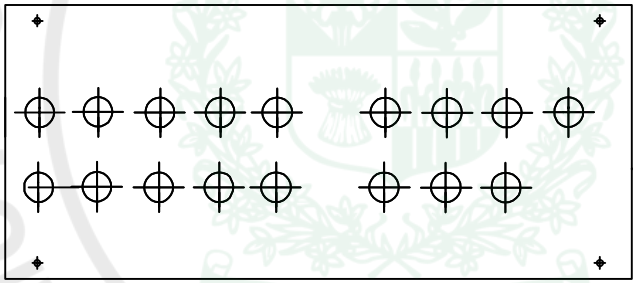
Power Planning and Monitoring Company (PPMC)
DESIGN AND STANDARDS (D&S)

Drawn By:	Checked By:	Verified By:	Scale:	NTS
ENGR.AAMIR HAMZA ASST.SPECIALIST (D&S)	ZARYAB HASSAN SPECIALIST (D&S)	SAKHAWAT ALI TEAM LEAD (D&S)	Revision Nos:	0/0
			Date :	17/04/2026

PPMC

Product :	Asset Performance Management System For 200/250kVA Transformer
Drawing Title:	Base Plate
Reference :	PPMC-DS-01
Drawing No.	APMS/PPMC/D&S/06 OF 18





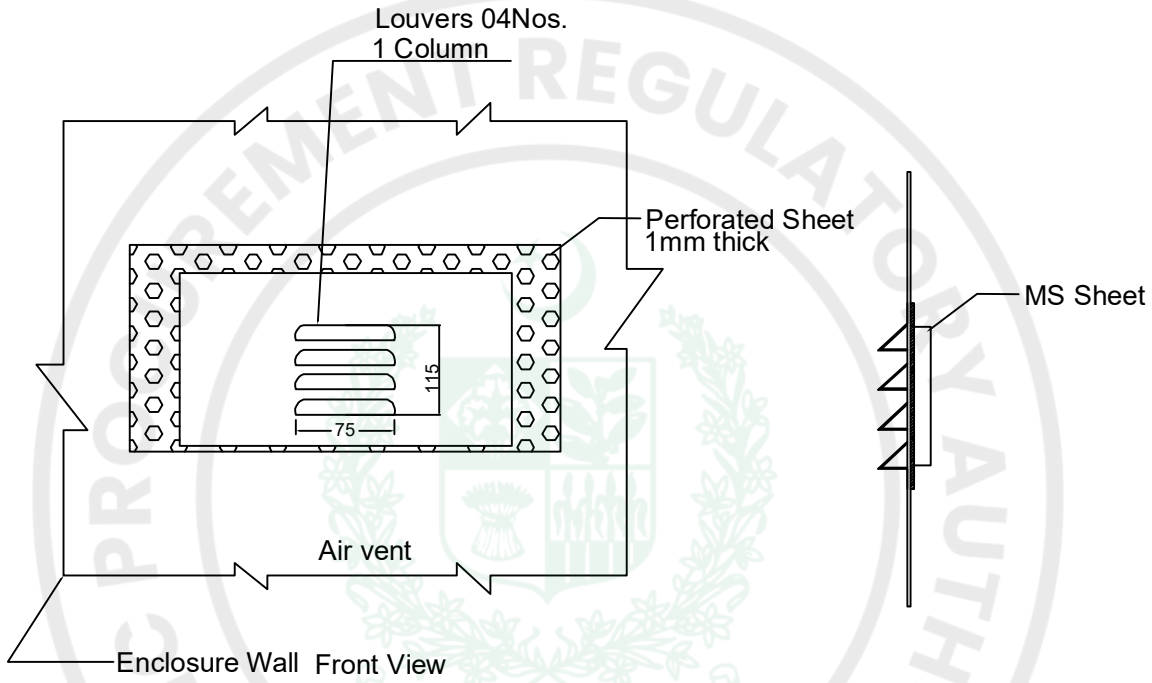
Note:
1.Tolerance: as per Dwg.No APMS/PPMC/D&S/18
2.All Dimension are in Millimeters.
3.Gland Material = PVC
4. Detailed dimension and Holes Position shall be as per approved Prototype

Power Planning and Monitoring Company (PPMC)
DESIGN AND STANDARDS (D&S)

Drawn By:	Checked By:	Verified By:	Scale:	NTS
ENGR.AAMIR HAMZA ASST.SPECIALIST (D&S)	ZARYAB HASSAN SPECIALIST (D&S)	SAKHAWAT ALI TEAM LEAD (D&S)	Revision Nos:	0/0
			Date :	17/04/2026

PPMC

Product :	Asset Performance Management System For 400/500kVA,630kVA Transformer
Drawing Title:	Base Plate
Reference :	PPMC-DS-01
Drawing No.	APMS/PPMC/D&S/ 07OF 18



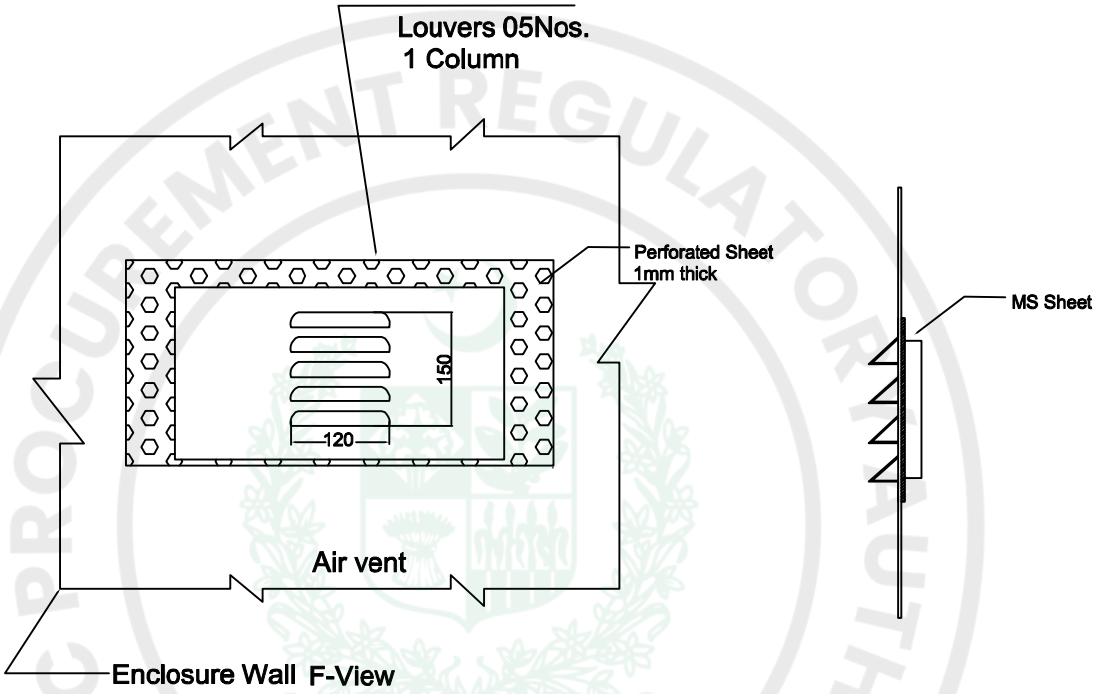
Note:
1.Tolerance: as per Dwg.No APMS/PPMC/D&S/18
2.All Dimension are in Millimeters.
3.Number of Louvers may be increased to comply with temperature rise test. However, it shall be fixed during prototype approval

Power Planning and Monitoring Company (PPMC)
DESIGN AND STANDARDS (D&S)

Drawn By:	Checked By:	Verified By:		
ENGR.AAMIR HAMZA ASST.SPECIALIST (D&S)	ZARYAB HASSAN SPECIALIST (D&S)	SAKHAWAT ALI TEAM LEAD (D&S)	Scale:	NTS
			Revision Nos:	0/0
			Date :	17/04/2026

PPMC

Product :	Asset Performance Management System For 25kVA,50kVA,100kVA Transformer
Drawing Title:	Air Vent
Reference :	PPMC-DS-01
Drawing No.	APMS/PPMC/D&S/ 08 OF 18



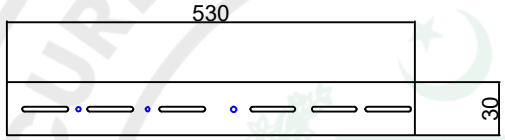
Note:
1.Tolerance: as per Dwg.No APMS/PPMC/D&S/18
2.All Dimension are in Millimeters.
3.Number of Louvers may be increased to comply with temperature rise test. However, it shall be fixed during prototype approval

Power Planning and Monitoring Company (PPMC)
DESIGN AND STANDARDS (D&S)

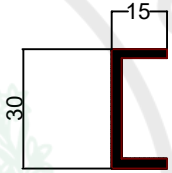
Drawn By:	Checked By:	Verified By:		
ENGR.AAMIR HAMZA ASST.SPECIALIST (D&S)	ZARYAB HASSAN SPECIALIST (D&S)	SAKHAWAT ALI TEAM LEAD (D&S)	Scale:	NTS
			Revision Nos:	0/0
			Date :	17/04/2026

PPMC

Product :	Asset Performance Management System For 200/250kVA,400/500kVA,630kVA Transformer
Drawing Title:	Air Vent
Reference :	PPMC-DS-01
Drawing No.	APMS/PPMC/D&S/ 09 OF 18



Channel for Meter Support.



Sectional View

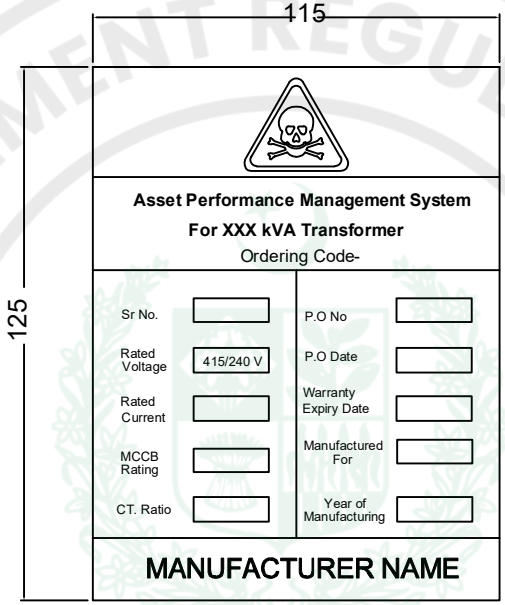
Note:
1.Tolerance: as per Dwg.No APMS/PPMC/D&S/18
2.All Dimension are in Millimeters.
3. Holes shall be made as per Requirement

Power Planning and Monitoring Company (PPMC)
DESIGN AND STANDARDS (D&S)

Drawn By:	Checked By:	Verified By:	Scale:	NTS
ENGR.AAMIR HAMZA ASST.SPECIALIST (D&S)	ZARYAB HASSAN SPECIALIST (D&S)	SAKHAWAT ALI TEAM LEAD (D&S)	Revision Nos:	0/0
			Date :	17/04/2026

PPMC

Product :	Asset Performance Management System For 25kVA,50kVA,100kVA,200/250kVA,400/500kVA and 630kVA Transformer
Drawing Title:	Meter Support Channel
Reference :	PPMC-DS-01
Drawing No.	APMS/PPMC/D&S/ 10 OF 18



Note:

Following Information Will Be In-Corporated In The Name Plate if There is Any Additional Requirement By The Customer (height maybe increased to 135 mm if needed :

1. Magnetic contactor Rating (A)
2. Manufacturer of OTL (for OTL ordering codes only)
3. Low Oil level and Normal Recovery Point (for OTL ordering codes only)

Note:

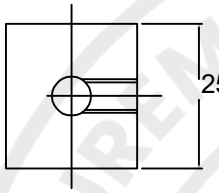
1.Tolerance: as per Dwg.No APMS/PPMC/D&S/18
2.All Dimension are in Millimeters.
3.Material: Non Magnetic SS-316 Sheet/ Aluminium Powder Coated Plate
4.Thickness 0.5mm

Power Planning and Monitoring Company (PPMC)
DESIGN AND STANDARDS (D&S)

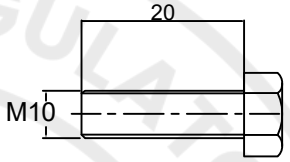
Drawn By:	Checked By:	Verified By:		
ENGR.AAMIR HAMZA ASST.SPECIALIST (D&S)	ZARYAB HASSAN SPECIALIST (D&S)	SAKHAWAT ALI TEAM LEAD (D&S)	Scale:	NTS
			Revision Nos:	0/0
			Date :	17/04/2026

PPMC

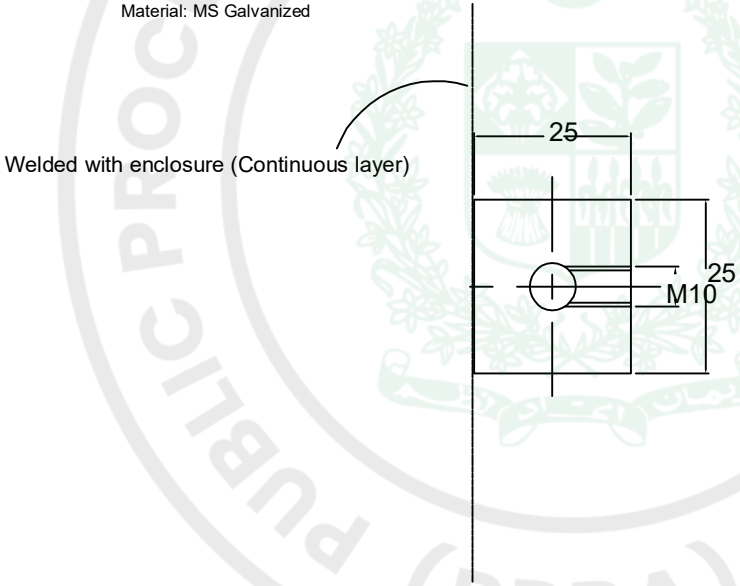
Product :	Asset Performance Management System For 25kVA,50kVA,100kVA,200/250kVA,400/500kVA and 630kVA Transformer
Drawing Title:	Rating Plate
Reference :	PPMC-DS-01
Drawing No.	APMS/PPMC/D&S/11 OF 18



Material: MS Galvanized



Material: MS
Finish: Galvanized



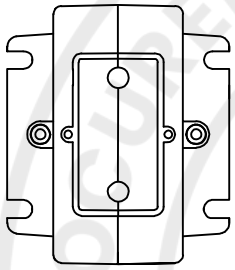
Note:
1.Tolerance: as per Dwg.No APMS/PPMC/D&S/18
2.All Dimension are in Millimeters.

Power Planning and Monitoring Company (PPMC)
DESIGN AND STANDARDS (D&S)

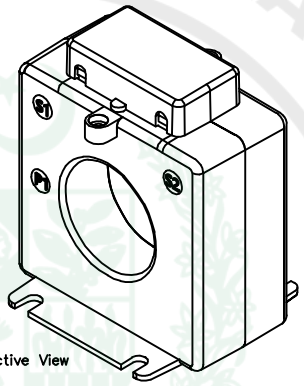
Drawn By:	Checked By:	Verified By:		
ENGR.AAMIR HAMZA ASST.SPECIALIST (D&S)	ZARYAB HASSAN SPECIALIST (D&S)	SAKHAWAT ALI TEAM LEAD (D&S)	Scale:	NTS
			Revision Nos:	0/0
			Date :	17/04/2026

PPMC

Product :	Asset Performance Management System For 25kVA,50kVA,100kVA,200/250kVA,400/500kVA and 630kVA Transformer
Drawing Title:	Earthing Terminal
Reference :	PPMC-DS-01
Drawing No.	APMS/PPMC/D&S/ 12 OF 18

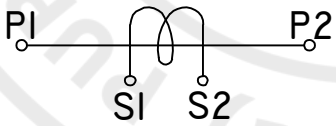


Top View



Perspective View

Terminal Markings



NOTE:

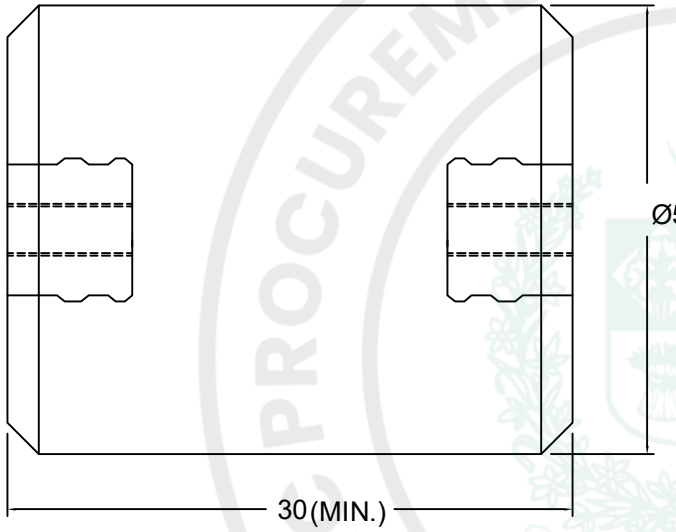
1. TERMINAL MARKINGS
   a. Primary P1,P2
   b. Secondary S1,S2
2. Dimensions shall be fixed according to the approved Prototype

Power Planning and Monitoring Company (PPMC)
DESIGN AND STANDARDS (D&S)

Drawn By:	Checked By:	Verified By:		
ENGR.AAMIR HAMZA ASST.SPECIALIST (D&S)	ZARYAB HASSAN SPECIALIST (D&S)	SAKHAWAT ALI TEAM LEAD (D&S)	Scale:	NTS
			Revision Nos:	0/0
			Date :	17/04/2026

PPMC

Product :	Asset Performance Management System For 25kVA,50kVA,100kVA,200/250kVA,400/500kVA and 630kVA Transformer
Drawing Title:	Current Transormer
Reference :	PPMC-DS-01
Drawing No.	APMS/PPMC/D&S/ 13 OF 18



Material: Bakelite/Polymer

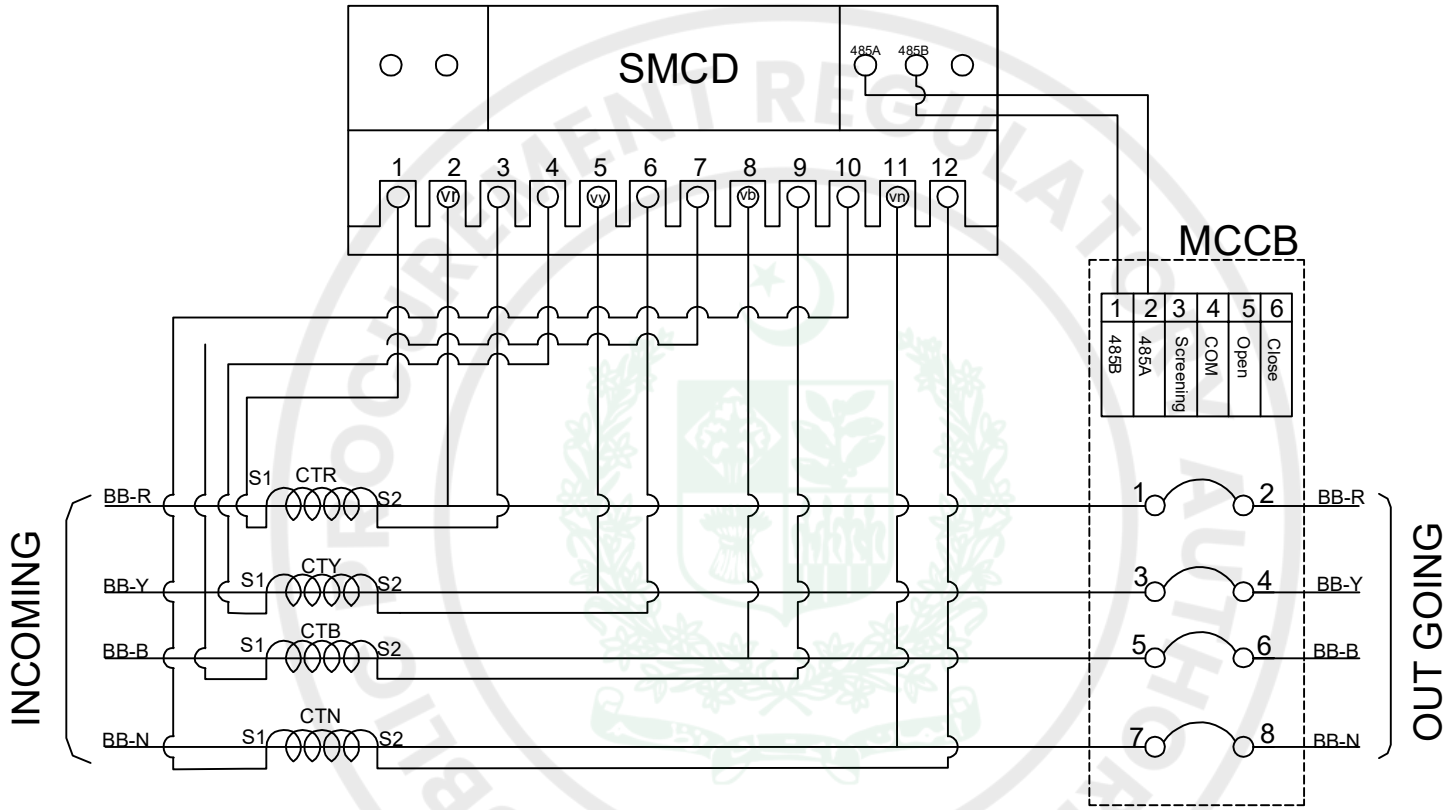
Note:
1.Tolerance: as per Dwg.No APMS/PPMC/D&S/18
2.All Dimension are in Millimeters.
3.Spacers maybe used by manufacture for Adjustment Purpose

Power Planning and Monitoring Company (PPMC)
DESIGN AND STANDARDS (D&S)

Drawn By:	Checked By:	Verified By:	Scale:	NTS
ENGR.AAMIR HAMZA ASST.SPECIALIST (D&S)	ZARYAB HASSAN SPECIALIST (D&S)	SAKHAWAT ALI TEAM LEAD (D&S)	Revision Nos:	0/0
			Date :	17/04/2026

PPMC

Product :	Asset Performance Management System For 25kVA,50kVA,100kVA,200/250kVA,400/500kVA and 630kVA Transformer
Drawing Title:	Insulator
Reference :	PPMC-DS-01
Drawing No.	APMS/PPMC/D&S/ 14 OF 18



Legends

01	BB-R	Busbar For Red Phase
02	BB-Y	Busbar For Yellow Phase
03	BB-B	Busbar For Blue Phase
04	BB-N	Busbar For Neutral(Black)
05	MCCB	Molded Case Circuit Breaker

01	CTR	CT For Red Phase
02	CTY	CT For Yellow Phase
03	CTB	CT For Blue Phase
04	CTN	CT For Neutral(Black)
05	SMCD	Smart Metering and Controlling Device

Note:

Terminals are shown for Visualization purpose Only

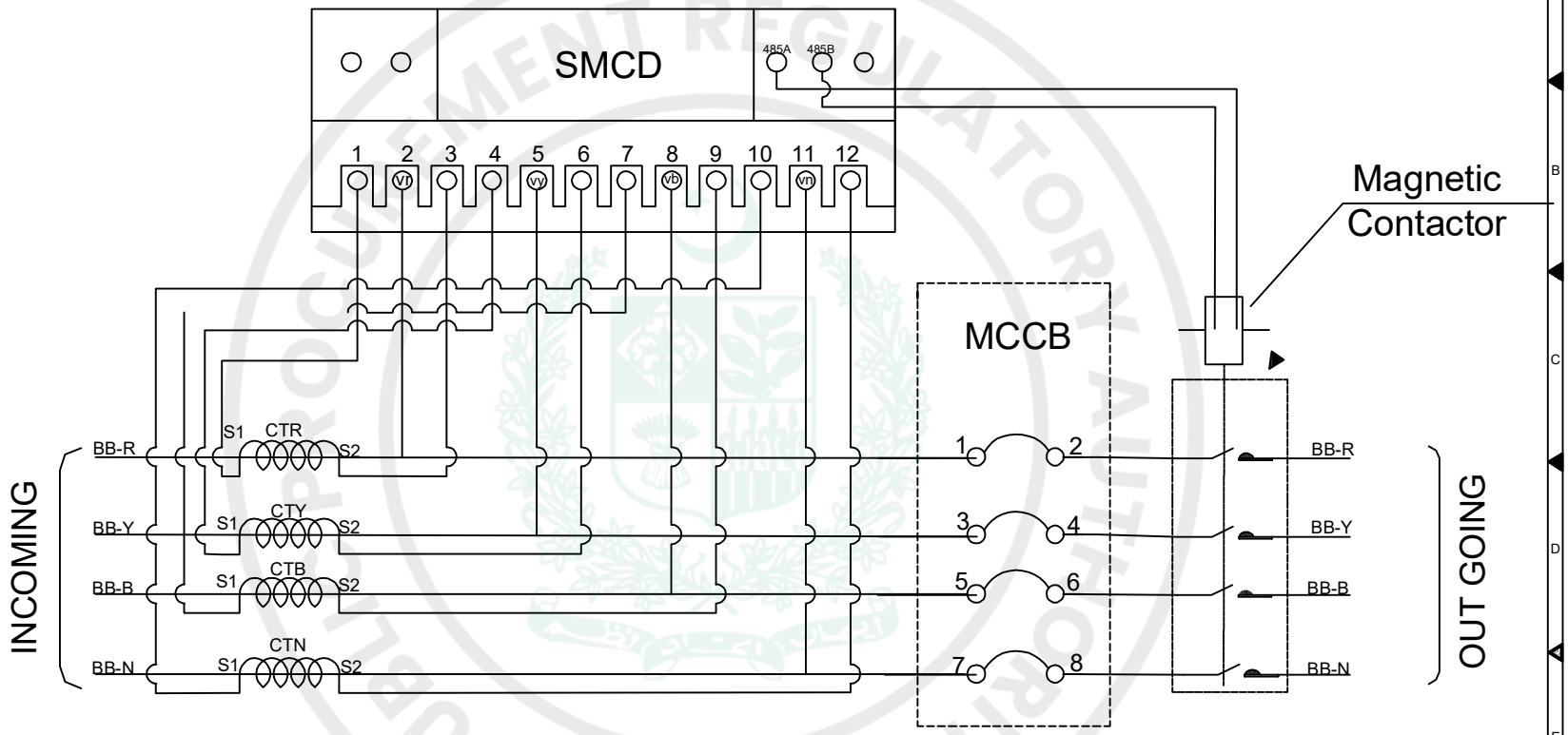
Power Planning and Monitoring Company (PPMC)

DESIGN AND STANDARDS (D&S)

Drawn By:	Checked By:	Verified By:		
ENGR.AAMIR HAMZA ASST.SPECIALIST (D&S)	ZARYAB HASSAN SPECIALIST (D&S)	SAKHAWAT ALI TEAM LEAD (D&S)	Scale:	NTS
			Revision Nos:	0/0
			Date :	17/04/2026

PPMC

Product :	Asset Performance Management System For 25kVA,50kVA,100kVA,200/250kVA,400/500kVA and 630kVA Transformer
Drawing Title:	Circuit Diagram with Magnetic Contactor
Reference :	PPMC-DS-01
Drawing No.	APMS/PPMC/D&S/ 15 OF 18



Legends

01	BB-R	Busbar For Red Phase
02	BB-Y	Busbar For Yellow Phase
03	BB-B	Busbar For Blue Phase
04	BB-N	Busbar For Neutral(Black)
05	MCCB	Molded Case Circuit Breaker

01	CTR	CT For Red Phase
02	CTY	CT For Yellow Phase
03	CTB	CT For Blue Phase
04	CTN	CT For Neutral(Black)
05	SMCD	Smart Metering and Controlling Device

Note:

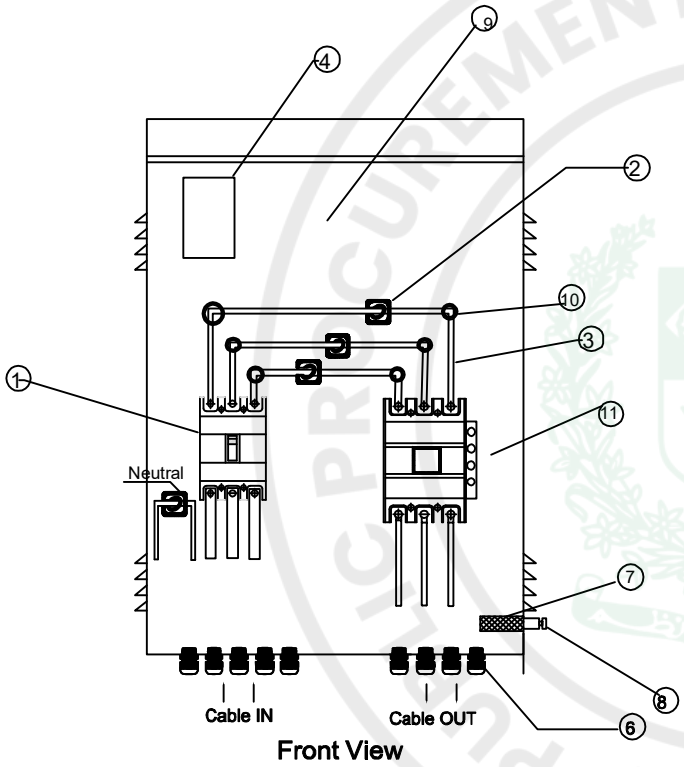
Terminals are shown for Visualization purpose Only

Power Planning and Monitoring Company (PPMC)
DESIGN AND STANDARDS (D&S)

Drawn By:	Checked By:	Verified By:		
ENGR.AAMIR HAMZA ASST.SPECIALIST (D&S)	ZARYAB HASSAN SPECIALIST (D&S)	SAKHAWAT ALI TEAM LEAD (D&S)	Scale:	NTS
			Revision Nos:	0/0
			Date :	17/04/2026

PPMC

Product :	Asset Performance Management System For 25kVA,50kVA,100kVA,200/250kVA,400/500kVA and 630kVA Transformer
Drawing Title:	Circuit Diagram with Magnetic Contactor
Reference :	PPMC-DS-01
Drawing No.	APMS/PPMC/D&S/ 16 OF 18



Front View

LEGEND

1- MCCB
2- LT CTs
3- Copper Bus Bars
4- Smart Metering and Control Device
5- Channel for Meter Support
6- Cable Glands
7- Copper braided wire for door earthing
8- Earthing Terminal
9- Mounting Plate for Components
10- Busbar Support Insulators
11-Magenetic Contractor

Note:
1.Tolerance: as per Dwg.No APMS/PPMC/D&S/18

4. Detailed dimension and Holes Position shall be as per approved Prototype

Power Planning and Monitoring Company (PPMC)
DESIGN AND STANDARDS (D&S)

Drawn By:	Checked By:	Verified By:	Scale:	NTS
ENGR.AAMIR HAMZA ASST.SPECIALIST (D&S)	ZARYAB HASSAN SPECIALIST (D&S)	SAKHAWAT ALI TEAM LEAD (D&S)	Revision Nos:	0/0
			Date :	17/04/2026

PPMC

Product :	Asset Performance Management System For 25kVA,50kVA,100kVA,200/250kVA,400/500kVA 630kVATransformer
Drawing Title:	MAGNETIC CONTRACTOR ARRANGEMENT
Reference :	PPMC-DS-01
Drawing No.	APMS/PPMC/D&S/ 17 OF 18

Tolerance Sheet

Tolerance in Dimensions

DIMENSION RANGE	TOLERANCE
1.0mm To 10mm	±10.0%
11mm To 55mm	±5.0%
56mm To 75mm	±3.0%
76mm & Above	±2.0%

Power Planning and Monitoring Company (PPMC)
DESIGN AND STANDARDS (D&S)

Drawn By:	Checked By:	Verified By:	Scale:	NTS
ENGR.AAMIR HAMZA ASST.SPECIALIST (D&S)	ZARYAB HASSAN SPECIALIST (D&S)	SAKHAWAT ALI TEAM LEAD (D&S)	Revision Nos:	0/0
			Date :	17/04/2026

PPMC

Product :	Asset Performance Management System For 25kVA,50kVA,100kVA,200/250kVA,400/500kVA and 630kVA Transformer
Drawing Title:	Tolerance Sheet
Reference :	PPMC-DS-01
Drawing No.	APMS/PPMC/D&S/18 OF 18

Average Annual Turnover (Annual Sales Value)

[The following table shall be filled in for the Applicant and for each member of a Joint Venture]

Applicant's Name: *[insert full name]*
Date: *[insert day, month, year]*
Joint Venture Member Name: *[insert full name]*
IFP No. and title: *[insert IFP number and title]*
Page *[insert page number]* of *[insert total number]* pages

Annual Turnover Data			
Year	**Amount** **Currency**	**Exchange rate*** **(If applicable)**	**PKR equivalent**
[indicate calendar year]	*[insert amount and indicate currency]*		
		Average Annual Turnover **	

* Refer ITA for date and source of exchange rate.

** Total PKR equivalent for all years divided by the total number of years. See Section III, Qualification Criteria and Requirements, ITA.