

# Standard Bidding Document

Procurement of Design,Supply,Installation,Testing &Commissioning of  
Assert Performance Management System(APMS) according to revised  
PPMC spec No.PPMC-DS-01:2026 & its Configuration & Interfacing with  
AMI system as per schedule of requirement SoR  
(Works)

National

Single Stage-Two Envelope



*May 06, 2026*

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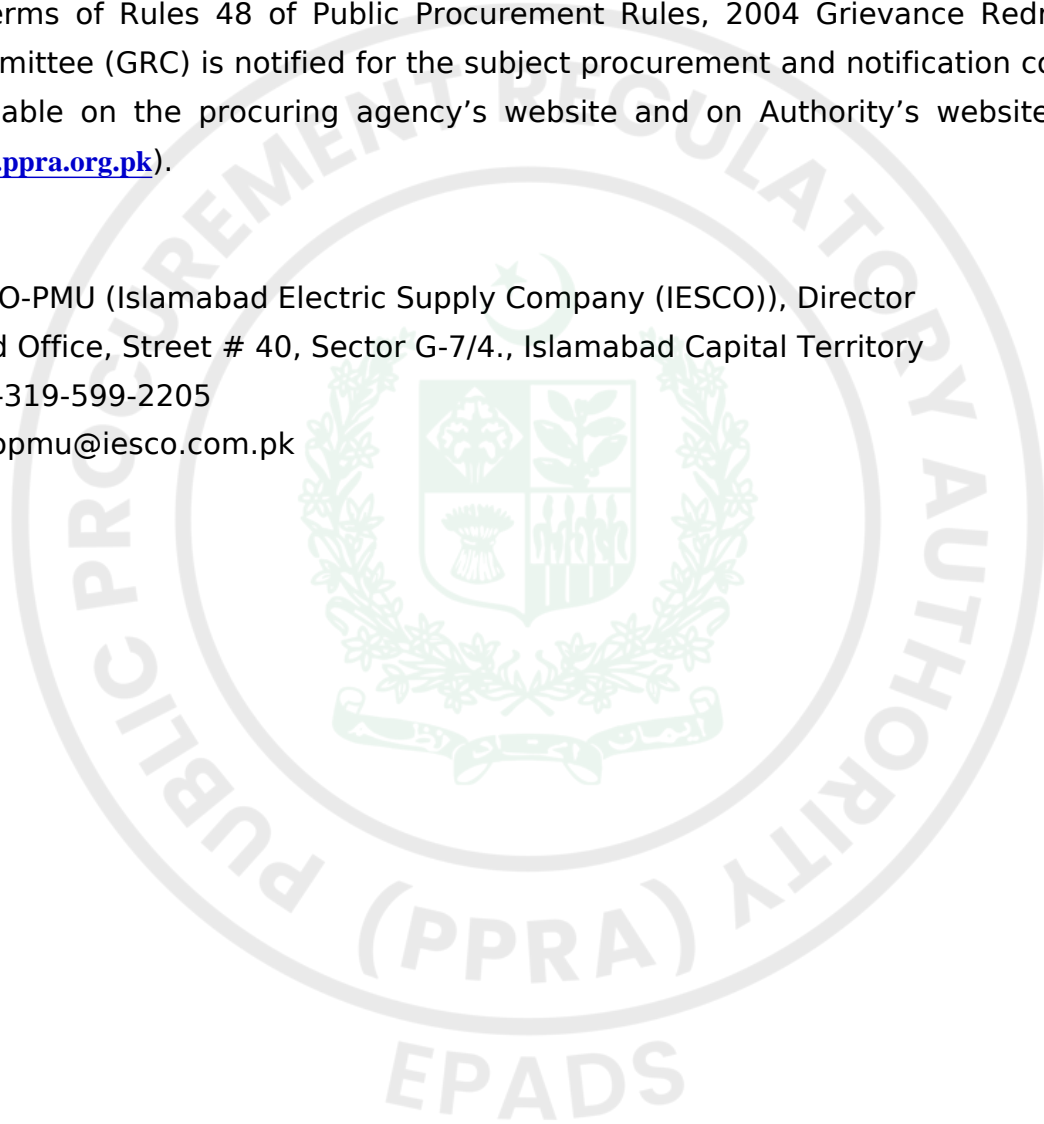
## REQUEST FOR BIDS PROCUREMENT OF CIVIL WORKS

1. The **IESCO-PMU (Islamabad Electric Supply Company (IESCO))** has reserved Funds for the procurement planned for FY **2025-26**. The **IESCO-PMU (Islamabad Electric Supply Company (IESCO))** intends to apply part of the proceeds of this Fund to cover eligible payments under the contract for the **"Procurement of Design, Supply, Installation, Testing & Commissioning of Assert Performance Management System (APMS) according to revised PPMC spec No.PPMC-DS-01:2026 & its Configuration & Interfacing with AMI system as per schedule of requirement SoR"**.
2. The **IESCO-PMU (Islamabad Electric Supply Company (IESCO))** invites sealed Bids from eligible Bidders for procurement of Works (**Procurement of Design, Supply, Installation, Testing & Commissioning of Assert Performance Management System (APMS) according to revised PPMC spec No.PPMC-DS-01:2026 & its Configuration & Interfacing with AMI system as per schedule of requirement SoR**) described in the bidding documents on **EPADS v2.0**.
3. **Single Stage-Two 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 amounting described in Bid Security Section in Bidding Document in the form of **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://vendors.epads.gov.pk/>** 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 **Thursday, May 21, 2026 11:00 AM**. E-bids will be opened by using **EPADS v2.0** on the same day at **Thursday, May 21, 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://pa.epads.gov.pk/>. A tutorial to explain the registration 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](http://www.ppra.org.pk)).

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## 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**

### **1. Contents of Bidding Documents**

1.1. 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

1.2. 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.

## **2. Clarification of Bidding Document, Pre-bid Meeting**

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

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

2.3. 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.

2.4. 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.

2.5. 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.

2.6. 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.

2.7. 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.

### **3. Amendment of Bidding Documents**

3.1. 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.

3.2. 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

### 1. Language of Bid

1.1. 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.

### 2. Documents Constituting the Bids

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

### 3. Documents Establishing Eligibility of Material, Equipment and Works, their Conformity to Bidding Documents

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

3.1.1. 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;

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

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

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

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

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

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

3.1.8. Any other document required in the BDS.

3.2. 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.

3.3. 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.

3.4. 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:

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

3.4.2. 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;

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

3.5. 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.

#### **4. Documents Establishing Eligibility and Qualification of the Bidder**

4.1. 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.

4.2. 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".

4.3. 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:

4.3.1. 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.

4.3.2. 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.

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

#### **5. Forms of Bid**

5.1. 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.

## 6. Bid Prices

6.1. 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.

6.2. 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.

6.3. 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:

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

6.3.2. 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.

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

6.5. 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.

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

6.7. 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.

6.8. 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.

## **7. Currencies of Bid and Payment**

7.1. 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.

## **8. Documents Comprising the Technical Proposal**

8.1. 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.

## **9. Bid Validity Period**

9.1. 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.

9.2. 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.

## 10. Bid Security or Bid Securing Declaration

10.1. 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,

10.2. 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:

10.2.1. 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;

10.2.2. A cashier's or certified cheque; or

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

10.3. 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.

10.4. 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.

10.5. 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.

10.6. 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:

10.6.1. The expiry of the Bid Security;

10.6.2. 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 Bidding documents;

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

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

10.7. 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.

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

10.8.1. if a Bidder:

10.8.1.1. 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

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

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

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

10.9. 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.

## **11. Withdrawal of Bids**

11.1. 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.

## **12. Format and Signing of Bid**

12.1. 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**

## 1. **Submission of Bids through EPADS v2.0**

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

## 2. **Deadline for Submission of Bids**

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

2.2. 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.

## 3. **Substitution and Modification of bids**

3.1. 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.

3.2. 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**

### 1. **Opening of Bids**

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

### 2. **Confidentiality**

2.1. 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.

### 3. Clarification of Bids

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

3.2. 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:

- 3.2.1. evaluation & qualification criteria;
- 3.2.2. required scope of work;
- 3.2.3. contract price;
- 3.2.4. all securities requirements;
- 3.2.5. tax requirements;
- 3.2.6. terms and conditions of bidding documents.
- 3.2.7. change in the ranking of the bidder

### 4. Preliminary Examination of Bids

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

- 4.1.1. meets the eligibility criteria defined in **ITB 3** and **ITB 4**;
- 4.1.2. has been prepared as per the format and contents defined by the Procuring agency/Employer in the bidding documents;
- 4.1.3. has been properly signed;

4.1.4. is accompanied by the required securities; and

4.1.5. 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.

4.2. 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: -

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

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

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

4.3. 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.

4.4. 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 –*

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

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

*4.4.3. 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.*

4.5. 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.

4.6. 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.

4.7. 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.

## **5. Examination of Terms and Conditions; Technical Evaluation**

5.1. 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.

5.2. 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.

5.3. 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.

## **6. Correction of Arithmetic Errors**

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

6.1.1. 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;

6.1.2. 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

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

6.1.4. 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.

6.2. 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**.

## **7. Conversion to Single Currency**

7.1. 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.

## **8. Evaluation of Bids**

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

8.2. 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.

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

8.3.1. 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;

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

8.4. 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.

8.5. 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**.

8.6. 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.*

## 9. Domestic Preference

9.1. 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.

## 10. Determination of Successful Bid

10.1. 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.

## 11. Qualification of Bidder

11.1. 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.

11.2. 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**.

11.3. 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.

## 12. Sub-Contractors

12.1. 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.

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

### 13. **Abnormally Low Financial Bid**

13.1. 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:

13.1.1. Comparing the bid price with the cost estimate;

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

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

13.2. 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**

13.3. 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.

13.4. 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.*

13.5. 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

### 1. Criteria of Award

1.1. 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:

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

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

1.1.3. Successful negotiations have been concluded, if any.

### 2. Negotiations

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

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

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

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

2.1.4. finalizing payment arrangements;

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

2.2. 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.

### **3. Procuring agency's Right to reject All Bids**

3.1. 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.

### **4. Notification of Award**

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

4.2. 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).

4.3. 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**.

4.4. 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**.

## 5. **Signing of Contract**

5.1. 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.

5.2. 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.

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

## 6. **Performance Security (or Guarantee)**

6.1. 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.

6.2. 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:

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

6.2.2. 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;

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

6.2.4. surety bond callable upon demand issued by any reputable surety or insurance company.

Any Performance Guarantee submitted shall be enforceable in Pakistan.

6.3. 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).

## 7. Advance Payment

7.1. 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.

7.2. 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**.

## **8. General Performance of the Bidders**

8.1. 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.

## **9. Corrupt & Fraudulent Practices**

9.1. 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**

### **1. Grievance Redressal**

1.1. 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**

### **1. Mechanism of Blacklisting**

1.1. 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
<b>A. Introduction</b>		
<b>1</b>	<b>1.1</b>	<p>Name of Procuring Agency: <b>IESCO-PMU (Islamabad Electric Supply Company (IESCO))</b></p> <p>The subject of procurement is: <b>Procurement of Design, Supply, Installation, Testing &amp; Commissioning of Assert Performance Management System (APMS) according to revised PPMC spec No. PPMC-DS-01:2026 &amp; its Configuration &amp; Interfacing with AMI system as per schedule of requirement SoR</b></p> <p>Expected commencement date: <b>Friday, July 31, 2026</b></p>
<b>2.</b>	<b>2.1</b>	<p>Financial year for the operations of the Procuring Agency: <b>2025-26</b></p> <p>Name and identification number of the Contract: <b>P29888</b></p>
<b>3.</b>	<b>3.1</b>	<p>JV/Consortium or Association Allowed: <b>Yes</b></p> <p>Number of JV/Consortium Members: <b>2</b></p>

## B. Bidding Documents

4.	6.2 & 6.4	The Bidders may seek clarifications through <b>EPADS v2.0</b> : Clarification Date: Monday, May 18, 2026
5.	7.2	Any addendum, in case issued, shall be published on <b>IESCO-PMU (Islamabad Electric Supply Company (IESCO))</b> website and on <b>EPADS v2.0</b> .

## C. Preparation of Bids

6.	8.1	<p>List of documents required along with the bid:</p> <ol style="list-style-type: none"><li>1. i. Joint venture Agreement if any on nonjudicial stamp paper for particular tender ii. No Deviation certificates from Commercial terms and technical specification iii. Firms Engineers and professionals Information iv. Income tax returns for last three years v. Audited Financial Reports of last three years vi. Confirm and valid Bank Credit line (latest) (if any) required to establish cash flow or financial resources. vii. PEC registration in category C4 and electrical code EE-05.</li><li>2. In case of foreign bidder interested in bidding process, foreign bidder will participate in JV with local bidder as per PEC by-laws. The foreign bidder will also obtain registration from PEC in relevant categories in case of award of contract.</li></ol>
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<b>7.</b>	<b>9.1</b>	The qualification criteria to establish the supply / production capability of the bidder.  <i>see Eligibility Criteria</i>
<b>8.</b>	<b>11.2</b>	<b>Works and Their related documents:</b> <i>See section Required Scope of Work</i>
<b>9.</b>	<b>11.1</b>	Price schedule will be provided according to the format defined and acquired.  <i>see section price schedule.</i>
<b>10.</b>	<b>11.4</b>	<b>Specifications:</b>  <i>see section of specifications.</i>
<b>11.</b>	<b>11.5 &amp; 13.5</b>	The price shall be <b>Fixed</b> . The bid price shall be adjusted in accordance with Appendix provided - Formula for Price Adjustment.
<b>12.</b>	<b>14.1</b>	Currency of the Bids shall be : <b>PKR</b>
<b>13.</b>	<b>16.1</b>	The Bids/Bid Validity period shall be: <b>120 Days</b>
<b>14.</b>	<b>17.1</b>	The amount of Bid Security shall be as defined in Bid Security Section for items and lots given in <b>BDS 6</b>
<b>15.</b>	<b>17.2</b>	The Bid Security shall be in the form of: <b>Call at Deposit, Bank Guarantee</b>
<b>16.</b>	<b>15.1</b>	Alternative Bids to the requirements of the bidding documents will not be permitted.

## D. Submission of Bids

17.	18.1 & 21.1	<p>Bid shall be submitted online on EPADS v2.0 whereas hard copy of the bid security should be submitted to the following;</p> <p><b>Head Office, Street # 40, Sector G-7/4., Islamabad Capital Territory</b></p> <p>Bids that are not submitted on EPADS v2.0 shall be disqualified.</p> <p>The deadline for Bids submission is: <b>Thursday, May 21, 2026 11:00 AM</b></p>
E. Opening and Evaluation of Bids		
18.	24.1	<p>The Bids opening shall take place on <b>EPADS v2.0</b>.</p> <p>Day : <b>Thursday</b></p> <p>Date: <b>May 21, 2026</b></p> <p>Time : <b>11:30 AM</b></p>
19.	30.2	<p>Selection technique adopted will be: <b>Least Cost Based Selection (LCBS)</b></p> <p><i>see Evaluation Criteria</i></p>
F. Award of Contract		
20.	41.1 & 41.2	<p>The Performance guarantee shall: <b>10.00%</b>.</p> <p>The Performance Guarantee shall be acceptable in the form of: <b>Bank Guarantee</b></p>
21.	45.1	<p>Arbitrator shall be appointed by mutual consent of the both parties.</p>

## G. Review of Procurement Decisions

<b>22.</b>	<b>37</b>	Grievance against this procurement shall be submitted online on EPADS v2.0.
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## Eligibility Criteria

Bidder's Type	Required Registration
Sole Proprietorship	NADRA CITIZENSHIP (CNIC/NICOP)
Partnership Firm	FBR (NTN)
Company (Private Limited)	FBR (GSTN)
Company (Public Limited)	SECP
Company (Holding Company)	PEC
Company (Limited by Guarantee)	
State Owned Enterprise (Private Limited)	
State Owned Enterprise (Public Limited)	

Eligibility Criteria	Document
In case of foreign Bidder passport Number Of authorized representative having Power of Attorney for preparation of bidding document and subsequently contract signing.	Yes
The amount of performance security (or guarantee), as a percentage of the Contract Price, shall be Ten (10%) percent of the Contract Price in favor of Chief Engineer (Development) IESCO from Schedule Bank of Pakistan having rating A+ in shape of Bank Guarantee. Contractor will provide performance Guarantee at time of acceptance of Notification of Award	Yes
Bid Declaration Form not applicable	No
Bid security must be submitted in an acceptable form in the amount fixed in PKR valid for 28 days beyond bid validity period in favor of Chief Engineer (Development), IESCO, Islamabad.	Yes

A bidder may participate in JV under legally enforcement JV agreement and all partners shall be jointly and severally laible for the execution of contract in accordance with contract terms. In case JV agreement is not jointly and severally liable then bid shall be rejected.	Yes
a) Advance payment 20% is allowed against the advance bank guarantee from scheduled bank having credit rating A +.b) 100% payment shall be paid to contractor on 100% installation of APMS for individual feeder	Yes

## Evaluation Criteria

### Least Cost Based Selection (LCBS)

Technical Marks	100
Passing Marks	100
Technical Evaluation Criteria	
The bidder or Joint venture (JV) must demonstrate experience as a contractor by having successfully completed at least (02) two No. of contracts, with none of contract value should be less than 30% of Rs. 83 million. These projects must have been executed on a turnkey basis and involve systems rated at 415V or higher, and must have been completed within the last five years prior to the bid opening date. (Quantitative)(Doc Required)	15
Manufacturer shall demonstrate at least five years experience in designing and manufacturing of similar nature/complex involving same or higher rated equipment/material. Three years satisfactory operation performance of same or high rated equipment. For the ease of evaluation, related form are enclosed in annexure and the same will be considered during evaluation. (Quantitative)(Doc Required)	15
Bidder's Net Worth for last year calculated as Rs. 82 Million difference b/w total assets & total liabilities should be positive (Quantitative)(Doc Required)	15

Minimum average annual turnover of PKR calculated as total revenue of the Bidder over the last three Years shall be equal to: 502 M (Quantitative)(Doc Required)	15
Specify proposed sources of financing, working capital and lines of credit after deduction of current commitments available to meet the cash flow demands as indicated in below: 61.8 M (Quantitative)(Doc Required)	15
Technical Team required as per SoR (Quantitative)(Doc Required)	10
Manufacturer will indicate its manufacturing / production capacity which shall be double the total sum of orders already in hand, expected orders in pipe line and this order (if placed on the bidder) (Quantitative)(Doc Required)	15

## Jobs/Lots

### Jobs Without Lots :

Job	Delivery Schedule	Quantity	Bid Security
Procurement of Design,Supply,Installation,Testing &Commissioning of Assert Performance Management System(APMS) according to revised PPMC spec No.PPMC-DS-01:2026 & its Configuration & Interfacing with AMI system as per schedule of requirement SoR	Address: delivery as per SoR Schedule: 120 Days Quantity: 1	1	2062575

### Related Services :

Yes

# Work Specifications and Market Rates

## Jobs Without Lots :

**Job:** Procurement of Design,Supply,Installation,Testing &Commissioning of Asset Performance Management System(APMS) according to revised PPMC spec No.PPMC-DS-01:2026 & its Configuration & Interfacing with AMI system as per schedule of requirement SoR

## Specifications / Requirements:

Sr. No	Ref. No.	Description	Unit	Qty	Rate	
1	1	Design, Supply, Installation, testing & Commissioning of 415 Volt Asset Performance Management System (APMS) as per Ordering code APMS-MC-S-100 as per PPMC-DS-01:2026 & SOR except three phase Four wire Energy (LT ToU) Meters Ordering code (APMS-MC-S-100) and its interfacing & configuration with AMI System	Nos.	233		-
2	2	Design, Supply, Installation, testing & Commissioning of 415 Volt Asset Performance Management System (APMS) as per Ordering code APMS-MC-S-200 as per PPMC-DDS-01/2026 and SoR except three phase Four wire Energy (LT ToU) Meters (APMS-MC-S-200) and its interfacing & configuration with AMI System	Nos.	116		-

Sr. No	Ref. No.	Description	Unit	Qty	Rate	
3	3	Design, Supply, Installation, testing & Commissioning of 415 Volt Asset Performance Management System (APMS) as per Ordering code APMS-MC-S-400 as per PPMC-DDS-01/2026 and SoR except three phase Four wire Energy (LT ToU) Meters (APMS-MC-S-400) and its interfacing & configuration with AMI System	Nos.	7		-
4	4	Supply, Installation of Busbar with AAC WASP Conductor with all allied accessories (PG connector and Spool Insulator (as per requirement)	Meter	3500		-
5	5	Connection of LT Transformer terminal to APMS as per order code with 4 core 120mm <sup>2</sup> PVC cable alongwith allied accessories (Terminal connector and Cable Sleeve with breaker & Magnetic contractor)	Meter	2500		-
6	6	Replacement of 2-phase or 2-leg Transformer & Transportation of Transformer from Regional store to Site & Dismantled Transformer back to Store (100 KVA)	Nos.	10		-
7	7	Replacement of 2-phase or 2-leg Transformer & Transportation of Transformer from Regional store to Site & Dismantled Transformer back to Store (200 KVA)	Nos.	20		-
8	Total					82,503,000.00
					GRAND TOTAL:	Rs82,503,000.00

## Scope of Work

Procurement of Design, Supply, Installation, Testing & Commissioning of Asset Performance Management System (APMS) according to revised PPMC spec No. PPMC-DS-01:2026 & its Configuration & Interfacing with AMI system as per schedule of requirement SoR under IESCO Own Resources

## 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]		





## 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 Contractor and 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**

## 1. **Effectiveness of Contract**

1.1. 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.

## 2. Commencement of Services

2.1. 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.

## 3. Program schedule

3.1. 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.

## 4. Starting Date/Expiration Date

4.1. 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.

4.2. 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.

## 5. Entire Agreement

5.1. 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.

## 6. Modification

6.1. 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.

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

## 7. Force Majeure

### 7.1. 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.

### 7.2. 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.

### **7.3. 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.

### **7.4. 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.

## **8. Termination**

### **8.1. 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);

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

8.1.2. 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;

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

8.1.4. 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;

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

### **8.2. 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.

8.2.1. 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;

8.2.2. 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;

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

8.2.4. 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

### 1. General

#### 1.1. Standard of Performance

1.1.1. 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;

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

#### 1.2. 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.

### 2. Conflict of Interests

#### 2.1. 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.

#### 2.2. 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.

### **2.3. 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:

- 2.3.1. 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;
- 2.3.2. 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;
- 2.3.3. after the termination of this Contract, such other activities as may be specified in the **SCC**.

### **3. Insurance to be Taken Out by the Contractor**

3.1. 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.

### **4. Contractor's Actions Requiring Procuring Agency's Prior Approval**

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

- 4.1.1. appointing such members of the Personnel not provided by the Contractor;
- 4.1.2. changing the Program of activities; and
- 4.1.3. any other action that may be specified in the **SCC**.

### **5. Reporting Obligations**

5.1. 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.

### **6. Liquidated Damages**

#### **6.1. 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.

#### **6.2. 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**.

### 6.3. **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

## 7. **Performance Guarantee**

7.1. 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**.

7.2. 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.

7.3. 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**.

7.4. 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**.

## 8. **Sustainable Procurement**

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

## D. **Contractor's Personnel**

### 1. **Description of Personnel**

1.1. 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.

### 2. **Removal and / or Replacement of Personnel**

2.1. 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.

2.2. 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.

2.3. 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

### 1. Change in the Applicable Law

1.1. 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**.

### 2. Services and Facilities

2.1. 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.

2.2. 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

### 1. Contract Price

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

### 2. Terms and Conditions of Payment

2.1. 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.

2.2. 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.

### 3. Quality Control Identifying Defects

3.1. 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**.

### 3.2. A {INSPECTION}

## 4. Correction of Defects, and Lack of Performance Penalty

4.1. 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.

4.2. 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.

4.3. 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.

## 5. Settlement of Disputes Amicable Settlement

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

## 6. Dispute Settlement

### 6.1. 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
	<p><b>Definitions</b></p> <p><b>The Procuring Agency is:</b>IESCO-PMU (Islamabad Electric Supply Company (IESCO)),DirectorHead Office, Street # 40, Sector G-7/4., Islamabad Capital Territory</p> <p><b>The Supplier is:</b></p> <p><b>The title of the subject procurement is:</b>Procurement of Design,Supply,Installation,Testing &amp;Commissioning of Assert Performance Management System(APMS) according to revised PPMC spec No.PPMC-DS-01:2026 &amp; its Configuration &amp; Interfacing with AMI system as per schedule of requirement SoR</p>
GCC 2	<p><b>Applicable/Governing Law:</b></p> <p>The Contract shall be interpreted in accordance with the laws of Islamic Republic of Pakistan</p>
GCC 3	<p><b>Language:</b></p> <p>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 <b>English.</b></p>

<p><b>GCC 4</b></p>	<p><b>Notices:</b></p> <p><b>The addresses for the notices are:</b></p> <p>Procuring Agency:</p> <p>IESCO-PMU (Islamabad Electric Supply Company (IESCO)),Director Head Office, Street # 40, Sector G-7/4., Islamabad Capital Territory +92-319-599-2205 iescopmu@iesco.com.pk</p> <p>Contractor/ Bidder:</p> <p>[Name, address and telephone number].</p> <p>The Contractor/ Bidder’s Representative(s)</p> <p>[Name, address, telephone number and e-mail address]</p>
<p><b>GCC 6.1</b></p>	<p><b>The Authorized Representatives are:</b></p> <p><b>For the Procuring Agency:</b></p> <p>IESCO-PMU (Islamabad Electric Supply Company (IESCO)),Director Head Office, Street # 40, Sector G-7/4., Islamabad Capital Territory +92-319-599-2205 iescopmu@iesco.com.pk</p> <p><b>For the Bidder:</b></p> <p><b>Name:</b> .....</p> <p><b>Designation:</b> .....</p> <p><b>Address:</b> .....</p>
<p><b>GCC 7</b></p>	<p><b>Effectiveness of the contract</b></p> <p>The Contractor/Bidder shall be effective within ..... days from the date of signature of the Contract by both parties</p>
<p><b>GCC 8</b></p>	<p><b>Commencement of Contract:</b></p> <p>The Contractor/ Bidder shall provide Non-Consultancy Services from the effective date of contract.</p>

<p><b>GCC 10.2</b></p>	<p><b>Expiration of Contract:</b></p> <p>The time period shall be .....</p>
<p><b>GCC 14</b></p>	<p><b>Termination</b></p> <p>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.</p>
<p><b>GCC 16</b></p>	<p><b>Conflict of Interest:</b></p> <p>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.</p>
<p><b>GCC 20</b></p>	<p><b>Liquidated Damages</b></p> <p>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 <b>0.05%</b> to <b>10.00%</b> of the Contract value, in accordance with the extent of performance failure &amp; the cost of investigating such incidents as judged by the Authority.</p>
<p><b>GCC 21</b></p>	<p><b>Performance Guarantee:</b></p> <p>The amount of performance guarantee shall be 10.00% of the contract price in acceptable form of Bank Guarantee</p>
<p><b>GCC 27</b></p>	<p><b>Currency of Payment:</b></p> <p>All the payment to be released to the contractor/Bidder shall be in Pakistani Rupees.</p>
<p><b>GCC 28</b></p>	<p><b>Payment terms:</b></p> <p>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.</p>

**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**

Quality and quantity inspection shall be carried out prior to shipment of Goods by the manufacturer(s) at the supplier's own expense and responsibility in terms of the items specified in the specifications. The supplier shall submit the inspection certificate issued by him which should be attached with the certificate(s) of the manufacturer(s) to the Procuring Agency in order to ensure that the goods are manufactured in compliance with the contract.

Factory Acceptance Tests (FAT) shall be carried out at the premises of Manufacturer jointly witnessed with IESCO Engineers. The Contractor shall keep the Engineer informed of the progress of manufacture and notify the Engineer approximately six (6) weeks in advance, in writing as to when the Goods or any part thereof will be ready for inspection and for shipping to wharf at the port of entry/disembarkation.

Following the receipt of such notice, the Engineer shall nominate to arrange pre-shipment inspection of the Goods or any part thereof including the packing at the Contractor's premises and will issue a pre-shipment Inspection Report or waiver to pre-shipment inspection. The Goods or any part thereof shall be shipped or delivered only upon issuance of pre-shipment inspection report. The Goods/material shall be subject to the type, sample and routine tests as described in the Specifications.

The contractor shall provide free of charge all such assistance, instruments, machines, labor and materials as are normally required for carrying out such tests. In case a part or whole of the equipment being supplied at the project by the contractor is from within the country (Pakistan) or outside country, the cost of performing as well as witnessing any test by the Inspectors during pre-shipment local inspection shall be borne by the contractor if such tests are clearly intended by or provided

for in the specifications or as agreed between IESCO and the contractor. Two (2) number authorized Engineers from IESCO will carry out inspection of the material at manufacturer's works. A notice of at least six (6) weeks advance, in writing shall have to be given to the IESCO by the Supplier when the stores against the order are ready for Inspection. Manufacturer will provide facilities for tests as per tender specifications free of cost

All reasonable facilities as provided in the specifications or followed by Trade & Industry in general shall have to be offered to the Inspecting officers, by the Supplier at their expense for carrying out Testing and Inspection. If Goods are being manufactured on other premises, the Contractor shall obtain permission of the Engineer/IESCO to carry out such inspection, examinations and testing at those premises.

For such purpose, the Supplier shall provide free access at all times during manufacture, assembly and testing to the premises in which the work is being carried out. The contractor will cover all the expenses in context of witnessing of the tests by the Inspectors including 1st class traveling (by air or by road depending on the distance from Islamabad Pakistan to the place or places of inspections), boarding & lodging in any A class accommodation, local transportation and daily allowance

**Following is the guidance for Dispute Resolution**

1. If any dispute of any kind whatsoever shall arise between the Authority and the Bidder in connection with or arising out of the Contract, including without prejudice to the generality of foregoing, any question regarding its existence, validity, termination and the execution of the Contract – whether during developing phase or after their completion and whether before or after the termination, abandonment or breach of the Contract – the parties shall seek to resolve any such dispute or difference by mutual diligent negotiations in good faith within 14 (fourteen) days following a notice sent by one Party to the other Party in this regard.
2. At future of negotiation the dispute shall be resolved through mediation and mediator shall be appointed with the mutual consent of the both parties.
3. At the event of failure of mediation to resolve the dispute relating to this contract such dispute shall finally be resolved through binding Arbitration by sole arbitrator in accordance with Arbitration Act 1940. The arbitrator shall be appointed by mutual consent of the both parties. The Arbitration shall take place in Islamabad, Pakistan and proceedings will be conducted in English language.
4. The cost of the mediation and arbitration shall be shared by the parties in equal proportion however the both parties shall bear their own costs and lawyer's fees regarding their own participation in the mediation and arbitration. However, the Arbitrator may make an award of costs upon the conclusion of the arbitration making any party to the dispute liable to pay the costs of another party to the dispute.
5. Arbitration proceedings as mentioned in the above clause regarding resolution of disputes may be commenced prior to, during or after completion of the contract.

Notwithstanding any reference to the arbitration herein, the parties shall continue to perform their respective obligations under the Contract unless they otherwise agree that the Authority shall pay the Bidder any monies due to the Bidder.

**Arbitrator's fee:**

The fee shall be specified in Pak Rupees, as determined by the Arbitrator, which shall be shared equally by both parties.

**Appointing Authority for Arbitrator:**

By the Mutual Consent or in accordance with the provisions of Arbitration Act, 1940, in case the parties fail to reach a consensus on the name of sole arbitrator, any party may submit an application to the Chief Justice Islamabad High Court for appointment of sole arbitrator. The Chief Justice IHC may appoint a former judge of any High Court or Supreme Court as the sole arbitrator to resolve the dispute between the parties.

**Rules of procedure for arbitration proceedings:**

Any dispute between the Authority and a Bidder who is a national of the Islamic Republic of Pakistan arising in connection with the present Contract shall be referred to adjudication or arbitration in accordance with the laws of the Islamic Republic of Pakistan including Arbitration Act 1940, however above provision shall prevail in referring the case to the Arbitrator.

**Place of Arbitration and Award:**

The arbitration shall be conducted in English language and place of arbitration shall be at



Bid Securing Declaration

## Form 9: Bid Securing Declaration

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

Bid No.: **P29888**

To: **IESCO-PMU (Islamabad Electric Supply Company (IESCO)), Director Head Office, Street # 40, Sector G-7/4., Islamabad Capital Territory**

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 **IESCO-PMU (Islamabad Electric Supply Company (IESCO)), Director Head Office, Street # 40, Sector G-7/4., Islamabad Capital Territory**

(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., **Procurement of Design, Supply, Installation, Testing & Commissioning of Assert Performance Management System (APMS) according to revised PPMC spec No. PPMC-DS-01:2026 & its Configuration & Interfacing with AMI system as per schedule of requirement SoR (P29888)** 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 BY THE 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 times 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: **IESCO-PMU (Islamabad Electric Supply Company (IESCO)), Director Head Office, Street # 40, Sector G-7/4., Islamabad Capital Territory**

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

## Production capacity annex

Technical Submission (Vendor)

Document Required

See Form Under Additional Forms and Documents: **Production capacity annex** (page number: 79)

## Bidder information form

Technical Submission (Vendor)

Document Required

See Form Under Additional Forms and Documents: **Bidder information form** (page number: 80)

## Bidder JV form

Technical Submission (Vendor)

Document Required

See Form Under Additional Forms and Documents: **Bidder JV form** (page number: 81)

## Deviation from contractual provision

Technical Submission (Vendor)

Document Required

See Form Under Additional Forms and Documents: **Deviation from contractual provision** (page number: 82)

## Deviation technical provision

Technical Submission (Vendor)

Document Required

See Form Under Additional Forms and Documents: **Deviation technical provision** (page number: 83)

## Manufacturer authorization

Technical Submission (Vendor)

Document Required

See Form Under Additional Forms and Documents: **Manufacturer authorization** (page number: 84)

## Manufacturer information form

Technical Submission (Vendor)

Document Required

See Form Under Additional Forms and Documents: **Manufacturer information form** (page number: 85)

## Production capacity of manufacturer

Technical Submission (Vendor)

Document Required

See Form Under Additional Forms and Documents: **Production capacity of manufacturer** (page number: 86)

## IESCO blacklisting policy

Technical Submission (Vendor)

Document Required

See Form Under Additional Forms and Documents: **IESCO blacklisting policy** (page number: 87)

## Power of Attorney

Technical Submission (Vendor)

Document Required

See Form Under Additional Forms and Documents: **Power of Attorney** (page number: 116)

## specs II

Technical Submission (Vendor)

Document Required

See Form Under Additional Forms and Documents: **specs II** (page number: 118)

## Defect liability

Information (Read-Only)

See Form Under Additional Forms and Documents: **Defect liability** (page number: 173)

## specs III

Technical Submission (Vendor)

Document Required

See Form Under Additional Forms and Documents: **specs III** (page number: 174)

## Form of Advance payment for (Advance payment 20% is allowed against the advance bank guarantee )

Financial Submission (Vendor)

Document Required

See Form Under Additional Forms and Documents: **Form of Advance payment for (Advance payment 20% is allowed against the advance bank guarantee )** (page number: 185)

## In continuation of ITB Clause 7.0

Financial Submission (Vendor)

Document Required

See Form Under Additional Forms and Documents: **In continuation of ITB Clause 7.0** (page number: 186)

## In continuation of GCC Clause F sub clause 2

Financial Submission (Vendor)

Document Required

See Form Under Additional Forms and Documents: **In continuation of GCC Clause F sub clause 2** (page number: 187)

## specs SoR I

Technical Submission (Vendor)

Document Required

See Form Under Additional Forms and Documents: **specs SoR I** (page number: 190)





## Procurement Forms

## Past Experience and Completed Contracts

The bidder or Joint venture (JV) must demonstrate experience as a contractor by having successfully completed at least (02) two No. of contracts, with none of contract value should be less than 30% of Rs. 83 million. These projects must have been executed on a turnkey basis and involve systems rated at 415V or higher, and must have been completed within the last five years prior to the bid opening date.

The manufacturer shall demonstrate at least five (05) years' experience in designing and manufacturing of similar nature/complex involving same or higher rated equipment/material. Three (03) years satisfactory operation performance of same or high rated equipment /material. For the ease of evaluation, related form are enclosed in annexure and the same will be considered during evaluation.

See Form Under Additional Forms and Documents: **Past Experience and Completed Contracts** (page number: 200)

## Historical Contract Non-Performance, and Pending Litigation and Litigation History

### History of Non-performing Contracts

Non-performance of a contract a did not occur as a result of contractor default since 1st January 2025.

a Non-performance, as decided by the Purchaser, shall include all contracts where (a) nonperformance was not challenged by the contractor, including through referral to the dispute resolution mechanism under the respective contract, and (b) contracts that were so challenged but fully settled against the contractor. Nonperformance shall not include contracts where Purchasers decision was overruled by the dispute resolution mechanism. Nonperformance must be based on all information on fully settled disputes or litigation, i.e. dispute or litigation that has been resolved in accordance with the dispute resolution mechanism under the respective contract and where all appeal instances available to the Bidder have been exhausted.

b This requirement shall comply as individual incase of bidder participate as Joint venture.

### pending litigation

All pending litigation, arbitration, Greivance Redressal committee (GRC) and Appellate GRC or other material events impacting the net worth and/or liquidity of the bidder, if any, shall be treated as resolved against the Bidder and so shall in total not represent more than 25% (twenty five percent) of the Bidder's last year net worth calculated as the difference between total assets and total liabilities.

See Form Under Additional Forms and Documents: **Historical Contract Non-Performance, and Pending Litigation and Litigation History** (page number: 201)

## Current Contracts and Their Progress

Financial Resources shall be determined as per following :

Financial Resources = working capital + credit line from sheduled bank - current commitment as per attached proforma

See Form Under Additional Forms and Documents: **Current Contracts and Their Progress** (page number: 203)

## Financial Capacity and Net Worth Evaluation Form

### a. Financial Capability of Bidder

Submission of audited financial statements for the last three years to demonstrate the current soundness of the Bidder's financial position. Bidder's Net Worth for the last year calculated as per FIN form shall be equal or exceed to NCB-277=Rs.82 Million. The difference between total assets and total liabilities should be positive.

in case of

1 single entity = 100% comply

2 in case of JV lead partner 100% and member 100%

b. Specify proposed sources of financing, working capital, lines of credit, and other financial means after deduction of current commitments, available to meet the cash flow demands as indicated in below: NCB-277=Rs.61.8 Million.

in case of

1 single entity = 100% comply

2 in case of JV lead partner 60% and member 40%

See Form Under Additional Forms and Documents: **Financial Capacity and Net Worth Evaluation Form** (page number: 204)

## Average Annual Turnover

Minimum average annual turnover of PKR calculated as total revenue of the Bidder over the last three Years shall be equal to: NCB= 502 Million.

in case of

1 single entity = 100% comply

2 in case of JV lead partner 60% and member 40%

See Form Under Additional Forms and Documents: **Average Annual Turnover** (page number: 206)





## Additional Forms and Documents

## Production Capacity

Criteria	Compliance Requirements			Documents	
Requirement	Single Entity	Joint Venture		Submission Requirements	
		All Partners Combined	Each Partner		One Partner
<p>In order to ensure the smooth and timely execution of order, the manufacturer will indicate its manufacturing / production capacity which shall be double the total sum of orders already in hand, expected orders in pipe line and this order (if placed on the bidder). The manufacturer shall provide the information with the bid to establish its capacity / capability to execute the order for which necessary documentary evidence may be attached related for the above mentioned requirements. In this context the manufacturer is required to fill in the relevant forms given in <b>Forms</b> of this tender document and submit the same with the bid. The purchaser may visit the site of supplier at any time during evaluation at the cost of supplier.</p>	Must meet requirement	Not applicable	Not applicable	Manufacturer must meet	Forms

*\*A Bidder or Manufacturer shall provide evidence of production output.*

## Bidder Information Form

Date of Bid Submission: \_\_\_\_\_  
Request for Bid No.: NCB \_\_\_\_\_

Page \_\_\_\_\_ of \_\_\_\_\_ pages

1. Bidder's Name: _____
2. In case of JV, legal name of each member: _____
3. Bidder's actual or intended country of registration: _____
4. Bidder's year of registration: _____ _____
5. Bidder's Address in country of registration: _____ _____
6. Bidder's Authorized Representative Information Name: _____ CNIC No. _____ Address: _____ _____ Telephone/Fax numbers: _____ Email Address: _____
7. Attached are copies of original documents of [please check the box(es) of the attached original documents] <input type="checkbox"/> Articles of Incorporation (or equivalent documents of constitution or association), and/or documents of registration of the legal entity named above. <input type="checkbox"/> In case of JV, letter of intent to form JV or JV agreement, in accordance with ITB 3.4. <input type="checkbox"/> Establishing that the Bidder is not under the supervision of the Procuring Agency
8. Included are the organizational chart, a list of Board of Directors, and the beneficial ownership.

## Bidder's JV Members Information Form

**Date of Bid Submission:** \_\_\_\_\_

**Request for Bid No.:** NCB \_\_\_\_\_

Page \_\_\_ of \_\_\_ pages

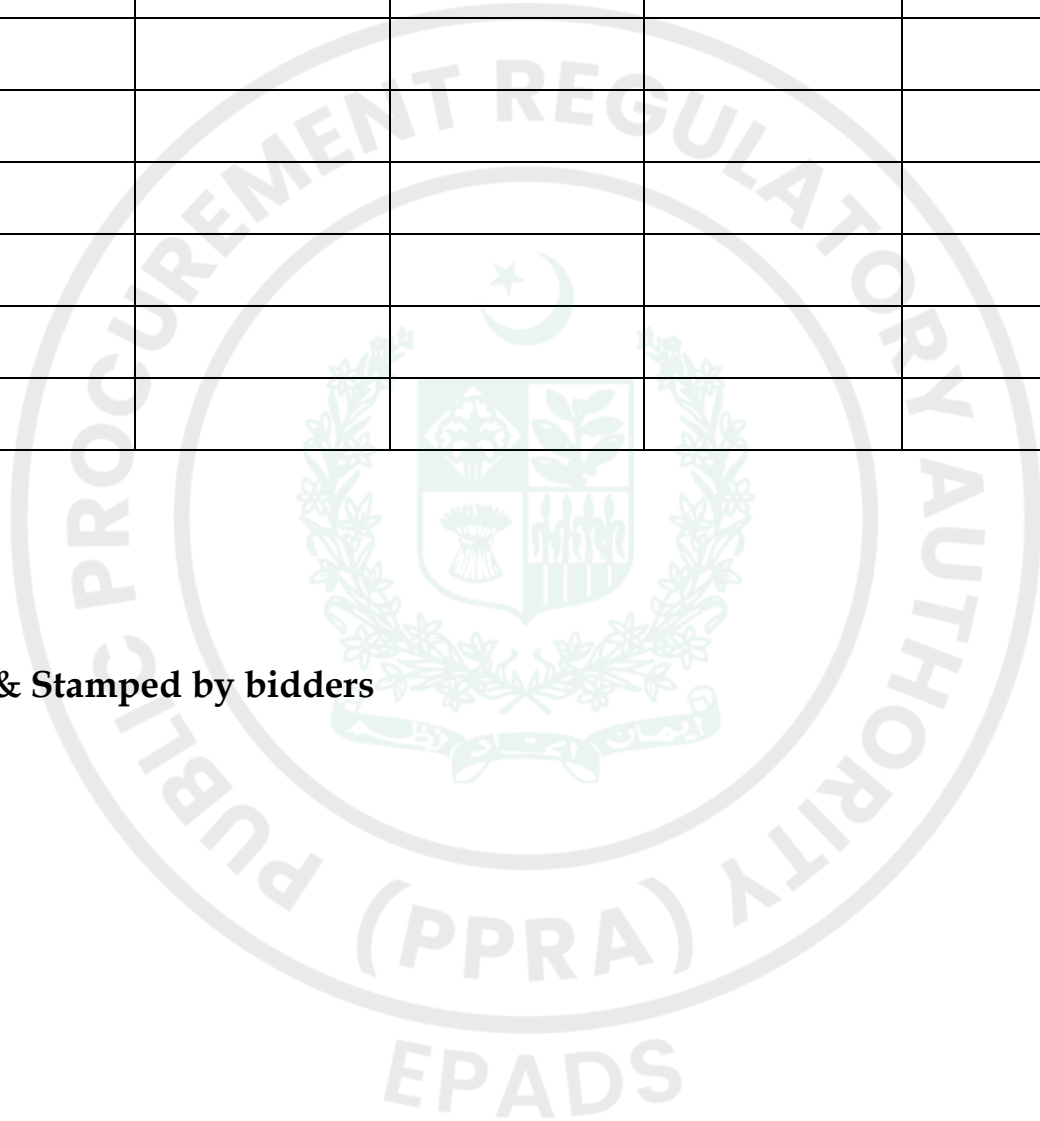
1. Bidder's Name: _____
2. Bidder's JV Member's name: _____
3. Bidder's JV Member's country of registration: _____
4. Bidder's JV Member's year of registration: _____
5. Bidder's JV Member's legal address in country of registration: _____ _____
6. Bidder's JV Member's authorized representative information Name: _____ Address: _____ _____ Telephone/Fax numbers: _____ Email Address: _____
7. Attached are copies of original documents of [please check the box(es) of the attached original documents] <input type="checkbox"/> Articles of Incorporation (or equivalent documents of constitution or association), and/or registration documents of the legal entity named above, in accordance with ITB 4.4.
8. Included are the organizational chart, a list of Board of Directors, and the beneficial ownership.

**Deviation from Contractual/Commercial Provision**

It is presumed that bidder shall not take any deviation. However, if he intends to take deviation to specified contractual/commercial conditions, those must be listed in the space provided below.

Sr #	Section No	Clause No	Deviation	Clarifications

**Sign & Stamped by bidders**

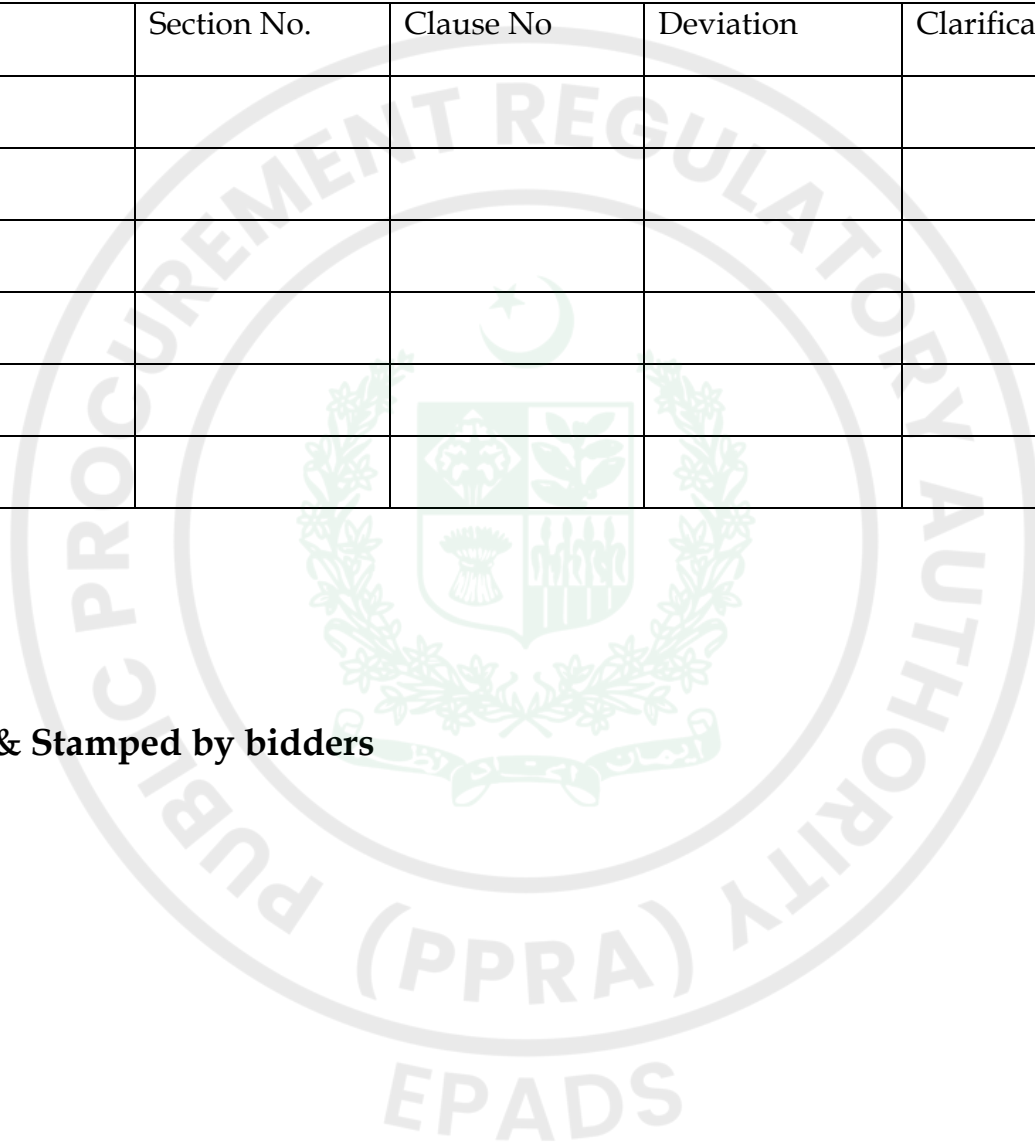


### Deviation from Technical Provision

It is presumed that bidder shall not take any deviation. However, if he intends to take deviation to specified terms, those must be listed in the space provided below:

Sr #	Section No.	Clause No	Deviation	Clarifications

**Sign & Stamped by bidders**



## Manufacturer's Authorization

No. \_\_\_\_\_

Dated \_\_\_\_\_

Date of Bid Submission:

\_\_\_\_/\_\_\_\_/2025

Request for Bid No.:

NCB \_\_\_\_\_

To:

\_\_\_\_\_  
\_\_\_\_\_

WHEREAS

We \_\_\_\_\_, who are official manufacturers of \_\_\_\_\_, having factories at \_\_\_\_\_, do hereby authorize M/s \_\_\_\_\_ to submit a Bid the purpose of which is to provide the following Goods, manufactured by us \_\_\_\_\_ and to subsequently negotiate and sign the Contract.

We hereby extend our full guarantee and warranty in accordance clause-18 of General Conditions of Contract, with respect to the Goods offered by the above firm.

Signed: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date signed \_\_\_\_\_ day of \_\_\_\_\_ Month, \_\_\_\_\_ Year

(PPRA)  
EPADS

## Manufacturer's Information Form

Date of Bid Submission: \_\_\_\_\_

Request for Bid No.: NCB \_\_\_\_\_

Page \_\_\_ of \_\_\_ pages

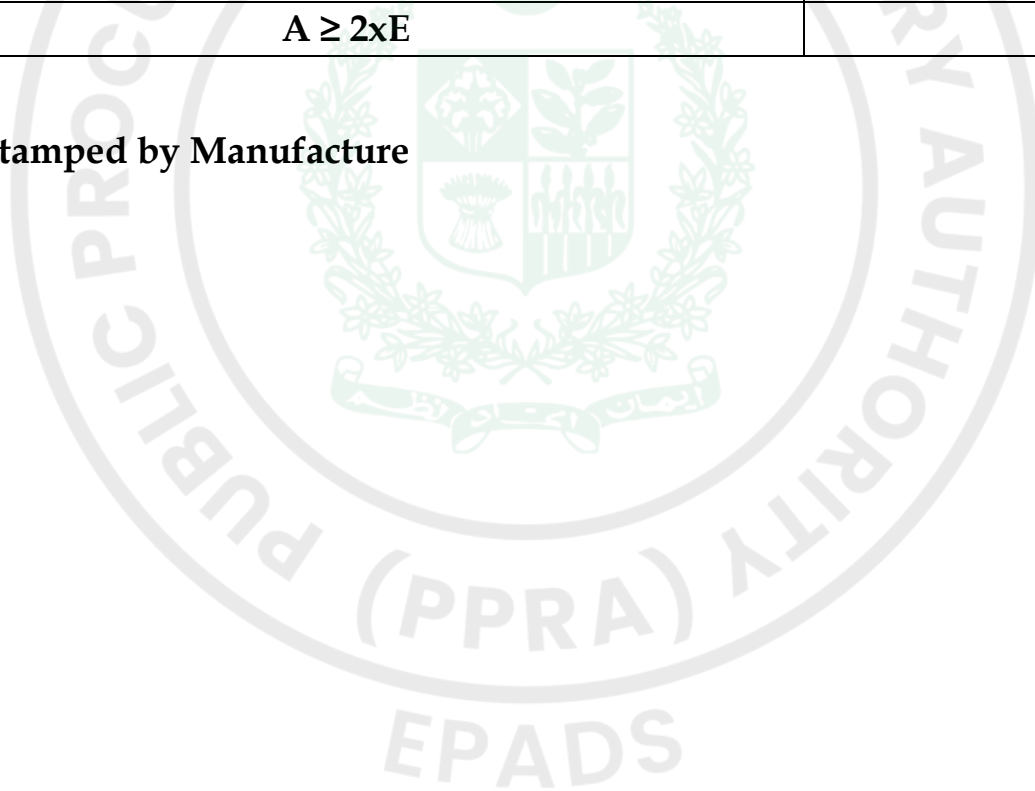
1. Manufacturer's Name: _____
3. Manufacturer Country of Registration: _____
4. Manufacturer year of Registration: _____
5. Manufacturer's legal address of Head Office and Production sites in Country of Registration: _____
6. Manufacturer's Authorized Representative Information Name: _____ Address: _____ Telephone/Mob/Fax numbers: _____ Email Address: _____
1 <input type="checkbox"/> Attached are copies of original documents of [please check the box(es) of the attached original documents] from concern chamber of commerce manufacturing country or Pakistani Embassy in manufacturing country <input type="checkbox"/> Articles of Incorporation (or equivalent documents of Constitution or Association), and/or registration documents of the legal entity named above, in accordance with ITB 4.4. 2. Included are the organizational chart, a list of Board of Directors, and the Beneficial Ownership.

EPADS

## Production Capacity of Manufacturer

Sr #		Factory Capacity in unit as mentioned in Price schedule
A	Total Factory Production Capacity (No. or Sets or other unit)/Year	
B	Order in Hand (No. or Sets or other unit)	
C	Expected order during execution of this contract if awarded (No. or Sets or other unit)	
D	Quantity of this order	
E	Remaining Capacity of Factory (No. or Sets or other unit) E= (A-B-C-D)	
<b><math>A \geq 2xE</math></b>		

**Signed & Stamped by Manufacture**



**MECHANISM  
FOR BLACKLISTING OF  
CONTRACTORS / CONSULTANTS /  
MANUFACTURERS**



**Approved by IESCO Board of Directors (BoD) in its  
178<sup>th</sup> Meeting held on 23<sup>rd</sup> August 2019.**

**ISLAMABAD ELECTRIC SUPPLY COMPANY (IESCO)**

**28<sup>th</sup> October, 2019**



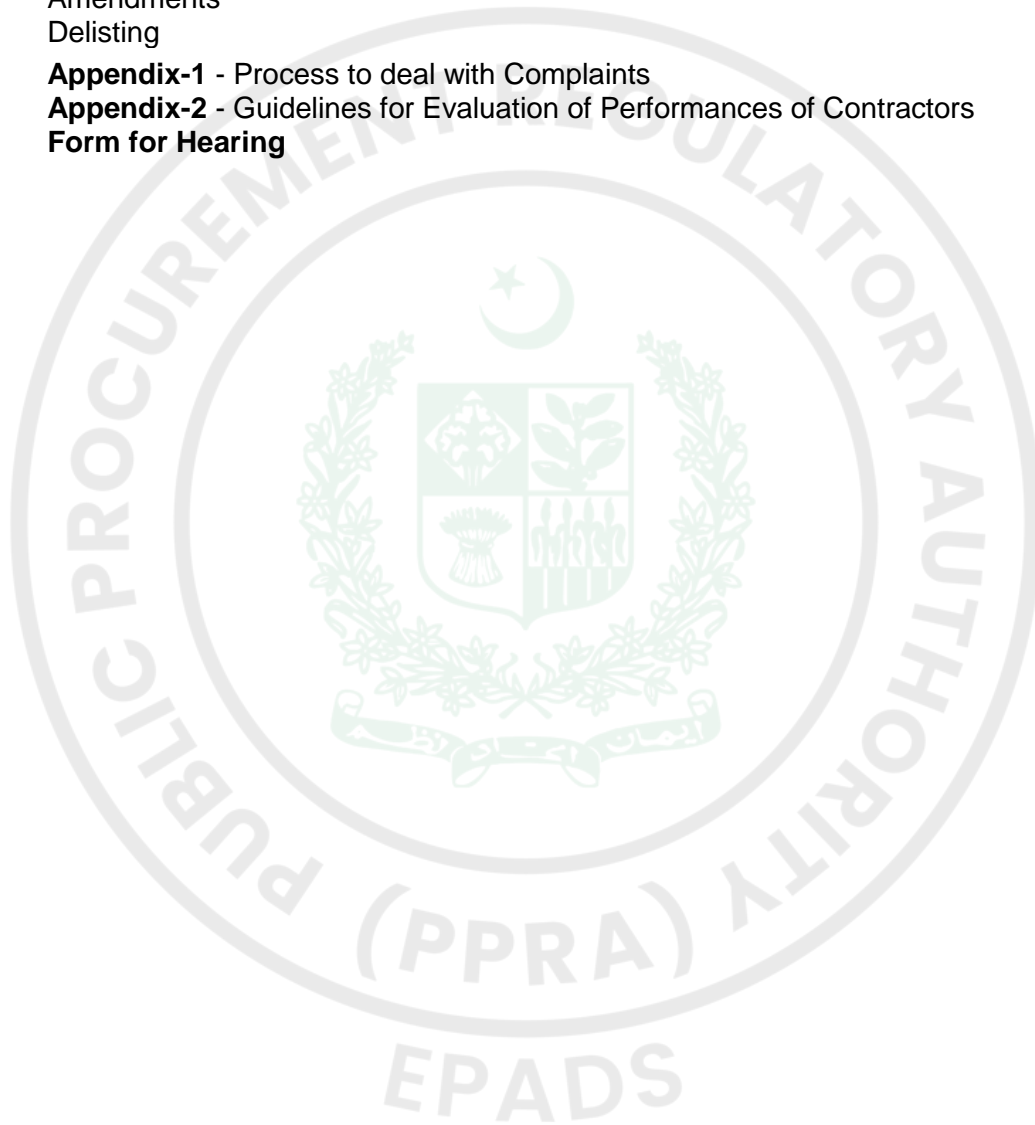
## **DISCLAIMER**

If any clause of this policy afterwards develops contradiction with PPRA Rules, then PPRA Rules will supersede the relevant clause of IESCO Mechanism for Blacklisting of Contractors / Consultants / Manufacturers.

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## PREFACE

This mechanism of blacklisting has been drafted in the light of Rule-19 “Blacklisting of suppliers and contractors” of the Public Procurement Rules, 2004 “PPRA Rules”. This Mechanism has been developed to mitigate the possibilities of corrupt practices and ensure the transparent and corruption free public procurement in the organization. The blacklisting policies of various procurement agencies have also been consulted. The policy was placed on IESCO website for more than 03 months & all the stake holders were invited to furnish their comments so that no one may have any objection after its implementation. This mechanism consists of 09 chapters containing Grounds for Blacklisting, Procedure for Suspension and Blacklisting, Formulation of “IESCO Standing Committee for Blacklisting”, Review against Decision of the Procuring Agency, Period of Debarment, Process to deal with Complaints & Guidelines for Evaluation of Performances of Contractors. The procedure has been developed for both of the procurement stages including competitive bidding stage and contract implementation stage. A disclaimer Clause has also been added so that Authority’s instructions could prevail. This document shall be considered an integral part of IESCO Bidding Documents / Tender Documents/ RFPs as well as contract agreements / purchase orders etc. The bidders shall have to submit an undertaking along with their bid that they have read all the contents of this blacklisting mechanism and they accept all the provisions of this document.

## DEFINITIONS

In addition to definitions mentioned in bidding document, following definitions are also applicable:

- (i) **Authority:** The Public Procurement Regulatory Authority.
- (ii) **Appeal:** Right of firm/individual to bring its / his grievance against the issuance of Blacklisting Order at the appropriate legal forum.
- (iii) **Appellate Authority:** The department, office or government unit exercising general and/or administrative supervision/control over the blacklisting agency. Department level agencies shall exercise appellate authority over offices, agencies, under their jurisdiction. *Provided, further,* that blacklisting decisions of government agencies that are not subject to general and/or administrative supervision/control of any department, office or government unit shall be final and executor.
- (iv) **Award:** A written notice from the procuring entity accepting a bid or proposal.
- (v) **Blacklisting:** An administrative penalty disqualifying a person or an entity from participating in any government procurement for a given period.
- (vi) **Blacklisting Mechanism:** A mechanism adopted by IESCO as a procuring agency/entity for Blacklisting supplier(s), manufacturer(s), distributor(s), contractor(s) or Experts/consultants/consulting firm(s) etc.
- (vii) **Blacklisted Person/Entity.** A person/entity that was disqualified by an agency and/or is included in the PPRA/ADB/World Bank/Donor Agencies' (working with Government of Pakistan) Consolidated Blacklisting Report/sanctioning list.
- (viii) **Contractor** includes-suppliers, contractors and consultants
- (ix) **Consolidated Blacklisting Report:** The report prepared by the NTDC/WAPDA/DISCOs/PPRA/ADB/World Bank/Donor Agency working with Government of Pakistan containing the list of supplier(s), manufacturer(s), distributor(s), contractor(s) or Experts/ consultants/ consulting firm(s) blacklisted by procuring entities/agencies.
- (x) **Debarment:** state of being legally excluded from participating in all types of procurement proceedings of the procuring department for a given period.
- (xi) **Delist.** Removal of a person/entity from the Consolidated Blacklisting Report.
- (xii) **Procuring Agency:** Any department, attached department or any office of the Islamabad Electric Supply Company;

- (xiii) **Suspension.** Administrative action taken for infractions committed by a contractor during the competitive bidding stage, whereby such contractor is prohibited from further participation in the bidding process of an agency.
- (xiv) **Termination of Contract-** Extinction of contract by reason or resolution or rescission under applicable rules/regulations/laws arising from the default of the firms/individuals.



# Chapter No.1

## 1.1 Introduction

Blacklisting is one of the effective tools used in the struggle against the corruption in connection with public procurement. The main objectives of any procurement process are transparency, economy, fairness and efficiency so that public money is spent on welfare of the public. Hence, blacklisting is an instrument, which may lead to the decrease of the potential corruption risks and also inculcate protection of public means and increase of effectiveness of allocation of the limited resources.

Rule-19 “Blacklisting of suppliers and contractors” of the Public Procurement Rules, 2004 (hereinafter “**PPRA Rules**”) stipulates that;

*“The procuring agencies shall specify a mechanism and manner to permanently or temporarily bar, from participating in their respective procurement proceedings, suppliers and contractors who either consistently fail to provide satisfactory performances or are found to be indulging in corrupt or fraudulent practices. Such barring action shall be duly publicized and communicated to the Authority:  
Provided that any supplier or contractor who is to be blacklisted shall be accorded adequate opportunity of being heard.”*

In the light of the above said Clause, Blacklisting Mechanism (hereinafter **the Mechanism**) has been specified for all procurements made by IESCO. This policy shall govern the blacklisting of manufacturers, suppliers, distributors, contractors, consultants and consulting firms (“contractors” for brevity) involved in government procurement for offenses or violations committed during competitive bidding and contract implementation

Any capitalized terms and abbreviations used in this mechanism which are not defined herein shall have the meanings given to them in Public Procurement Regulatory Authority Ordinance, 2002 (hereinafter “**PPRA Ordinance**”) and PPRA Rules amended upto date.

## 1.2 Extent of Application

- i. The Mechanism shall be applicable and remain in force, along with any amendments thereto, within IESCO until any clear instructions or guidelines are imparted by the Government through PPRA, PEC, or any other competent forum.
- ii. The Mechanism shall also be applicable on the pre-qualified firms.
- iii. The Mechanism shall be applicable for suppliers / bidders / contractors / local agents / representatives / consultants / firms / individuals / distributors / Manufacturers / organization transacting business with IESCO.

- iv. Wherever any provision of this mechanism shall be in conflict with provisions of any applicable guidelines of donor agencies, or any other applicable Statute / Law or Rule enforced at the time in Pakistan, the provisions of the Statute / Law or rule shall prevail.
- v. After Approval of this mechanism by the competent Authority, it shall be considered an integral part of bidding document/tender document/RFP as well contract agreement/Purchase Order, unless otherwise specified PPRA rule-5. The bidder will submit an Undertaking along-with their bid that they have read and accept the provisions of this Mechanism. Non-submission of an Undertaking may result in rejection of their bid. The said Undertaking will subsequently become part of the Contract Agreement as well.

### **1.3 Basic Principles of Blacklisting Mechanism**

Following are the important basic principles of Blacklisting Mechanism::

- i. To lay down effective mechanism for disciplining deviant Contractors against whom, misconduct has been established;
- ii. An opportunity will be provided to any contractor alleged to have committed an act of misconduct, to defend himself;
- iii. The formal hearing be conducted by a Committee/Committees.
- iv. The presenter has the sole responsibility for deciding the terms of suspension.
- v. Blacklisting is a temporary action and not permanent measure.
- vi. The period of blacklisting / suspension would invariably depend upon the seriousness / nature of offence committed by the erring contractor.
- vii. Blacklisting Mechanism is applicable for all type of national or international contractors, manufacturers, consultants, pre-qualified contractors /manufacturers, local agents, distributors and suppliers.

## CHAPTER NO. 2

### GROUNDS FOR BLACKLISTING

#### 2.1 General Grounds

The following shall comprise the broad multilateral grounds for blacklisting:

- i. **Corrupt Practice**" the offering, giving, receiving, or soliciting, directly or indirectly, of anything of value to influence the action of a public official in the procurement process or in contract execution;
- ii. **Fraudulent Practice**" a misrepresentation or omission of facts in order to influence a procurement process or the execution of a contract
- iii. **Collusive Practice**" a scheme of arrangement between two or more bidders, with or without the knowledge of the Purchaser, designed to establish bid price at artificial, non-competitive levels, and
- iv. **Coercive Practice**" harming or threatening to directly or indirectly, persons or their property to influence their participation in the procurement process or affect the execution of a contract.

In addition to above, blacklisting of firms/individuals may be resorted to when the charges are of serious nature, which include but are not limited to the following:

#### 2.2 Grounds at Competitive Bidding Stage

The procuring Agency shall impose on bidder(s)/JV/Entities/Consulting firm(s) or prospective bidders the penalty of suspension or blacklist them for a specific period for the offense from participating in the public bidding process, without prejudice to the imposition of additional administrative sanctions as the internal rules of the agency may provide and/or further criminal prosecution, as provided by applicable laws, for the following violations:

- i. Indulging in Corrupt, Fraudulent as well as Collusive & Coercive Practices.
- ii. Submission of eligibility requirements containing false information or falsified or spurious documents
- iii. Submission of false/forged/unauthentic Bid Security/Pay Order/CDR or infringement of documents to get undue monetary or any other benefit.
- iv. Submission of Bids that contain false information or falsified documents, or the concealment of such information in the Bids or making frivolous complaints and allegations in order to influence the outcome of eligibility screening or any other stage of the public bidding.

- v. Unauthorized use of one's name, or using the name of another for purpose of public bidding.
- vi. Withdrawal of a bid after submission, or refusal to accept an award, or enter into contract with the government without justifiable cause, after he had been adjudged as having submitted the Lowest Calculated Responsive Bid or Highest Rated/ranked Responsive Bid.
- vii. Refusal or failure to submit the required performance security within the prescribed time limit.
- viii. Any documented unsolicited attempt by a bidder to unduly influence the outcome of the bidding in his favor.
- ix. All other acts that tend to defeat the purpose of the competitive bidding, such as but not limited to: an eligible contractor not buying bid documents from procuring agency or not complying with the requirements during bid evaluation, and contractors habitually withdraw from bidding for at least three (3) times within a year.
- x. Bidder(s) (prior to or after bid submission) designed to establish bid prices at artificial, non-competitive levels and to deprive the procuring agencies of the benefit(s) of free and open competition and any request for, or solicitation of anything of value by any public official in the course of the exercise of his duty;
- xi. Involved in litigation or needless petitioning to influence or obstruct the procurement process either on his own behalf or at the behest of any other vested interest.
- xii. Breach of confidentiality of evaluation process as mentioned in Appendix-I based on illegal access or in any way to get undue benefit or to provide benefit or to frustrate the bidding/evaluation process. This will also include attempts to sabotage the bidding process directly or indirectly.
- xiii. Any effort by the bidder to influence the procuring agency in the examination, evaluation, ranking of Proposals, and recommendation for award of Agreement.

In addition to the penalty of suspension, the bid security posted by the concerned bidder or prospective bidder shall also be forfeited.

## 2.3 Grounds at Contract Implementation Stage

Without prejudice to the imposition of additional administrative sanctions as the internal rules of the procuring agency may provide and/or further criminal prosecution as provided by applicable laws, the procuring agency shall take against the contractors after the termination of the contract, the action of suspension for specific period from participating in the public bidding process, for violations committed during the contract implementation stage, which include but not limited to the following:

- a. Indulging in Corrupt, Fraudulent as well as Collusive & Coercive Practices.
- b. Extraordinary delay in signing or refusal to accept the Notification of Award (NOA) and/or the contract without any cogent reason.
- c. Failure of the contractor, due solely to his fault or negligence, to mobilize and start work or performance within the specified period in the Notice of Award (NOA).
- d. Submission of fake / frivolous or mutilated Performance Guarantee or Advance Payment guarantee etc.
- e. Failure by the contractor to fully and faithfully comply with its contractual obligations without valid cause, or failure by the contractor to comply with any written lawful instruction of the procuring entity or its representative(s) pursuant to the implementation of the contract. For the procurement of infrastructure projects or consultancy contracts, lawful instructions include but are not limited to the following:
  - i. Employment of competent technical personnel, competent engineers and/or work supervisors; and Deployment of committed equipment, facilities, support staff and manpower; and
  - ii. Provision of warning signs and barricades in accordance with approved plans and specifications and contract provisions;
  - iii. Stockpiling in proper places of all materials and removal from the project site of waste and excess materials, including broken pavement and excavated debris in accordance with approved plans and specifications and contract provisions;
  - iv. Renewal of the effective dates of the performance security after its expiration during the course of contract implementation.
- f. Assignment and subcontracting of the contract or any part thereof or substitution of key personnel named in the proposal without prior written approval by the procuring entity.
- g. For the procurement of goods, unsatisfactory progress in the delivery of the goods by the manufacturer, supplier or distributor arising from his

fault or negligence and/or unsatisfactory or inferior quality of goods, as may be provided in the contract or as under:

- i. Deviations from specifications and terms & conditions of the purchase order/contract.
- ii. Provision of fake prototype/type test reports
- iii. Provision of fake inspection call FAT/Type test
- iv. Failure to rectify the fault/damage/problem during period of warrantee
- v. Supply of goods through inappropriate way such as smuggling of goods
- vi. Supply of stolen goods/re-sold goods.
- vii. Provision of fake /forged custom /taxes /duties documents
- h. For the procurement of consulting services, poor performance by the consultant of his services arising from his fault or negligence. Any of the following acts by the consultant shall be construed as poor performance and is liable to be Blacklisted:
  - i. Defective design resulting in substantial corrective works in design and/or construction;
  - ii. Failure to deliver critical outputs due to consultant's fault or negligence; and
  - iii. Specifying materials which are inappropriate, substandard, or way above acceptable standards.
  - iv. Allowing defective workmanship or works by the contractor being supervised by the consultant.
  - v. Submitting CV's of key personnel in the prequalifying process or bid documents of professionals that are not in actual employment of the bidder or without consent of experts.
  - vi. Acting together (Contractor & Consultant) in secret toward a fraudulent or illegal end
- i. For the procurement of infrastructure projects, poor performance by the contractor or unsatisfactory quality and/or progress of work arising from his fault or negligence. Any of the following acts by the constructor shall be construed as poor performance:

- i. Negative slippage of 15% and above within the critical path of the project due entirely to the fault or negligence of the contractor; and
- ii. Quality of materials and workmanship not complying with the approved specifications/Drawing(s) arising from the contractor's fault or negligence.
- iii. Unnecessary delay in completion of project
- iv. Failure to rectify fault/problem/damages during defect liability.
- j. Willful or deliberate abandonment or non-performance of the project or contract by the contractor resulting to substantial breach thereof without lawful and/or just cause.
- k. In addition to above, other grounds for blacklisting of firms/individuals include but are not limited to the following:
  - i. Obtaining fraudulent payments;
  - ii. Obtaining contracts by misleading the purchaser;
  - iii. Refusal to pay IESCO dues etc.;
  - iv. Failure to fulfill contractual obligations Changes in the status of firm's ownership/partnership etc., causing dissolution of the firm which existed at the time of inspection prior to original registration of the firm
  - v. Registration of a firm with a new name by the Proprietor or family or a nominee thereof of a firm that has been already blacklisted;
  - vi. Contractors who have negotiated Plea Bargain under the National Accountability Ordinance 1999, or contractors involved with any other criminal proceedings conducted by any investigation agency where default has been proved specifically in relation to supplies made to or contracts concluded with IESCO or department thereof.;
  - vii. Non-compliance of the existing policy/rules/law of GoP during execution of contract.
  - viii. Hiring of underage personnel for assignments or works violating Child Labor (Prohibition and Regulation) Amendment Bill, 2016.
  - ix. Non-Adherence to safety codes.

For the Blacklisting of a Firm, in addition to the penalty of suspension for a certain period, the performance security posted by the contractor shall also be forfeited.

## CHAPTER NO. 3

### FORMULATION OF “IESCO STANDING COMMITTEE FOR BLACKLISTING”

#### 3.1 Defining Structure of Committee

A permanent Committee namely “IESCO’s Standing Committee for Blacklisting” comprising of the following members shall examine the justification of the reasons given by the Project Authority prior to blacklisting / debarment of any firm/supplier/contractor/ individual.

- |  |                 |
|--|-----------------|
| i. <b>General Manager Technical</b>  | <b>Convener</b> |
| ii. Director General/ Manager (Legal) IESCO                                    | Member          |
| iii. Representative of Finance Director<br>(Not Less than the Rank of Manager) | Member          |
| iv. Deputy Manager (Village Electrification Cell)                              | Member          |
| v. Deputy Manager Procurement PMU  | Member          |

The quorum for committee meeting will be 3 members including the Convener, the presence of Convener is mandatory. Committee shall evaluate the case and develop consensus however, in case of conflict among the member of committee, decision of convener shall be considered final.

#### 3.2 Provision of Additional Member

Depending upon the nature of the case, the Committee may consult or appoint / nominate additional members from within IESCO with the approval of Chief Executive Officer (CEO) IESCO, provided that the Committee consists of an odd number of individuals as per spirit of Rule 48(1) of the PPRA Rules. Independence of any additional members shall be ensured while making the selection of such additional members. Furthermore, the aforementioned Standing Committee shall also be authorized to seek external expert advice or call any employee of IESCO as and when required.

#### 3.3 Timeline for Finalization of Recommendations

The committee shall finalize its recommendations within the time specified in this mechanism.

## CHAPTER NO. 4

### PROCEDURE FOR SUSPENSION AND BLACKLISTING.

#### 4.1 The Competitive Bidding Stage

##### 4.1.1 Initiation of Action

Upon receipt of or obtaining information and / or knowledge that any person(s) is involved in practices mentioned in Article 2.1 and 2.2 of the Mechanism, the concerned project Authority / formation may initiate the suspension and blacklisting proceedings by filing its recommendations with the procuring agency or procuring agency also motu proprio (by itself) commence the proceedings upon prima facie (self-sufficient) determination that the bidder/ prospective bidder/ JV/ Person/Entity has committed any of the grounds for blacklisting during the competitive bidding stage as mentioned in article-2.1 & article-2.2 of the policy.

The Project Director or Project implementation Agency shall provide substantial evidence for the person/entity/JV/Firm against whom the case for blacklisting has been initiated.

##### 4.1.2 Notification

Upon verification of the existence of grounds for blacklisting, the procuring agency shall immediately notify the contractor concerned in writing, advising him that:

- a. Complaint for suspension and blacklisting has been filed against him, or he has been considered by the procuring agency for suspension and blacklisting, stating the grounds for such;
- b. He has the opportunity to explain his position regarding why he should not be suspended and blacklisted;
- c. Hearing shall be conducted before the procuring agency or “IESCO’s Standing Committee for Blacklisting”, upon his request, where he may present documentary evidence, verbal testimony and cross-examine the witnesses presented against him; and
- d. The consequences of being suspended and blacklisted.

Within seven (7) calendar days from receipt of notification, the bidder shall submit its written answer with documentary evidence to the procuring agency or “IESCO’s Standing Committee for Blacklisting” with a manifestation for request of hearing to determine questions of fact, if he so desires. No time extension shall be allowed. If contractor fail to answer within the stipulated period, the procuring agency shall issue a resolution recommending its blacklisting with the immediate suspension of the contractor from participating in any bidding process of the agency for a certain period and the forfeiture of his bid security.

### **4.1.3 Hearings**

If a hearing is requested by the contractor, the procuring agency shall immediately set the date and time for hearing. The hearing shall be non-litigious and shall be terminated within five (5) days. The procuring agency shall constitute an independent "Hearing Committee" comprising of odd Number members. The procuring agency may also invite a representative from PPRA or a duly recognized private group in a sector or discipline relevant to the procurement at hand as an observer for each hearing.

If no request is made, the procuring agency shall make a determination of the case based on the complaint, answer, documentary evidence submitted and facts verified. If the procuring agency is convinced that the contractor/bidder is at fault, it shall issue a resolution recommending for its blacklisting with suspension of the bidder from participating in any bidding process of the agency and the forfeiture of his bid security.

### **4.1.4 Decision**

The Head of the Procuring Entity shall, within fifteen (15) days from receipt of the resolution and the records of proceedings, determine whether reasonable cause exists for the suspension of the contractor and the forfeiture of the latter's bid security. If the Head of the Procuring Entity determines that such reasonable cause exists, he shall issue a decision regarding its blacklisting and suspending the contractor from participating in any bidding process of the agency, and further declaring that his bid security is forfeited. Otherwise, he shall dismiss the case.

The decision shall clearly and distinctly state the facts, evidence and the law on which it is based, as well as the date of effectiveness of the penalty, if any.

In case a contractor commits more than one offense or a combination of offenses for the same project/contract in a particular agency, each violation shall be met the corresponding penalty.

### **4.1.5 Notice of Decision**

The procuring agency shall furnish the suspended contractor a copy of the decision immediately from its promulgation.

## 4.2 Contract Implementation Stage

### 4.2.1 Initiation of Action

Procuring Agency shall commence the proceedings upon prima facie (self-sufficient) determination that the contractor has committed any of the grounds for blacklisting during the contract implementation stage as mentioned in bidding document/Contract agreement or any event as mentioned in article-2.1 & article-2.3 of the policy of written complaint from Engineer/ consultant/ supervisory office.

The Project Director or Project implementation Agency shall provide substantial evidence for the person/entity/JV/Firm/Contract against whom the case for blacklisting has been initiated.

### 4.2.2 Notification

Upon verification of the existence of grounds for blacklisting, the procuring agency shall immediately notify the contractor concerned in writing, advising him that:

Within seven (7) calendar days from receipt of notification, the contractor shall submit its written answer with documentary evidence to the procuring agency with a manifestation for request of hearing to determine questions of fact, if he so desires. No time extension shall be allowed.

If the contractor fail to answer within the stipulated period, the procuring agency shall issue a resolution recommending the blacklisting with immediate suspension of the contractor from participating in any bidding process of the agency and the forfeiture of his bid security.

### 4.2.3 Hearings

If a hearing is requested by the contractor, the procuring agency shall immediately set the date and time for hearing. The hearing shall be non-litigious and shall be terminated within five (5) days. The procuring agency shall constitute an independent "Hearing Committee" comprising of odd Number members. The procuring agency may also invite a representative from PPRA or a duly recognized private group in a sector or discipline relevant to the procurement at hand as an observer for each hearing.

If no request is made, the procuring agency shall make a determination of the case based on the complaint, answer, documentary evidence submitted and facts verified. If the procuring agency is convinced that the contractor is at fault, it shall issue a resolution recommending for blacklisting with suspension of the contractor from participating in any bidding process of the agency and the forfeiture of his performance security.

#### **4.2.4 Decision**

The procuring agency shall, within fifteen (15) days from receipt of the resolution and the records of proceedings, determine whether reasonable cause exists for the suspension of the contractor and the forfeiture of the latter's performance security. If the Head of the Procuring Entity determines that such reasonable cause exists, he shall issue a decision for blacklisting the contractor with suspending the contractor from participating in any bidding process of the agency, and further declaring that his performance security is forfeited. Otherwise, he shall dismiss the case.

The decision shall clearly and distinctly state the facts, evidence and the law on which it is based, as well as the date of effectivity of the penalty, if any.

In case a contractor commits more than one offense or a combination of offenses for the same project/contract in a particular agency, each violation shall be met the corresponding penalty

#### **4.2.5 Notice of Decision**

The procuring agency shall furnish the blacklisted contractor a copy of the decision immediately from its promulgation.

## CHAPTER NO. 5

### REVIEW AGAINST DECISION OF THE PROCURING AGENCY

#### 5.1 Filing an Appeal for Review against decision

The Contractor shall have the right to lodge request to review the blacklisting decision, if the same is convinced that some concrete evidence proves the case otherwise in favor of the Contractor. For this purpose, the same will file an appeal within five (5) days from receipt of the notice of decision.

#### 5.2 Constituting Decision Review Committee

The procuring agency shall constitute an independent "Decision Review Committee" comprising of three members and external observer(s) preferably PPRA representative.

#### 5.3 Timeline for Deciding the Appeal

Committee shall resolve with finality the review application within ten (10) days from the filing thereof and furnish blacklisted/suspended contractor/bidder a copy of the resolution immediately from its promulgation.

#### 5.4 Finalization of the Decision

The decision of the committee shall become final and executor after the lapse of fifteen days from the receipt of the notice of decision or decision of review application. If an appeal is filed, the affirmed, modified or reversed decision shall become final and executory upon receipt thereof by the department and person/entity concerned. Upon finality of the decision suspending the contractor, the procuring agency shall issue a Blacklisting Order disqualifying the erring contractor from participating in the bidding of all projects.

## CHAPTER NO. 6

### APPEAL

#### 6.1 Filing an Appeal with the Authority

The Contracting Firm shall have the right to file an appeal with the Authority within ten days from the date of receipt of the decision for either or both of the following causes, provided that only a single application shall be filed with the Authority:

- a. The decision is not in conformity with the evidence and/or facts presented, hence does not construe grounds for Blacklisting laid down under Rule 19 of the PPRA Rules – 2004; and
- b. Newly discovered evidence or facts which could not be discovered and produced at the investigation and which when presented would probably alter the result of the investigation.

# CHAPTER NO. 7

## PERIOD OF DEBARMENT

### 7.1 Period of Debarment for Blacklisted Firms

The Blacklisting shall be for a reasonable specified period of time and as a general rule of prudence, the period may not exceed three years. The following time periods shall be considered for debarment on account of blacklisting;

Causes of Blacklisting	Time for Debarment
Corrupt & fraudulent & collusive practices, criminal breach of trust.	03 years
Submission of fake documents including financial instruments like securities & guarantees, submission of false Financial statement / Audit reports etc.	03 years and forfeiture of securities
Making false statement and allegation to gain undue advantage	03 years and forfeiture of securities
Commission of embezzlement, theft, cheating, forgery, bribery, falsification or destruction of records, receiving stolen property, false use of trademark, securing fraudulent registration, giving false evidence, furnishing false information.	03 years and forfeiture of securities
Breach of confidentiality of evaluation process as mentioned in Appendix 1 hereto	06 month to 02 years as mentioned in Appendix-1 and forfeiture of securities
Extraordinary delay in signing or refusal to accept a procurement contract without cogent reasons, when the bid has been accepted by IESCO	06 month to 02 years as determined by the committee and forfeiture of securities
Non-satisfactory performance as mentioned in Appendix-2	2 years and forfeiture of securities
The contractor was blacklisted by the government or the donor agency and subsequently adopted by IESCO	3 years or the time period for which the concerned agency debarred the contractor, whichever is higher

In case the person/ contractor / firm/ consortium appeared in Consolidated Blacklisting Report shall also be considered debarred in participation of bidding process.

Note: **All the penalties given herein above will be in addition to the consequences already agreed upon by the parties in the contract or any other documents.**

## CHAPTER NO. 8

### APPRAISAL TO PROCUREMENT COMMITTEE/BOARD OF DIRECTORS

#### 8.1 Appraisal of Blacklisted Firms to Procurement Committee/ Board of Directors (BoD)

The Procuring Agency shall apprise the Procurement Committee/Board of Directors (BoD) before communicating its Blacklisting decision to the Authority, if a Firm/Company/Bidder/JV/Manufacturer/Subcontractor/Consultant etc. is declared blacklisted by the IESCO.



## CHAPTER NO. 9

### COMMUNICATION OF NOTIFICATION TO AUTHORITY

#### 9.1 METHODOLOGY FOR COMMUNICATION OF NOTIFICATION TO THE PPRA/NTDC/WAPDA/DISCOS

**9.1.1** Unless otherwise provided in these policies, the blacklisting agency concerned shall submit to the PPRA /NTDC/WAPDA /DISCOs, within seven (7) calendar days after the issuance of the blacklisting order/delisting orders made by the agency, the following documents:

- a. Blacklisting Order duly signed by the Head of procuring agency containing, among others, Department/Office Order or Board Resolution number, name and address of the blacklisted person/entity, license number, if applicable, project/contract and location/amount, specific ground(s)/offense(s) committed as provided in article-9, sanction imposed and its date of start and completion, date of issuance of the order to blacklist, and other conditions which can extend duration of sanctions in article-9.
- b. Delisting Order duly signed by the blacklisting agency containing, among others, Department/Office Order or Board Resolution number, name and address of the blacklisted person/entity, name of project/contract and location, specific sanction being lifted and the number of previously issued blacklisting Department/Office Orders or Board Resolutions, effectively date of delisting, and date of delisting approval.

**9.1.2** The PPRA shall prepare the Consolidated Blacklisting Report every quarter, based on the submitted Blacklisting Orders and disseminate the same to procuring agencies. The report shall be further posted in the PPRA website and shall indicate the number of times a person/entity has been blacklisted, the type of offense/violation committed, the penalty imposed, and the blacklisting agency concerned. The PPRA shall delist from such report those whose sanctions are lifted automatically after serving the given penalty as provided for in article-9 hereof and those whose sanctions are lifted through the issuance of Delisting Orders.

**9.1.3** In the case of procurement of infrastructure projects, a blacklisting agency should decide to refer the case of its blacklisted person/entity to Pakistan Engineering Council (PEC)/SECP for license suspension/revocation, it shall submit

to PEC/SECP a copy of the decision accompanied with supporting documents.

- 9.1.4** All existing blacklisting reports of the Government or any of its procuring agencies, as well as the list of constructors/Consultant/consulting firms whose licenses are suspended or revoked by the PEC as of the date of effectiveness, are hereby adopted and made part of the PPRA Consolidated Blacklisting Report upon the issuance of these orders.

## **9.2 EFFECTIVENESS**

These guidelines / mechanism or any amendments thereof shall take effect immediately after its approval from Board of Directors of IESCO.

## **9.3 AMENDMENTS**

In the implementation of this policy, the IESCO/PPRA may introduce modifications thereto through the amendment of its specific provisions as the need arises. Any amendment to this policy shall be applicable to government projects advertised for bid after the effectiveness of the said amendment.

## **9.4 DELISTING**

A blacklisted person/entity shall automatically be delisted after the period for the penalty shall have elapsed, unless the blacklisting agency requests the PPRA/NTDC/DISCOs/WAPDA to maintain the blacklisted person/entity in the PPRA/PPRA/NTDC/DISCOs/WAPDA Consolidated Blacklisting Report due to justifiable reasons. In the latter case, the blacklisted person/entity shall be delisted only upon the blacklisting agency's issuance of a Delisting Order.

## **APPENDIX-1**

### **PROCESS TO DEAL WITH COMPLAINTS**

It has been frequently observed that after opening of tenders, the bidders start to influence the evaluation process. Such misleading attempts results in delay in finalizing of award of contract and cause financial loss to the National exchequer and stain its sanctity. The evaluation process is confidential till publication of award of contract process.

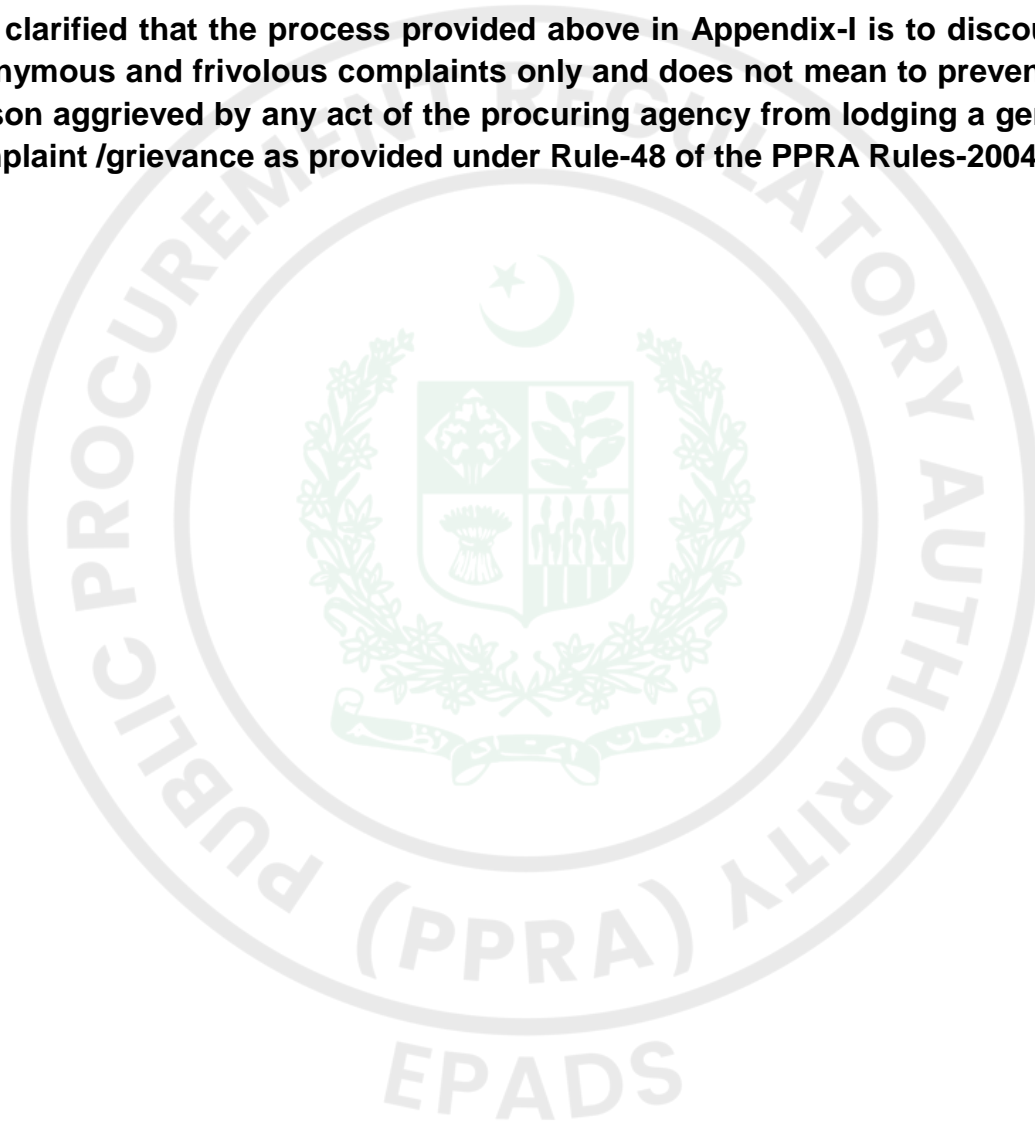
Provision of guidelines of international donor agencies and PPRA provides sufficient opportunity to bidders for redressal of their grievances. Hence, the attempts made by the bidders during evaluation process or thereafter to influence the contract award decisions fall under the definition of corrupt and fraudulent practices. Therefore, during bidding stage, the following mechanism shall be adopted in case of receipt of any complaint from the bidder.

- i. Anonymous complaints shall not be entertained.
- ii. The Procuring Agency reserves the right to call for an affidavit from the complainant verifying the truthfulness and correctness of the contents of the complaint.
- iii. The notice of displeasure and explanation will be immediately sent to those firms who lodge the complaint during the evaluation process.
- iv. If the firm itself or through its agent or any third party does not refrain from making complaints in the same tender, the official warning will be sent and their case will be sent to IESCO's Rights Protection Committee which may analyses the situation and suggest action including the rejection of the bid of the complainant, However, Project Authority with prior approval of CEO IESCO. May reject the bid even in first instance depending upon nature of the case or provision of the Bidding Documents.
- v. If the same bidder itself or through its agent or any third party lodges complaint in another tender floating in parallel before decision of Committee, its bid will straight forwardly be rejected by the project authority. It may also be debarred to participate in the next tender for six months under intimation to the Committee and CEO IESCO.
- vi. If the same bidder itself or through its agent or any third party lodges complaint third time in the same or any other tender within a period of one years, its bid will be rejected and bid security will be forfeited by the project authority. It may also be debarred to participate in the next tender for one year under intimation to the committee and CEO IESCO.
- vii. In order to monitor the record of the bidders, a data base will be maintained at IESCO's website and the offices of the project authorities regarding firms / supplier / contractors/consultant who consistently lodge complaints during the evaluation process by making clandestine access to confidential record and hamper the award of contract process.

- viii. In order to monitor the record of the persons, a data base will be maintained at IESCO's website and offices of the project authorities regarding such persons who consistently lodge frivolous complaints during the evaluation process by making clandestine access to confidential record and hamper the award of contract process.

**NOTE:**

It is clarified that the process provided above in Appendix-I is to discourage anonymous and frivolous complaints only and does not mean to prevent any person aggrieved by any act of the procuring agency from lodging a genuine complaint /grievance as provided under Rule-48 of the PPRA Rules-2004.



## APPENDIX-2

### GUIDELINES FOR EVALUATION OF PERFORMANCE OF CONTRACTORS

- i. After signing of the contract, the Project authority (or the Consultant / Engineer) must monitor and evaluate the Contractor's performance, that is, whether the Contractor is fulfilling his obligations based on the terms of the contract and plans that were developed and agreed upon with the Project authority at the time of signing of contract or during kick-off meetings. In case of breach of contract or consistent non-performance security or debarment / blacklisting.
- ii. Though the contractor's performance evaluation is an on-going process, which takes place throughout the duration of the contract and also during the Defect Liability / Warranty Period, hence a Contractors Performance Evaluation Report shall be drafted by the project authority once all of the contractual obligations of the latter have been completed so that the project authority have gained a more complete picture that will help it in formulating a more objective judgment.
- iii. The performance evaluation report may be prepared for all contracts of more than Rs. 50 million. When based on the Evaluation Report, the performance of the contractor is non-satisfactory in. EPC contract(s) (or the contractor receives 02 No Notices of Default within same contract or against consecutive contract (s) within a period of 2 years) and 03 No supply contracts awarded within a period of 02 years, the procuring agency may initiate the case of blacklisting of the contractors in accordance with the terms of this mechanism.
- iv. In case of any extra-ordinary delay in performance of a single contract of vital and critical importance, the procuring agency shall have the right to terminate the contract, recover the loss and debar the bidder/firm/JV/contractor/consultant from participation in future tenders. The procuring agency shall be the sole judge to determine the importance of the project.
- v. The above said assessment will be in addition to the provisions already agreed by the parties in the contract or any other documents.



No.

/IESCO/ISB

Dated:

**Form for Hearing**

Through Registered AD, Courier Service or email or Fax

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

1. A committee for investigation of blacklisting Proceedings in furtherance of Rule 19 PPRA, 2004 has been constituted to investigate and decide upon the allegations at Para-2/below. You are required to appear in person or defend in writing with evidence on \_\_\_\_\_ at IESCO Head Office as to why you should not be blacklisted for:
  
2. 

\*\*\*\*\* Add charge \*\*\*\*\*
  
3. You are being given an opportunity to be heard and are required to appear in person or defend in writing with evidence on \_\_\_\_\_ at IESCO Head Office. In case of you failure to attend or pay heed the Committee shall proceed ex-parte.
  
4. [To be added in the third notice]. As of final notice you are directed to furnish a satisfactory explanation in writing with supporting evidence within three days of receipt of this notice, to show cause as to why the blacklisting penalty may not be imposed. Failing to pay heed to this last notice shall stand a presumption against you that you have no explanation to offer and the matter shall be proceeded ex-part.

**General Manager (Technical)  
IESCO Head Office,  
Street No. 40, Sector G-7/4.  
Islamabad - 46000**

## Power of Attorney (For signatory of Application)

[To be printed on a PKR 100 stamp paper]

**KNOW ALL MEN BY THESE PRESENTS THAT** by this Power of Attorney ("**Power of Attorney**"), \_\_\_\_\_ [ *Insert name firm/Company/JV*] having its registered office at [-----], does hereby nominate, appoint and authorize Mr. \_\_\_\_\_, having CNIC No. \_\_\_\_\_ hereinafter referred to as the "**Signatory of Application**", to do in our name and on our behalf the following:

1. Sign and submit to \_\_\_\_\_ or its authorized nominee, the Prequalification Application / Bid for "-----", in response to the tender No. ----- Advertisement dated [---] issued by The Procuring Agency and all other documents and instruments required to submit the Bidding Documents.
2. execute all such contracts, deeds, documents and instruments as may be considered necessary and expedient in relation to the foregoing; and
3. do and carry out all other actions as may be required by the Procuring Agency in connection with the bidding process as a whole;
4. To immediately notify The Procuring Agency in writing of any impending or actual revocation as well as any change in the terms of this Power of Attorney.
5. To do in our name and on our behalf, all such acts, deeds and things necessary in connection with or incidental to our Bid in response to the above referred bidding document including signing and submission of all documents, instruments and deeds (including correcting any deficiencies or mistakes therein), attending any meetings organized by the Procuring Agency (including pre-bid conference meetings and bid opening meetings) and providing information/responses to the Procuring Agency in all matters in connection with our Bid.

We, [ *Insert name of Firm/Company* ], do hereby ratify and confirm whatsoever the Signatory of Application shall do by virtue of these presents and further agree that whatever the Signatory of Application shall do or cause to be done pursuant to this Power of Attorney shall be binding on us.

Furthermore, each provision of this Power of Attorney is severable and distinct from the others. The invalidity, illegality or unenforceability of any one or more provisions of this Power of Attorney at any time shall not in any way affect or impair the validity, legality and enforceability of the remaining provisions hereof.

IN WITNESS WHEREOF, we have executed this **POWER OF ATTORNEY** as of [Date].

**FOR: [INSERT NAME OF APPLICANT FIRM/ COMPANY]**

Signature: \_\_\_\_\_ Name: \_\_\_\_\_

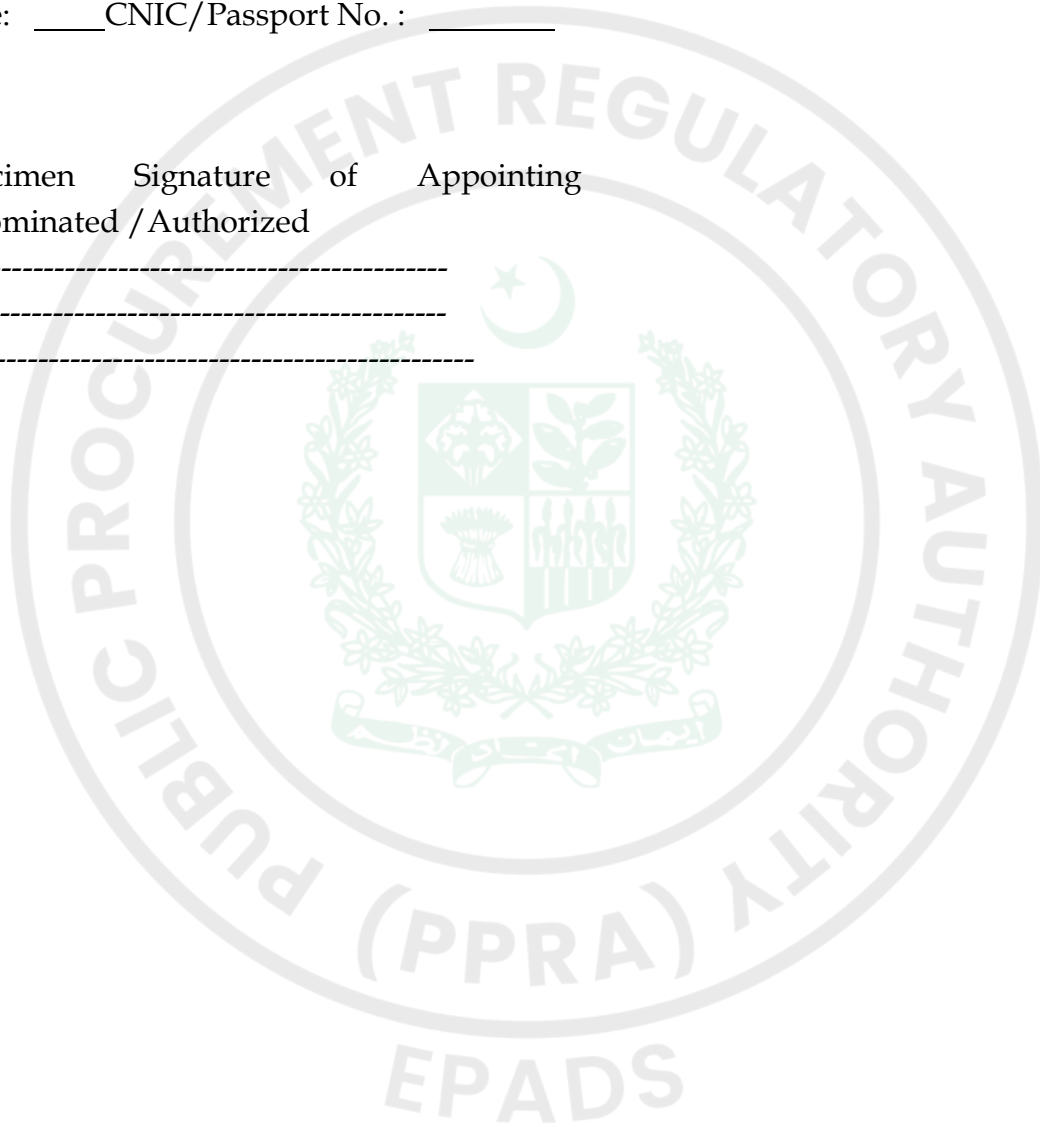
Title: \_\_\_\_\_ CNIC/Passport No. : \_\_\_\_\_

Specimen Signature of Appointing  
/Nominated / Authorized

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# POWER PLANNING AND MONITORING COMPANY



## **SPECIFICATION (PPMC-DS-01:2026)**

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

EPADS

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## Document Change Record

### NGC document change record

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


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

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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. Following detailed consultations and incorporation of stakeholder inputs, the specification was subsequently approved in the 3rd SRC meeting held on 22.04.2026 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.

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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](mailto: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.

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## 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.

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## 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

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### 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.

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**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.

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**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).**

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- 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 (LiSOCl<sub>2</sub>) 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.

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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:

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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 ( $\pm$ %) at Current (% of Rated)				Phase Displacement ( $\pm$ 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.

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- 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<sub>n</sub>.

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

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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)

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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.

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- 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.

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

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- 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.

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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:

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Examination	Defects
<b>Material</b>	Enclosure components not made from specified material.
<b>Finish</b>	Nuts, bolts and washers not galvanized. Busbars not tin-plated. There shall be no dents/rust on the enclosure.
<b>Construction &amp; Dimensions</b>	Enclosure design not in accordance with the drawings. Component missing, improper fittings or not fulfilling Dimensional requirements.
<b>Markings</b>	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 $\pm 2$ °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

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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).

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### **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°C)
  - i. Low Oil Level (binary values)
  - j. Sensor fault (binary values)

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- 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.

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- 14.6 Following tests shall be performed during prototype testing on complete enclosure: -
- Visual Examination & Verification of dimensions (as per specified drawings)
  - Verification of Components (as per specified drawings)
  - Power Frequency Test of 2.5 kV shall be applied between all four busbars and between ground for one (01) minute.
  - Enclosure Tests as per Clause 11.22.
  - 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 $\pm 2$ °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

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			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,

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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. ( $\geq 20$  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.

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### 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 ( $\geq 20 \mu\text{m}$ ) (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.

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## **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, Channels 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.

	<b>Asset Performance Management System</b>				
	<b>PPMC-DS-01:2026</b>				
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## 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 ( $\pm 2^{\circ}\text{C}$ ) (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

	<b>Asset Performance Management System</b>				
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## 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)			

	<b>Asset Performance Management System</b>				
	<b>PPMC-DS-01:2026</b>				
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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			


	<b>Asset Performance Management System</b>				
	<b>PPMC-DS-01:2026</b>				
	PPMC-DS-01	1	23-04-2026	23-04-2029	35 of 36
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#### 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			

	<b>Asset Performance Management System</b>				
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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

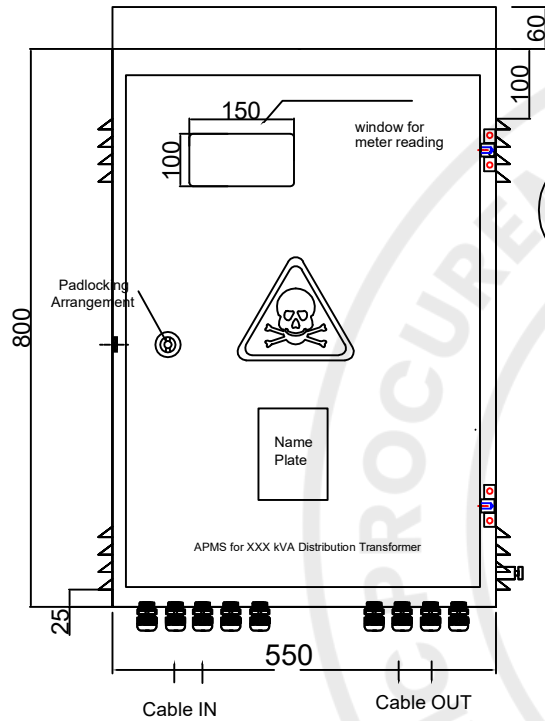
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			Revision Nos:	0/0
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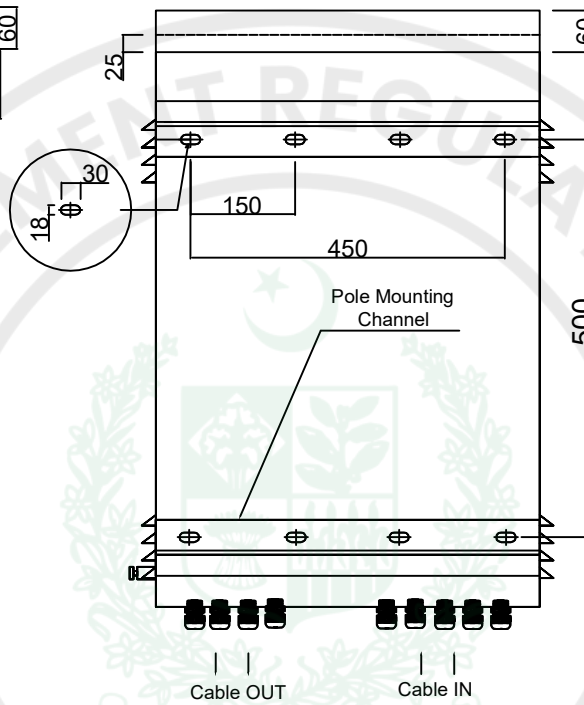


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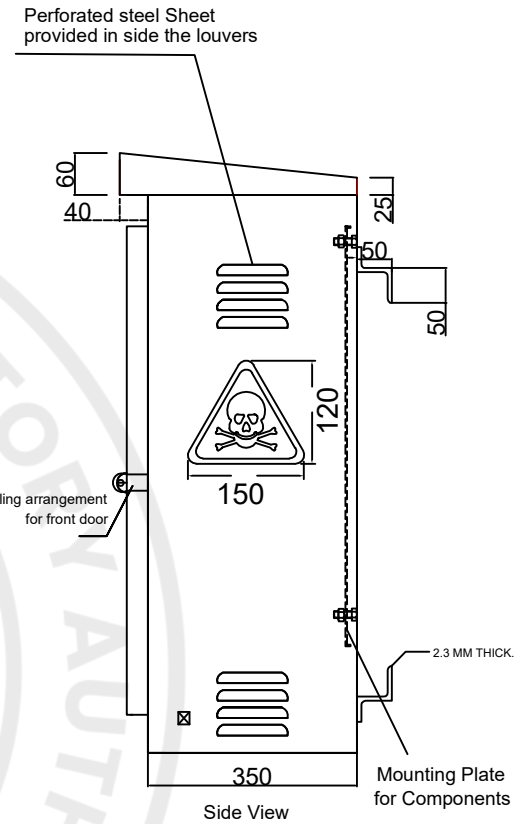
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Drawing Title:	LIST OF DRAWINGS
Reference :	PPMC-DS-01
Drawing No.	APMS/PPMC/D&S/ 00 OF 18



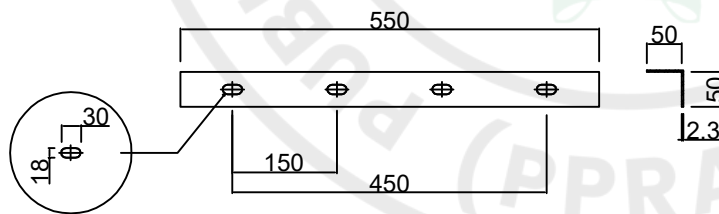
Front View



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 Requirements.

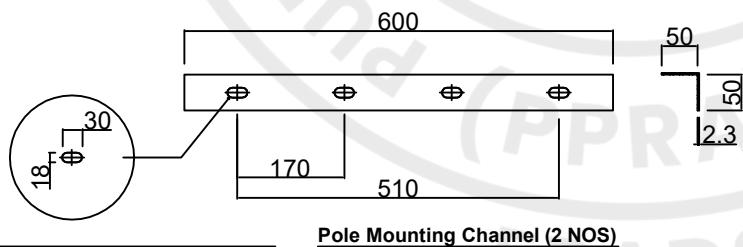
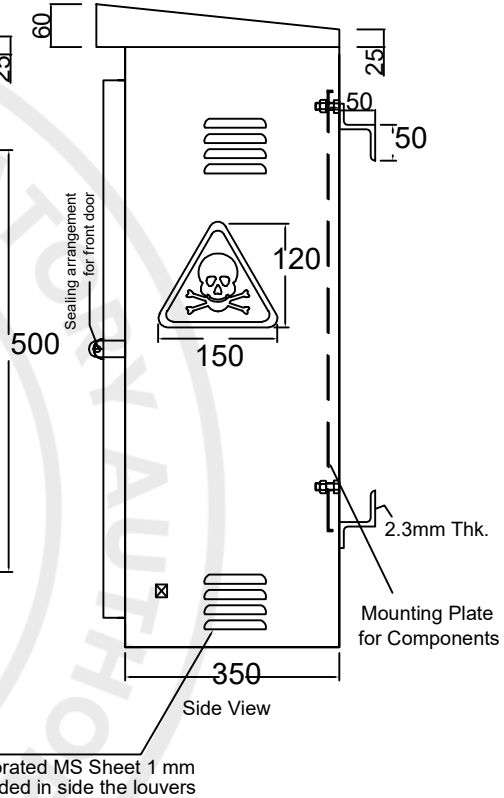
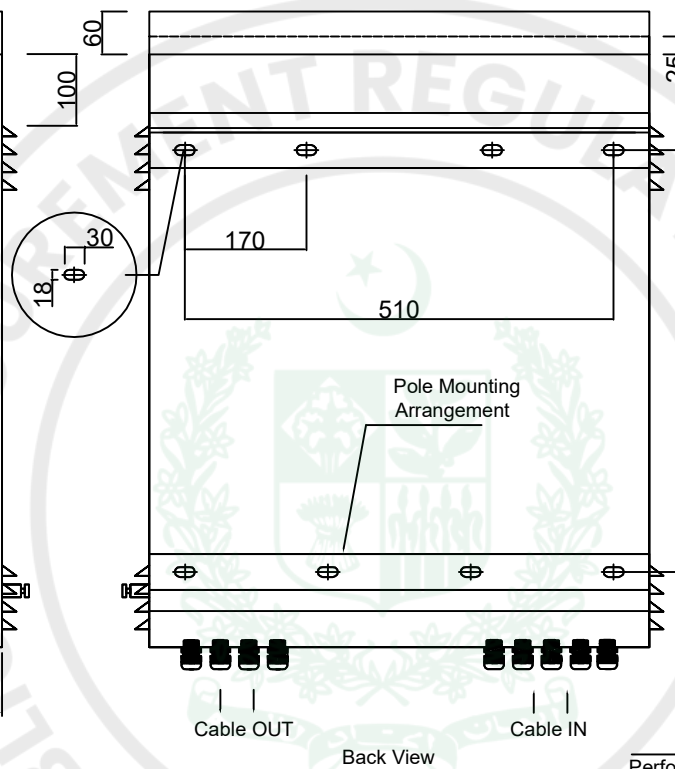
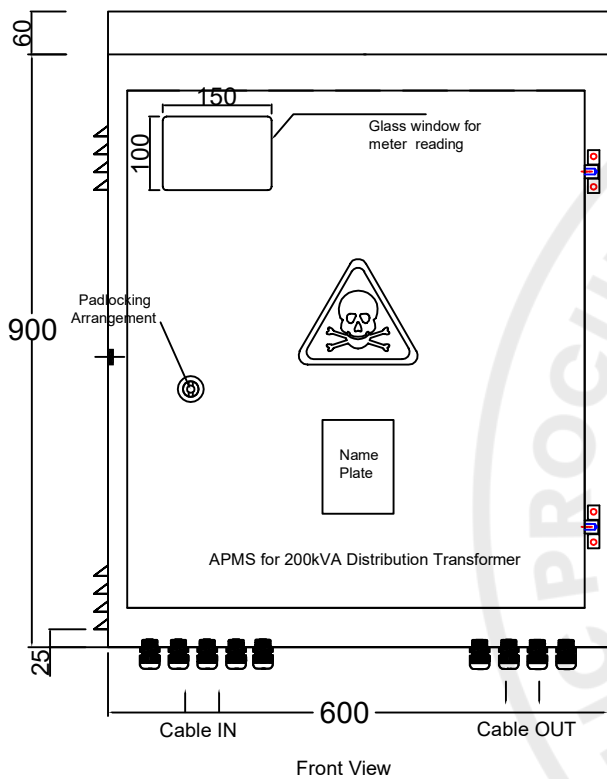
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			Date :	17/04/2026



**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



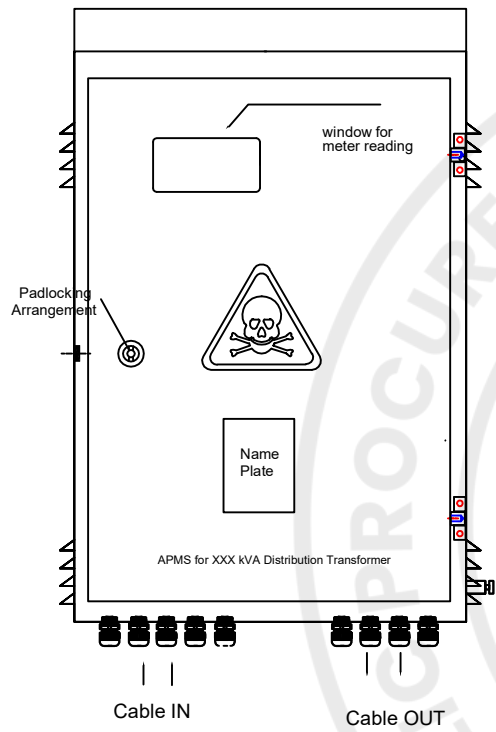
- Note:
- 1.Tolerance: as per Dwg.No APMS/PPMC/D&S/18
  - 2.All Dimension are in Millimeters.
  - 3.Enclosure Sheet Thickness=1.6mm (Min)
  - 4.Door Sheet Thickness =2.3mm (Min)
  - 5.Color: RAL-7032 (Powder Coating )
  - 6.Louvers May be Increased By Manufactures To Fullfill Temprature Rise Test Requirments.

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1	2	3	Date :	17/04/2026

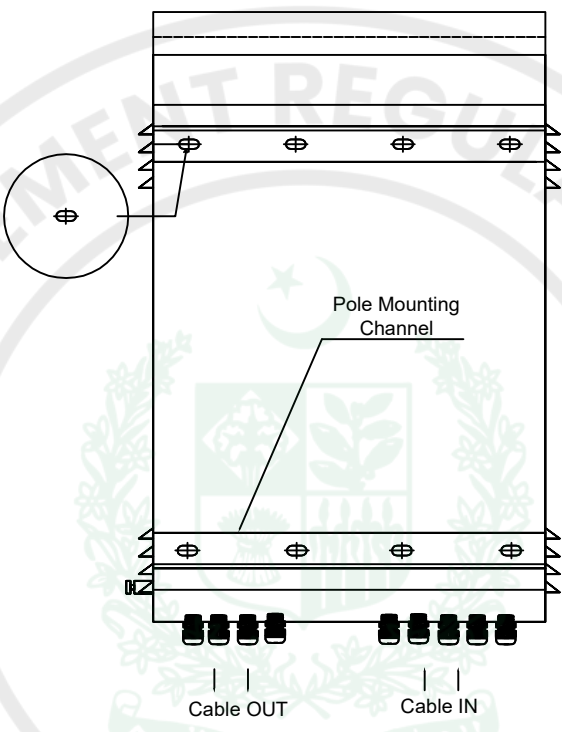


PPMC

Product :	Asset Performance Management System For 200/250 kVA Transformer
Drawing Title:	Enclosure Unit
Reference :	PPMC-DS-01
Drawing No.	APMS/PPMC/D&S/ 02 OF 18

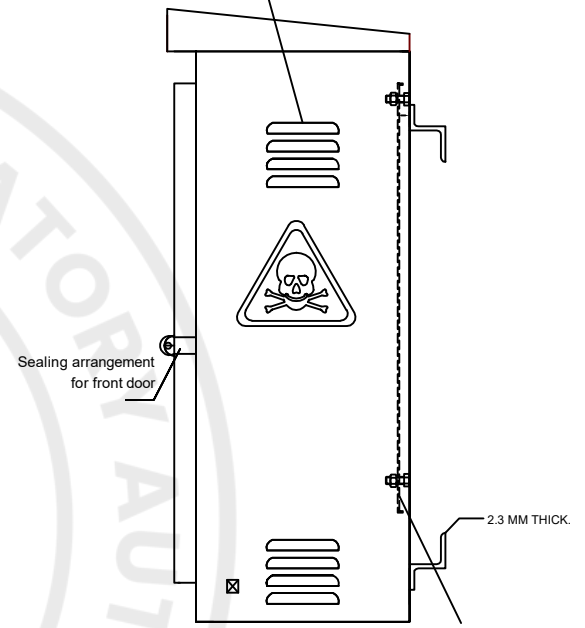


Front View

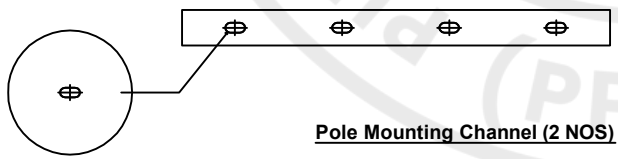


Back View

Perforated steel Sheet provided in side the louvers



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.

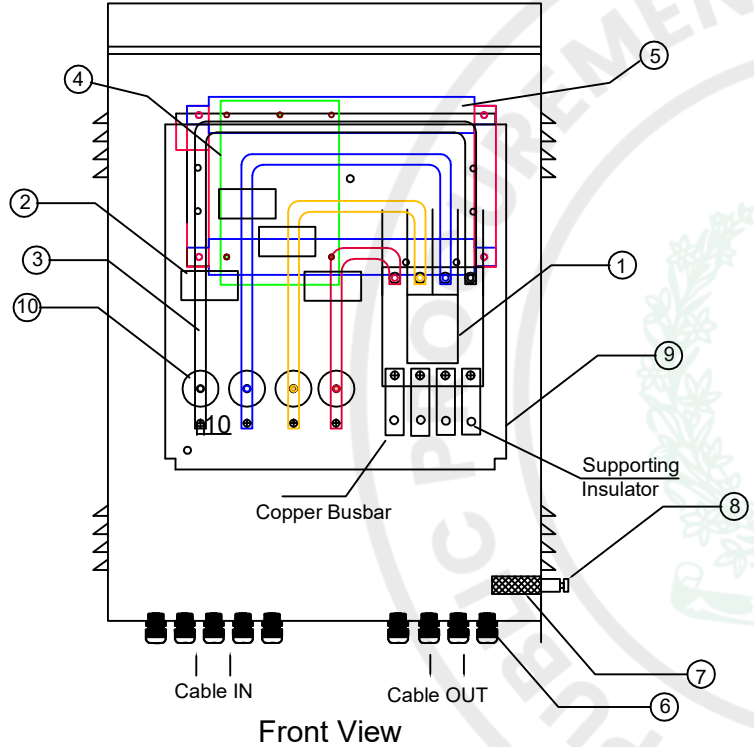
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			Revision Nos:	0/0
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**PPMC**

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



**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

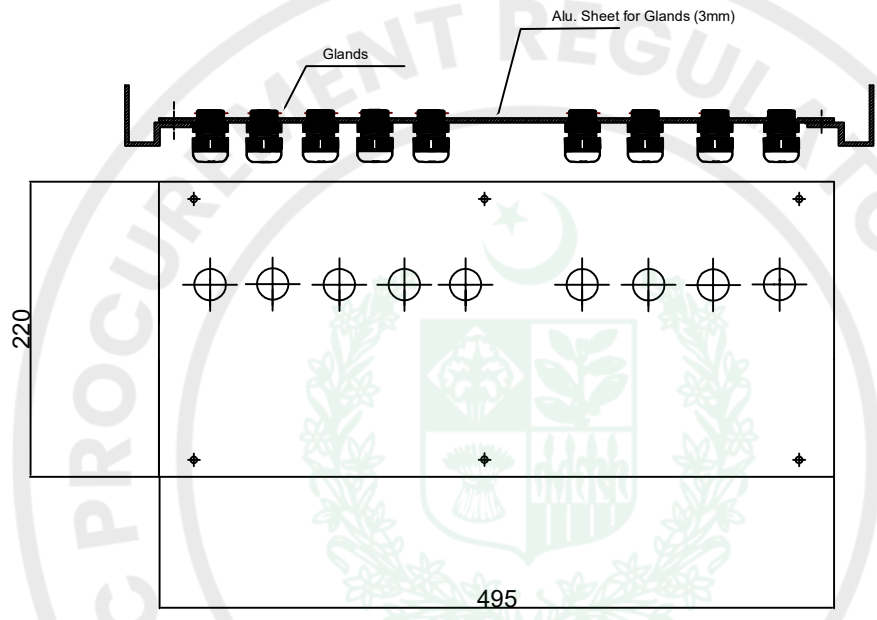
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			Date :	17/04/2026



**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



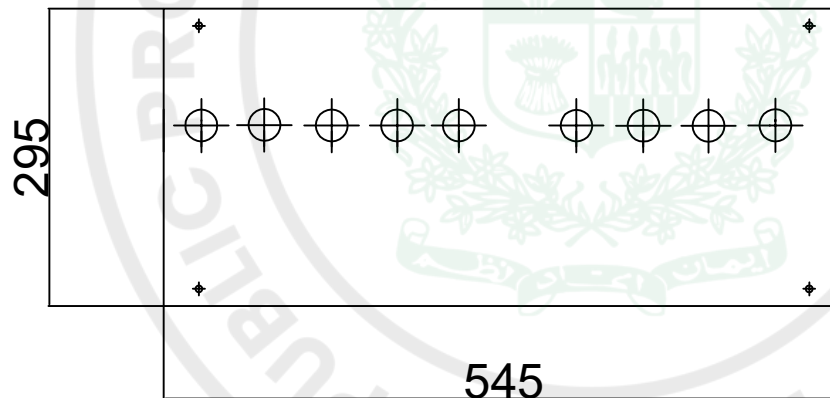
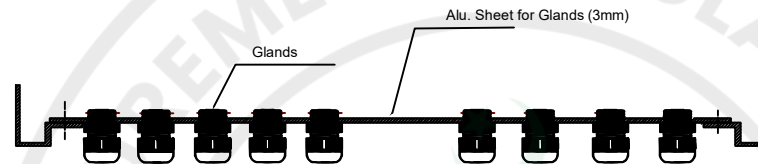
- Note:
- 1.Tolerance: as per Dwg.No APMS/PPMC/D&S/18
  - 2.All Dimension are in Millimeters.
  - 3.Gland Material = PVC
  4. Holes Positions Can Be Changed But Will Be Fixed Once Prototype is Approved.

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			Revision Nos: 0/0
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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.

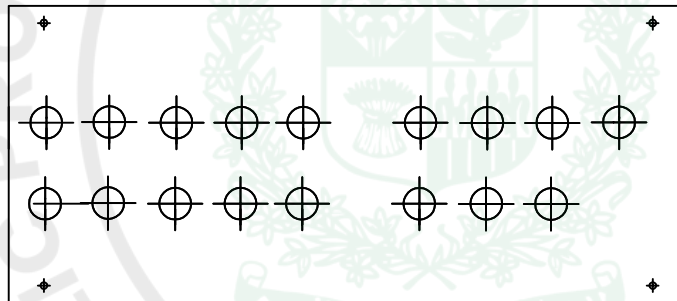
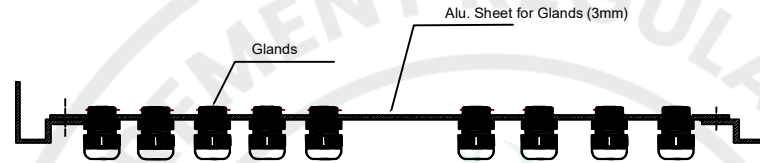
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			Date:	17/04/2026



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

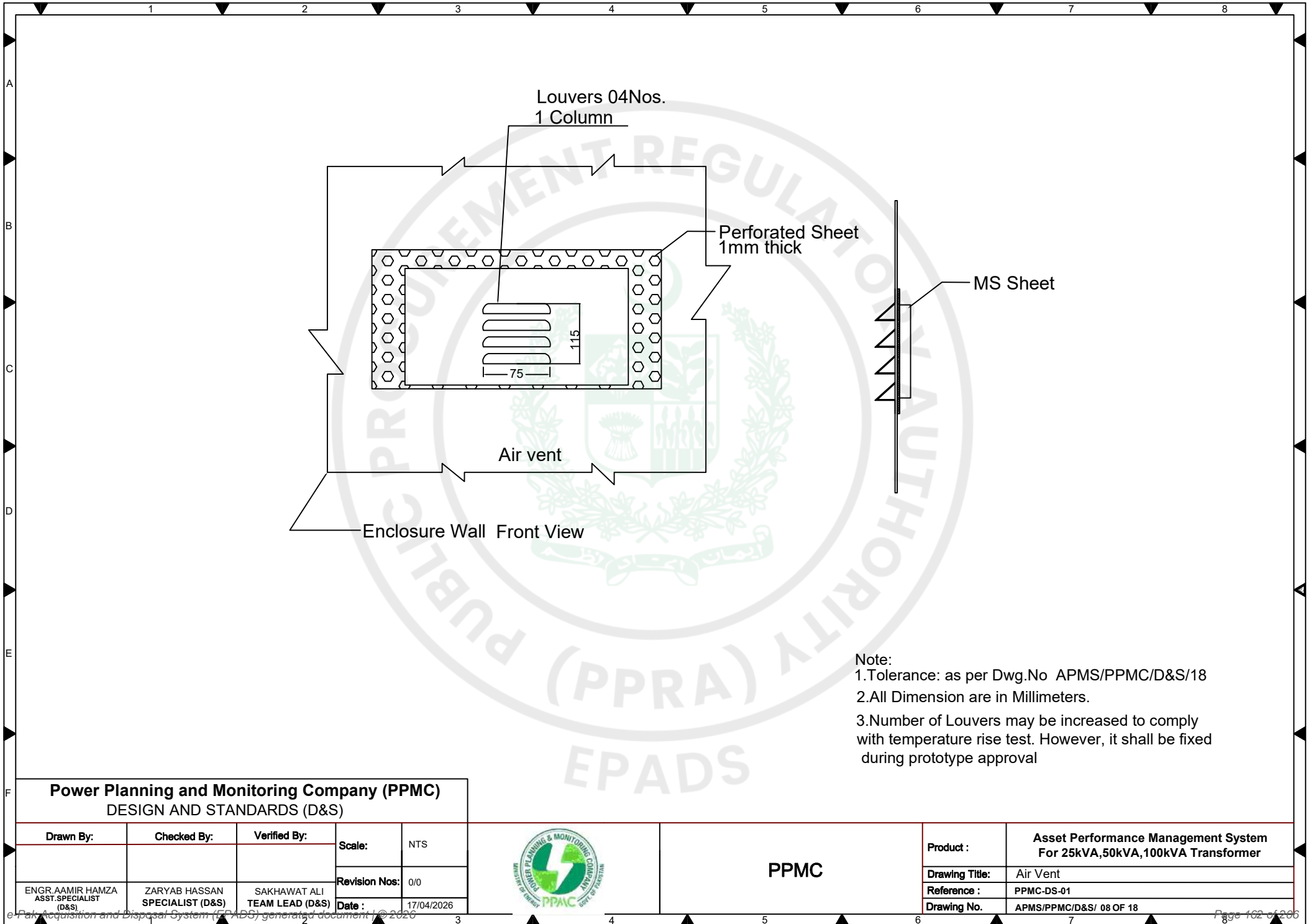
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			<b>Date :</b>	17/04/2026



**PPMC**

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

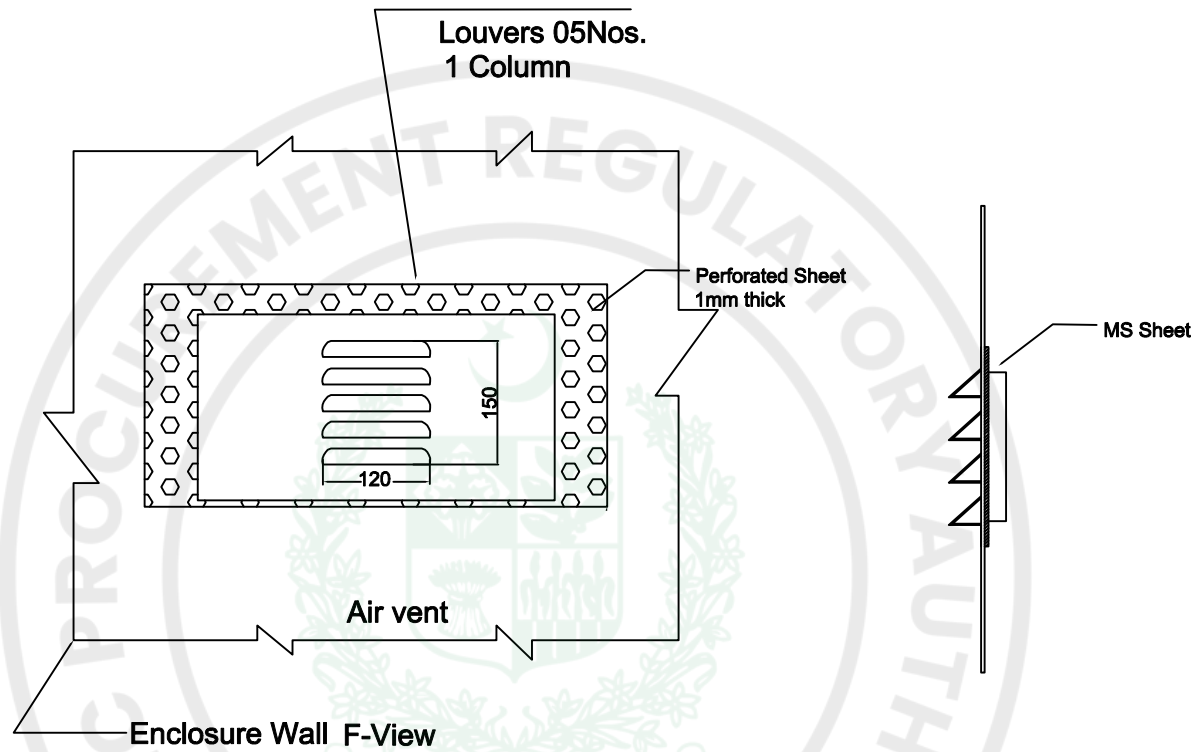
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			Revision Nos:	0/0
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**PPMC**

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

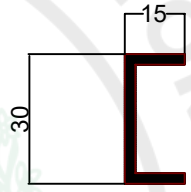
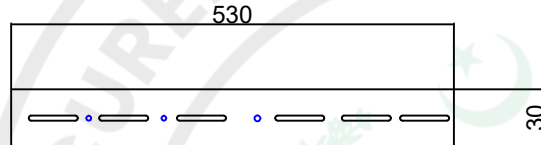
**Power Planning and Monitoring Company (PPMC)**  
 DESIGN AND STANDARDS (D&S)

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			<b>Revision Nos:</b>	0/0
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**PPMC**

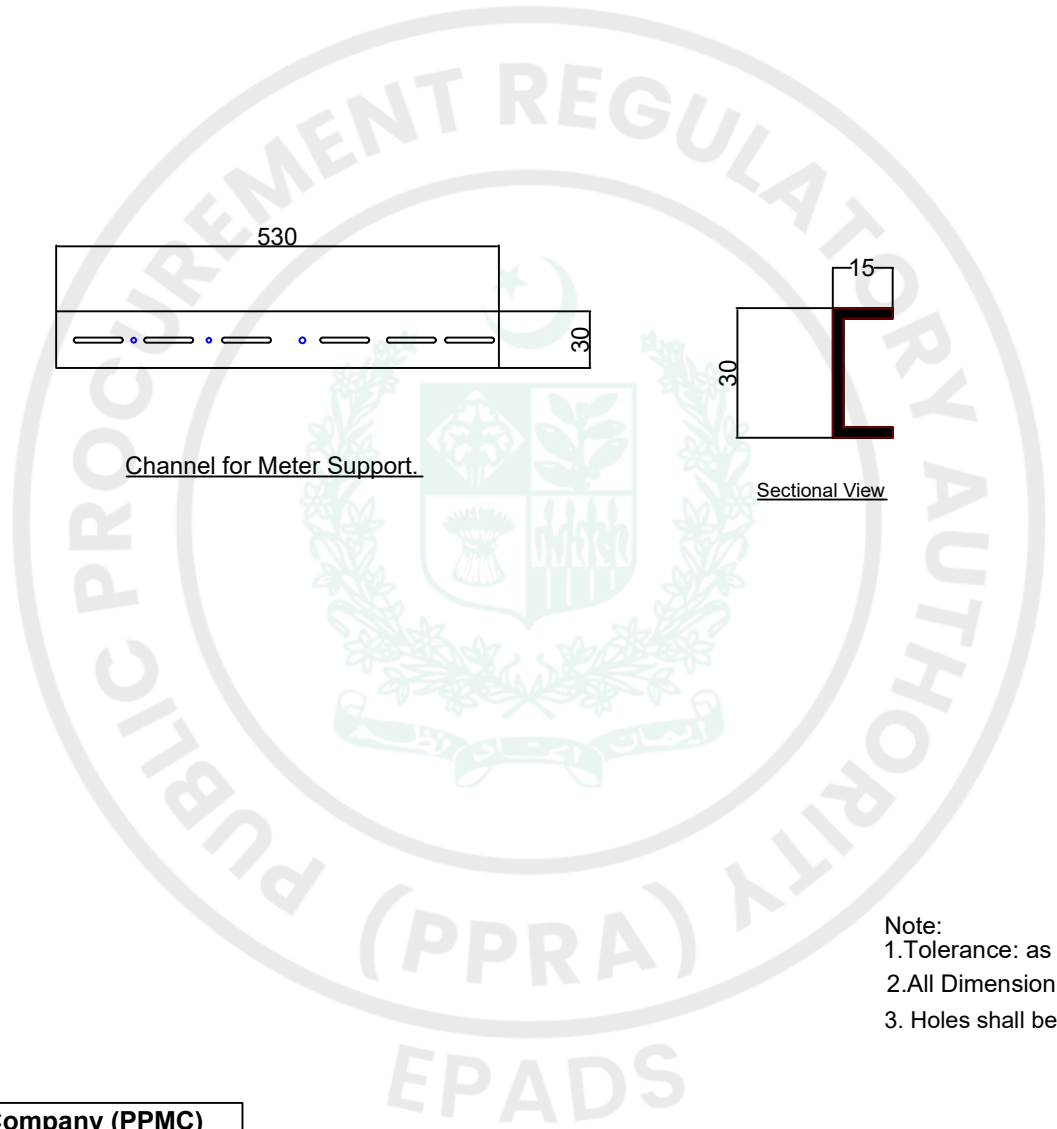
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<b>Drawing Title:</b>	Air Vent
<b>Reference :</b>	PPMC-DS-01
<b>Drawing No.</b>	APMS/PPMC/D&S/ 09 OF 18



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
			Revision Nos:	0/0
ENGR.AAMIR HAMZA ASST.SPECIALIST (D&S)	ZARYAB HASSAN SPECIALIST (D&S)	SAKHAWAT ALI TEAM LEAD (D&S)	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

115



**Asset Performance Management System  
For XXX kVA Transformer**

Ordering Code-

Sr No. <input type="text"/>	P.O No <input type="text"/>
Rated Voltage <input type="text" value="415/240 V"/>	P.O Date <input type="text"/>
Rated Current <input type="text"/>	Warranty Expiry Date <input type="text"/>
MCCB Rating <input type="text"/>	Manufactured For <input type="text"/>
CT. Ratio <input type="text"/>	Year of Manufacturing <input type="text"/>

MANUFACTURER NAME

**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

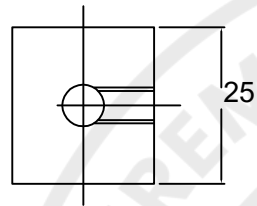
**Power Planning and Monitoring Company (PPMC)  
DESIGN AND STANDARDS (D&S)**

Drawn By:	Checked By:	Verified By:	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

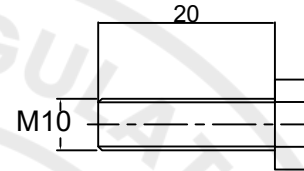


PPMC

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

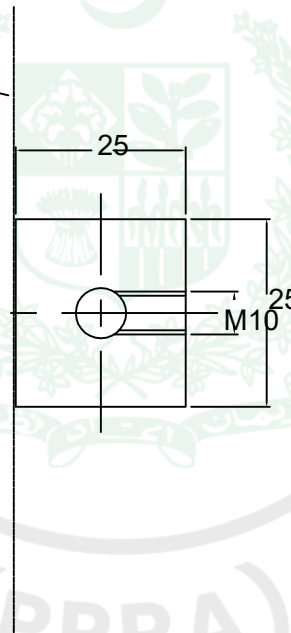


Material: MS Galvanized



Material: MS  
Finish: Galvanized

Welded with enclosure (Continuous layer)



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

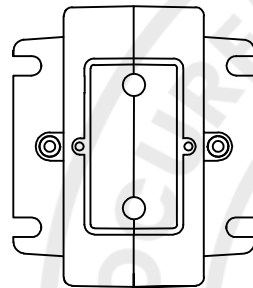
**Power Planning and Monitoring Company (PPMC)**  
DESIGN AND STANDARDS (D&S)

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

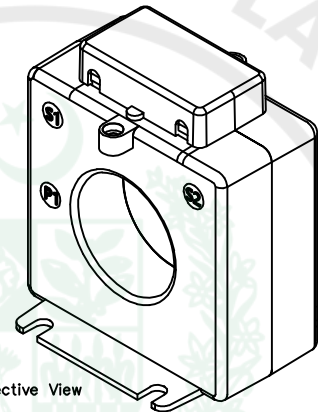


**PPMC**

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

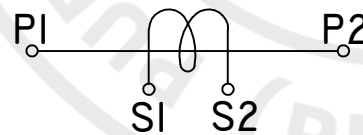


Top View



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

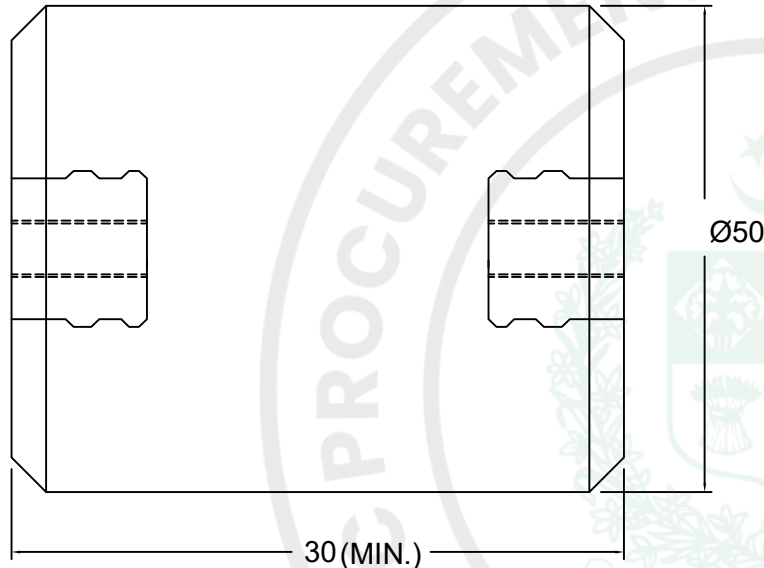
**Power Planning and Monitoring Company (PPMC)**  
DESIGN AND STANDARDS (D&S)

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



PPMC

Product :	Asset Performance Management System For 25kVA,50kVA,100kVA,200/250kVA,400/500kVA and 630kVA Transformer
Drawing Title:	Current Transformer
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)

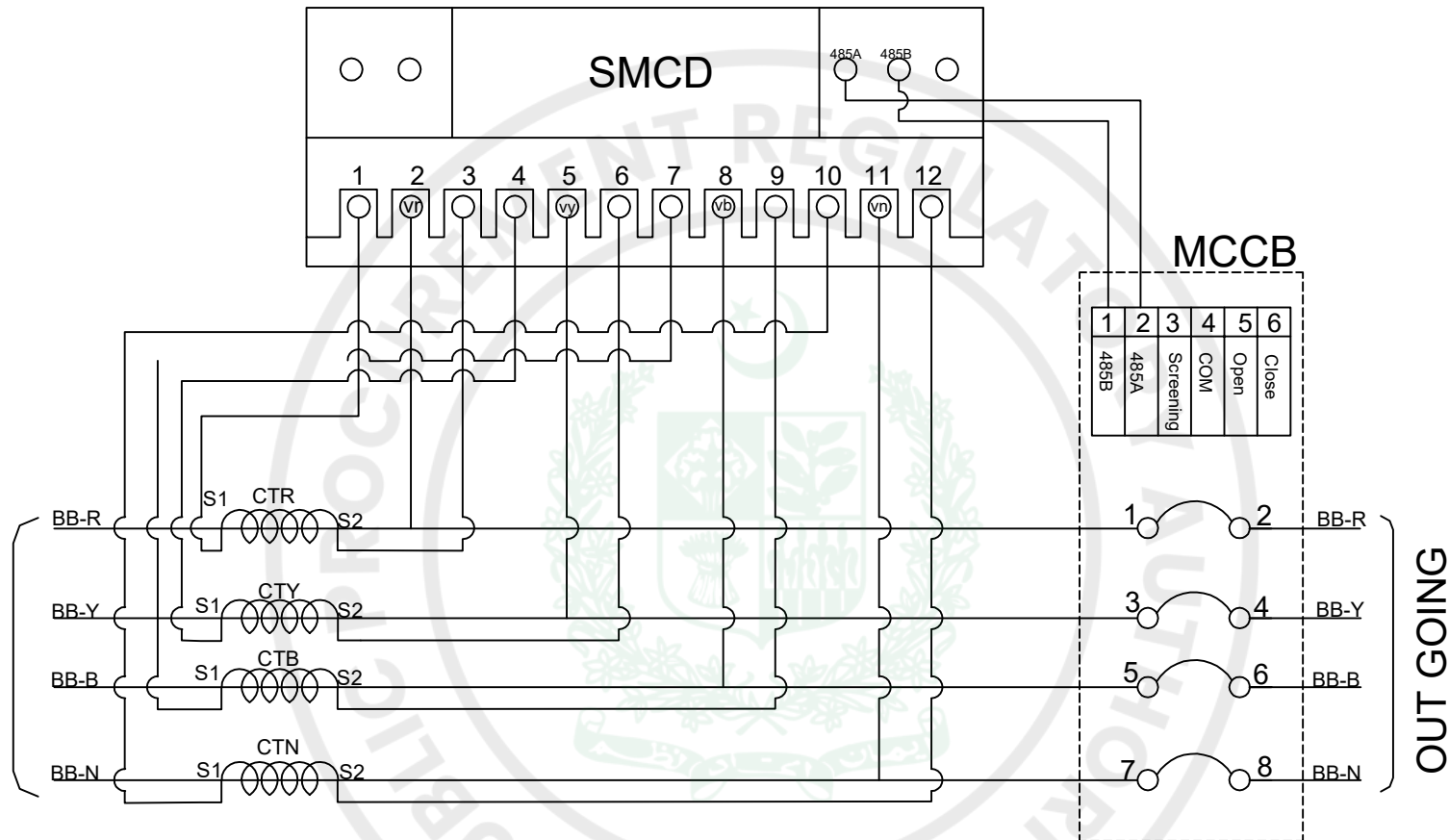
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<b>ENGR.AAMIR HAMZA</b> ASST.SPECIALIST (D&S)	<b>ZARYAB HASSAN</b> SPECIALIST (D&S)	<b>SAKHAWAT ALI</b> TEAM LEAD (D&S)	<b>Revision Nos:</b>	0/0
			<b>Date :</b>	17/04/2026



**PPMC**

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

INCOMING



MCCB

1	2	3	4	5	6
485B	485A	Screening	COM	Open	Close

OUT GOING

**Legends**

01	BB-R	Busbar For Red Phase	01	CTR	CT For Red Phase
02	BB-Y	Busbar For Yellow Phase	02	CTY	CT For Yellow Phase
03	BB-B	Busbar For Blue Phase	03	CTB	CT For Blue Phase
04	BB-N	Busbar For Neutral(Black)	04	CTN	CT For Neutral(Black)
05	MCCB	Molded Case Circuit Breaker	05	SMCD	Smart Metering and Controlling Device

Note:  
Terminals are shown for Visualization purpose Only

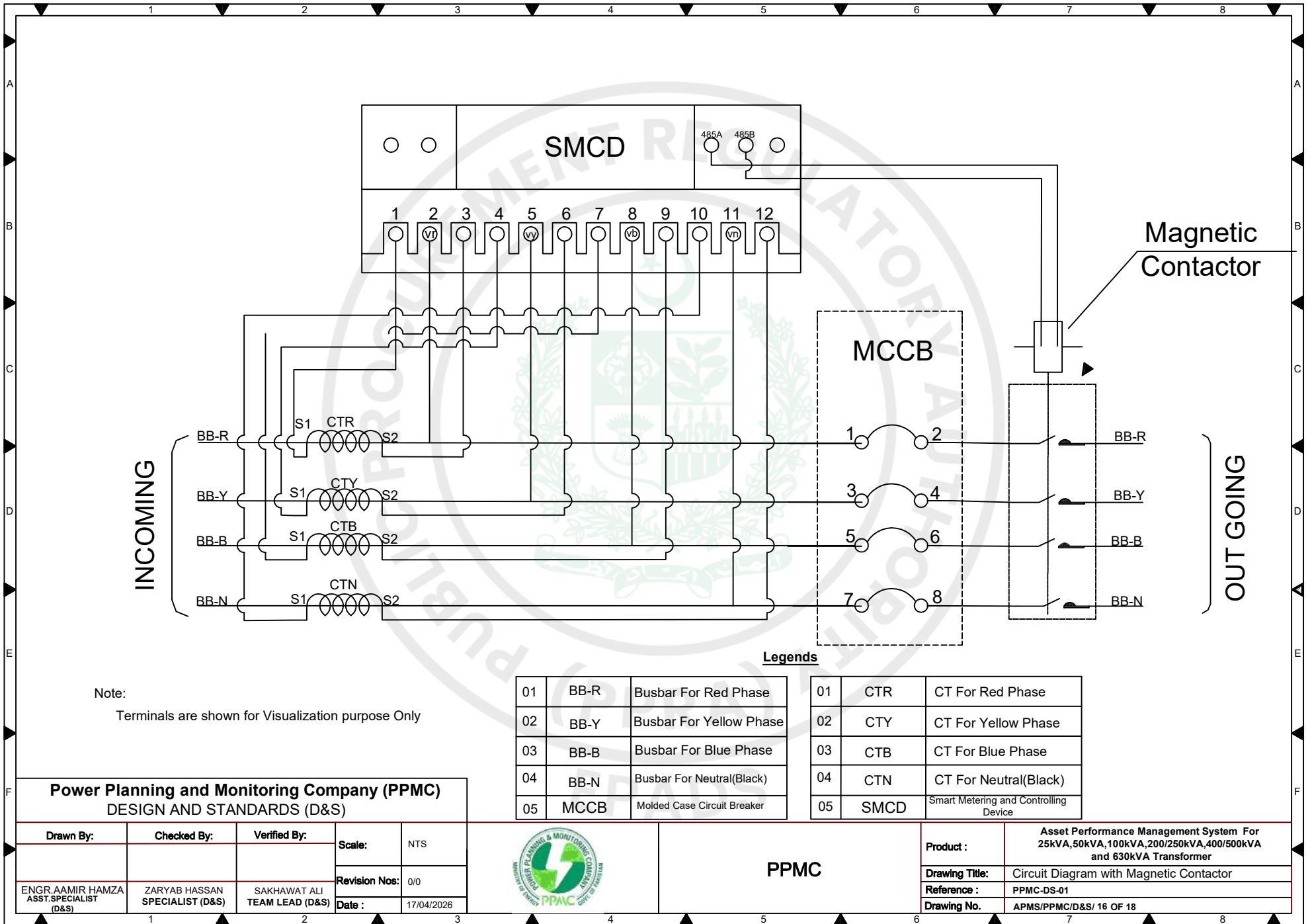
**Power Planning and Monitoring Company (PPMC)**  
DESIGN AND STANDARDS (D&S)

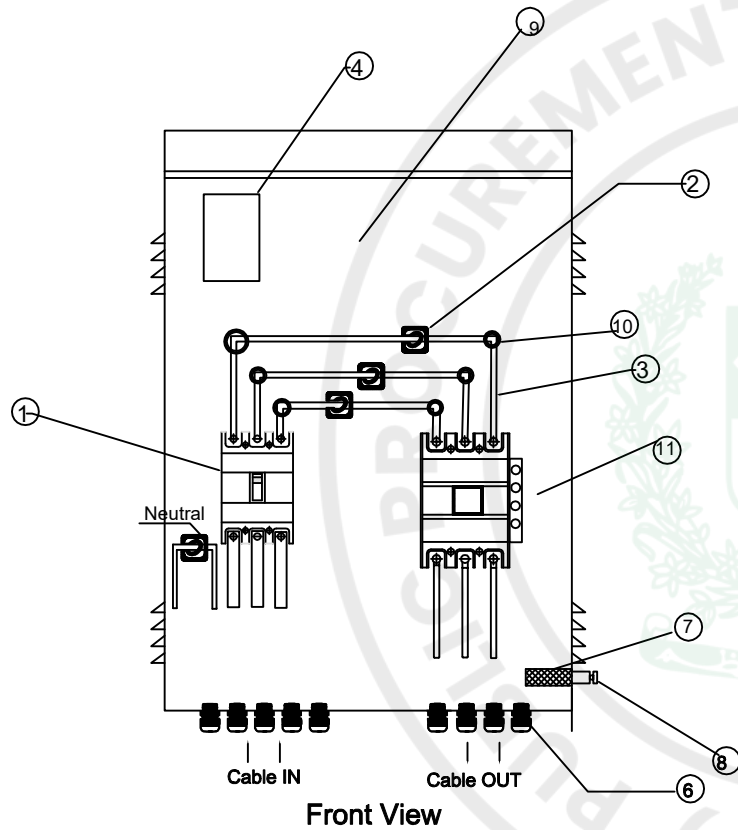
Drawn By:	Checked By:	Verified By:	Scale:	NTS
ENGR.AAMIR HAMZA ASST.SPECIALIST (D&S)	ZARYAB HASSAN SPECIALIST (D&S)	SAKHAWAT ALI TEAM LEAD (D&S)	Revision Nos:	0/0
			Date :	17/04/2026



PPMC

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





### 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- Magnetic 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 630kVA Transformer
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

1.0mm To 10mm  
 11mm To 55mm  
 56mm To 75mm  
 76mm & Above

### TOLERANCE

±10.0%  
 ±5.0%  
 ±3.0%  
 ±2.0%

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

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



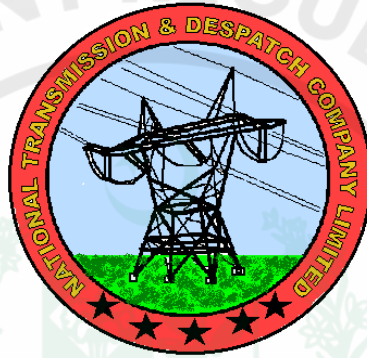
**PPMC**

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

As per GCC Clause F sub clause 3 the Defects Liability Period is: Three Hundred and Sixty Five (365) days after issuance of Completion certificates or energization of Transmission Line, whichever occur later. *Performance Guarantee will be released after expiration of defect liability period and satisfactory operational certificate from Concerned Project Director (AMI) IESCO.*



**WAPDA  
NATIONAL TRANSMISSION AND DESPATCH  
COMPANY  
SPECIFICATION P-63:2007**



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**ALUMINIUM STRANDED CONDUCTOR**

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**DESIGN DEPARTMENT**

## **CONTENTS**

0. Foreword
1. General
2. Scope
3. Definitions
4. Standards for aluminium conductor
5. Material
6. Dimensions and Characteristics
7. Test Methods
8. Tests by Manufacturer
9. Acceptance Tests
10. Acceptance and Rejection
11. Packing and Marking

### **PRINTING HISTORY**

First approved on 14<sup>th</sup> February, 1970.

Revised on 20<sup>th</sup> September, 1979 (Incorporating Amendment No. 1& 2)

Revised on 08<sup>th</sup> August, 2007.

## SPECIFICATION P-63:79

### ALUMINIUM STRANDED CONDUCTORS

#### 0 FOREWORD

- 0.1 This standard specification has been introduced by WAPDA and lays down specification for aluminium stranded conductors.
- 0.2 This specification is based on IEC recommendation 207 and is subject to revision as and when required.
- 0.3 This specification is intended for procurement of material and does not include provisions of contract.

#### 1 GENERAL

- 1.1 The 500 kV, 220kV and 132 kV buses shall have mechanical strength to withstand stresses arising from symmetrical short circuit currents as follows:
- For 500 kV and 132 kV buses= 40 kA
- For 220 kV buses = 63 kA
- 1.2 The continuous current rating for main buses shall be not less than 3150 A for 500 kV and 220 kV and 2000 A for 132 kV switchyard under the specified conditions. The continuous current ratings for the overhead conductors to be used for connections of transmission lines and transformers and the conductors for equipment inter-connections shall be not less than the continuous current ratings of the equipment i.e. 3150 A for 500 kV and 2000A for 220 kV and 132 kV switchyards under the specified conditions.
- 1.3 Three bundle all aluminium "Coreopsis" conductor shall be used for main busbars of 500 kV & 220 kV and two bundle all aluminium "Coreopsis" conductor for 132 kV switchyards. High level and low level overhead buses to be used for line/transformer feeder shall use three bundle "Coreopsis" conductor for 500kV and two bundle coreopsis conductor for 220 kV and 132 kV.
- 1.4 Ground connections shall be provided on equipment buses at all the necessary locations for temporary earthing on both sides of the equipment(s) under maintenance. Design, quantity to be supplied and locations of connectors shall be subject to approval by the Engineer.
- 1.5 Different parameters of 500kV and 220kV transmission lines are given in Clause 5.1.

## 2 SCOPE

- 2.1 This specification covers aluminium stranded conductors made from round aluminium wires, for use as overhead electrical conductors.

## 3 DEFINITIONS

- 3.1 For the purposes of this specification the following definitions shall apply.

3.2 Solid Conductor. A conductor consisting of one circular wire.

3.3 Stranded Conductor. A conductor consisting of seven or more aluminium wires of the same nominal diameter twisted together in concentric layers. When the conductor consists of more than one layer, successive layers are twisted in opposite directions.

3.4 Diameter. Mean of two measurements at right angles taken at the same cross-section.

3.5 Direction of Lay. The direction of lay is defined as right hand or left hand .With right hand lay; the wires shall conform to the direction of the central parts of the letter 'Z' when the conductor is held vertically. With left hand lay, the wires conform to the direction of the central part of the letter 'S' when the conductor is held vertically.

3.6 Lay Ratio. Ratio of the axial length of a complete turn of the helix formed by an individual wire in a stranded conductor to the external diameter of the helix.

## 4 STANDARDS FOR ALUMINIUM CONDUCTOR

### 4.1 Resistivity

The resistivity of aluminium wire depends upon its purity and its physical condition. For the purposes of this specification the maximum value permitted is 0.028264 ohm.sq mm/m at 20° C and this value shall also be used as standard resistivity for the purpose of calculation.

### 4.2 Density

At a temperature of 20°C, the density of hard-drawn aluminium wire is to be taken as 2.703 kg/dm<sup>3</sup>.

### 4.3 Coefficient of Linear Expansion

The coefficient of linear expansion of hard-drawn aluminium wire is to be taken as 2.703 kg/dm<sup>3</sup>.

#### 4.4 Constant – mass Temperature Coefficient

At a temperature of 20°C the “Constant Mass” temperature coefficient of resistance,  $\alpha$ , of hard drawn aluminium wire, measured between two potential points rigidly fixed wire, measured between two potential points rigidly fixed to the wire, is taken as 0.00403 per centigrade degree.

### 5 MATERIAL

5.1 The conductor shall be constructed of hard-drawn aluminium wire having the mechanical and electrical properties specified herein. The material shall contain not less than 99.5 percent aluminium by weight.

5.2 The mechanical properties of hard drawn aluminium wire shall be in accordance with Table-I given below:

Table- I

Mechanical properties of hard drawn aluminium wire

Nominal wire diameter diameter mm	Minimum Ultimate tensile stress	
	Before stranding kg/sq mm	After stranding kg/sq mm
1.25	20.4	19.4
1.50	19.7	18.7
1.75	19.2	18.2
2.00	18.8	17.9
2.25	18.4	17.5
2.50	18.0	17.1
2.75	17.6	16.7
3.00	17.2	16.3
3.25	16.9	16.0
3.50	16.7	15.9
3.75	16.5	15.7
4.00	16.3	15.5
4.25	16.3	15.5
4.50	16.2	15.4
4.75	16.2	15.4
5.00	16.2	15.4

5.3 For wires of intermediate diameter, the minimum ultimate tensile stress shall be the same as for the next larger diameter.

5.4 The aluminium wires shall be clean, smooth and free from harmful defects prior to being stranded.

## 6 DIMENSIONS AND CHARACTERISTICS

### 6.1 Standard Sizes

The dimensions and characteristics of the conductors standardised for use by NTDC/WAPDA and covered by this specification are given in table –II.

Code Word	Nominal Size	Stranding and wire dia	Dia of complete conductor	Calculated area of complete conductor	Ultimate strength	D.C resistance at 20°C	Weight
	Sq mm	No/mm	mm	Sq mm	kg	Ohms/km	Kg/km
Gant	25	7/2.21	6.63	26.85	469	1.0661	73.4
Ant	50	7/3.10	9.30	52.83	847	0.5419	144.4
Wasp	100	7/4.39	13.17	105.95	1633	0.2702	290.1
Arbutus	400	37/3.72	26.06	402.14	6304	0.0717	1108.7
Hawthorn	600	61/3.55	31.95	603.78	8966	0.0479	1668.1
Coreopsis	810.74	61/4.11	36.99	1075.06	13670	0.0356	2241.0

#### 6.1.1 Tolerances

A tolerance of plus or minus one percent with a minimum of 0.025 mm is permitted on the nominal diameter of all the wires. The cross-section of any wire shall not depart from circularity by more than an amount corresponding to a tolerance of 2 percent on the nominal standard diameter.

### 6.2 Joints

6.2.1 There shall be no joints in any wire of a stranded conductor containing seven wires, except those made in the base rod or wire before final drawing.

6.2.2 In stranded conductors containing more than seven wires, joints in individual wires are permitted, in addition to those made in the base rod or wires before final drawing, but no two such joints shall be less than 15 m apart in the complete stranded conductor. Such joints shall be made by resistance or cold pressure butt welding. They are not required to fulfil the mechanical or electrical requirements for unjointed wires. Joints made by resistance butt welding shall, subsequent to welding, be annealed over a distance of at least 200 mm on each side of the joint.

### 6.3 Stranding

6.3.1 The wires used in the construction of stranded conductor shall before stranding, satisfy all the relevant requirements of this specification.

6.3.2 The lay ratio of different layers shall be within the limits given in the table-III.

Table-III: Lay ratio for aluminium stranded conductors.

L a y R a t i o								
No of wires in conductors	6-wire min	Layer max	12-wire min	Layer max	18-wire min	Layer Max	24-wirw min	Layer max
7	10	14	-	-	-	-	-	-
19	10	16	10	14	-	-	-	-
37	10	17	10	16	10	14	-	-
61	10	17	10	16	10	15	10	14

6.3.3 In all constructions the successive layers shall have opposite directions of lay, the outermost layer being right handed. The wires in each layer shall be evenly and closely stranded.

6.3.4 In aluminium stranded conductors having multiple layers of wires, the lay ratio of any layer shall not be greater than the lay ratio of the layer immediately beneath it.

#### **6.4 Calculation of Conductor Properties**

6.4.1 The properties of the conductors shall be calculated in accordance with clause 6.4.2 below.

6.4.2 The resistance of any length of the stranded conductor is the resistance of the same length of any wire multiplied by a constant as given in table-IV given below.

Table –IV:

Stranding Constants

Stranding Constant		
Number of wires in conductor	weight	Resistance
7	7.091	0.1447
19	19.34	0.05357
37	37.74	0.027757
61	62.35	0.01676

6.4.3 The weight of each wire in any particular layer of a length of stranded conductor, except the central wire, will be greater than that of an equal length of straight wire by an amount depending on the mean lay ratio of that layer. The total weight of any length of any aluminium stranded conductor is therefore obtained by multiplying the weight of an equal length of straight wire by the appropriate constant given in table-IV above.

- 6.4.4 The strength of a stranded conductor containing not more than 37 wires, in terms of the strength of the individual component wires, may be taken to be 95% of the sum of the strengths of individual aluminium wires before stranding calculated from the value of the minimum ultimate tensile stress given in table-I.

The strength of a stranded conductor containing more than 37 wires may be taken to be 90% of the sum of the strengths of the individual aluminium wires calculated from the value of minimum ultimate tensile stress given in table-I

- 6.4.5 For testing the ultimate tensile strength of a complete stranded conductor, suitable fittings shall be applied to the ends of a sample of conductor which shall be not less than 5 meter long and the assembly shall then be pulled in a suitable tensile testing machine.

## **7 TEST METHODS**

### **7.1 Tensile Test**

- 7.1.1 This test shall be made on aluminium wires prior to and after stranding. The breaking load of the specimen cut from the sample shall be determined by means of a tensile testing machine of which the accuracy can easily be checked and to which adjustments can be made if necessary.
- 7.1.2 When an automatic tensile testing machine is used, the load shall be applied gradually and the rate of separation of jaws of the testing machine shall not be greater than 100 mm per minute.
- 7.1.3 When a hand operated lever testing machine is used, 90% of the specified breaking load shall be applied quickly and the load shall then be increased steadily until the specimen breaks. The time taken in applying the last 10 percent of the load shall be approximately 15 seconds and the total time from first application of load to fracture shall be approximately 20 seconds.
- 7.1.4 The tensile strength shall not be less than the values specified in clause 4.2.

### **7.2 Wrapping Test**

- 7.2.1 The aluminium wire shall be wrapped round a mandrel of diameter equal to the wire diameter to form a close helix of eight turns. Six turns shall then be unwrapped and again closely wrapped.
- 7.2.2 The wire shall not break or show any cracks.

### **7.3 Resistivity Test**

- 7.3.1 The electrical resistance of aluminium wire shall be measured to an accuracy of at least one part in a thousand. The length of the specimen shall be sufficient to give the accuracy required and shall be suitable for the

method of testing used. The resistance shall be measured at a temperature which shall not be less than 10°C and not more than 30°C. The measured resistance shall be corrected to the value at 20°C by means of the formula.

$$R_{20} = R_T \left( \frac{1}{1 + \alpha (T-20)} \right)$$

Where: T = temperature of measurement in °C  
R<sub>T</sub> = resistance at T °C  
R<sub>20</sub> = resistance at 20 °C  
and α = constant –mass temperature coefficient of resistance (=0.00403).

7.3.2 The resistivity at 20 °C shall then be calculated from the resistance at 20 °C. The resistivity at 20 °C shall not exceed the value specified in clause 4.1.

## **8 TESTS BY MANUFACTURER**

8.1 The manufacturer shall progressively carry out tests to maintain quality control and to ensure manufacture of conductor in compliance with the specification. Such tests shall include the following, but need not be restricted to them.

- 1) Visual Inspection
- 2) Verification of Dimensions
- 3) Tensile Tests
- 4) Wrapping Test
- 5) Resistivity Tests

8.2 Visual inspection and verification of dimensions shall be carried out as routine tests on wires and complete conductors.

8.3 Before the start of manufacture the base rod shall be tested for resistivity. One specimen shall be selected at random out of every 10 coils for test. Material not conforming to the standard shall not be used.

8.4 The tensile strength and wrapping test shall be carried out on wire finished to size but before stranding. Samples shall be drawn from not less than 10 percent of the individual lengths of aluminium wire which will be included in any one consignment.

8.5 The manufacturer shall maintain a record of all the tests carried out by him for examination by the authorised representative of NTDC/WAPDA.

8.6 The manufacturer shall furnish a certificate to the effect that the aluminium stranded conductor manufactured by him conforms in all respects to the requirements of this standard.

## **9 ACCEPTANCE TESTS**

9.1 The following tests shall be carried out on the aluminium stranded conductor for acceptance.

- 1) Visual Inspection
- 2) Verification of dimensions
- 3) Tensile Test
- 4) Wrapping Test
- 5) Resistivity Test

## **10 ACCEPTANCE AND REJECTION**

10.1 The manufacturer shall divide each consignment into lots for inspection. These lots shall be so selected that material in a lot is of reasonably uniform quality and as far as possible, is manufactured at the same time and under the same conditions. The manufacturer shall keep sufficient production records to ensure that this can be done regularly. A lot may contain any number of lengths upto a maximum of 150.

10.2 From each lot, regardless of its size, samples of wires shall be taken at random from 10 lengths of stranded conductor. One sample sufficient to provide one specimen for each test, shall be taken from each strand of the conductor in each of the selected lengths.

10.3 The samples taken shall be subjected to each of the tests prescribed in clause 9. The lot shall be accepted, if for each test, the sample complies with the requirements of clauses 10.4 and 10.5.

10.4 If in any test, at most one specimen fails the sample shall be considered acceptable for that test.

10.5 If two specimens fail in any test, a further sample in accordance with clause 10.2, shall be taken from the lot, and the particular test repeated. If there are no further failures the samples shall be considered acceptable for the test.

10.6 If in any test three or more specimens fail, the entire lot shall be rejected.

10.7 The manufacturer shall afford to the inspector all necessary test facilities and assistance for carrying out the tests. The facilities shall be provided free of charge.

## 11 PACKING AND MARKING

- 11.1 Aluminium stranded conductor shall be supplied on stranded wooden reels as per fig 1. The reels shall be made from high quality wood and shall be of sound construction, able to withstand the usual rigours of transportation and field construction. The complete periphery of the reels apart from being protected by heavy wooden lagging railed at each end of the reel flanges as per fig. 1, shall also be bound by two steel straps. The wooden reels shall be given two brush coats of 5 percent pentachlorophenol solution in oil before winding of conductor. The conductor shall be wound tightly.
- 11.2 The conductor shall be supplied in lengths specified in fig 1. Each reel shall contain either one or two lengths only as specified. A tolerance of plus or minus 5 percent is permitted on the conductor length. Additionally it shall be permissible to supply not more than 5 percent of the lengths on any one order in random lengths, none of which shall be shorter than one third of the nominal length.
- 11.3 The manufacturer shall provide the following markings on the reels in legible and indelible letters.
- 1) Manufacturer's name and designation
  - 2) Conductor designation
  - 3) Address of the consignee and purchase order number
  - 4) Serial number of the reel
- 11.4 The manufacturer shall stamp the following information on metallic plates which shall be securely nailed to the reel.
- 1) Size and designation of aluminium stranded conductor
  - 2) Net weight, tare weight and gross weight in kg
  - 3) Total length of the conductor on the reel, in meters
  - 4) Serial number of the reel
- 11.5 Both sides of the reel shall have an arrow marking indicating the direction of rolling.
- 11.6 All markings shall appear on both sides of the reel in the positions indicated in figure 1.

Enclose Fig 1b

## Form of Advance Payment Security

Date:

Contract Name and No.:

To:

In accordance with the payment provision included in the Contract, in relation to advance payments, \_\_\_\_\_ (hereinafter called "the Supplier") shall deposit with the Purchaser a security consisting of \_\_\_\_\_, to guarantee its proper and faithful performance of the obligations imposed by said Clause of the Contract, in the amount of \_\_\_\_\_.

We, the undersigned \_\_\_\_\_, legally domiciled in \_\_\_\_\_ (hereinafter "the Guarantor"), as instructed by the Supplier, agree unconditionally and irrevocably to guarantee as primary obligor and not as surety merely, the payment to the Purchaser on its first demand without whatsoever right of objection on our part and without its 30 claim to the Supplier, in the amount not exceeding \_\_\_\_\_.

This security shall remain valid and in full effect from the date of the advance payment received by the Supplier under the Contract until twenty-eight (28) days following completion of delivery CIF/DDP/CIP /Ex-Works IESCO store New wah basis as certified by the Purchaser.

Name

In the capacity of

Signed

Duly authorized to sign the security for and on behalf of

Date \_\_\_\_\_

**In continuation of ITB Clause 7.0**

- |  |   |
|--|---|
|  | <p>I. Terms of payments</p> <ul style="list-style-type: none"><li>a) advance payment 20% is allowed against the advance bank guarantee from scheduled bank having credit rating A +.</li><li>b) 100% payment shall be paid to contractor on 100% installation of APMS for individual feeder</li></ul> |
|--|---|



**In continuation of GCC Clause F sub clause 2**

The method and conditions of payment to be made to the Supplier under this Contract shall be as follows:

**Payment for Goods supplied from abroad:**

**A) payment will be made by the Finance Director IESCO Islamabad on production of the following documents:**

- a) Bill in triplicate mentioning clearly NTN No. & GST No.
- b) Delivery Challan and GRN duly stamped and signed by the consignee (in original).
- c) Warranty Certificate.
- d) General Sales Tax Invoice.
- e) Inspection Certificates
- f) Certificate from Chief Engineer (Development) IESCO Islamabad regarding acceptance of Performance Bond.
- g) Certificate from Excise & Taxation Department, certifying the fact that all payable professional taxes have been cleared by the supplier.
- h) Custom clearance certificate
- j) Certificate issued from consignee store Manager that materials received vide GRN No. \_\_\_ dated \_\_\_ has been taken on stock against stock code No. \_\_\_
- k) The payment of General Sales Tax, fixed by the Government, shall be made to the firm on production of General Sales Tax return cum payment Challan
- l) Deduction of Advance payment as per pro-rata basis against each invoice.
- L IESCO local committee certificate

**OR**

- B) Finance Director IESCO will establish a confirmed and irrevocable Letter of Credit for Rs. \_\_\_\_\_/- through any nationalized bank of Pakistan in your favor. All charges relating to opening of Letter of Credit and negotiation thereon, shall be borne by contractor. The amount of material excluding General Sales Tax i.e. Rs. \_\_\_\_\_/- in the Letter of Credit shall be available for

	<p>negotiation and en-cashable on submission of following documents: -</p> <ul style="list-style-type: none"> <li>i) Bill in triplicate mentioning clearly NTN No. &amp; GST No.</li> <li>ii) Delivery Challan and GRN duly stamped and signed by the consignee</li> <li>iii) Warranty certificate</li> <li>iv) Inspection certificate from Nominated Inspector</li> <li>v) Certificate issued by the Chief Engineer (Development), IESCO Islamabad regarding acceptance of Performance Bond.</li> <li>vi) Certificate from Excise &amp; Taxation Department, certifying the fact that all payable professional taxes have been cleared by the supplier.</li> <li>vii) General Sales Tax Invoice.</li> <li>viii) Certificate issued from consignee store Manager that materials received vide GRN No. ___ dated ___ has been taken on stock against stock code No. ___</li> <li>ix) The payment of amount of 17% General Sales Tax i.e. Rs. _____/- in the Letter of Credit shall be available for negotiation and en-cashable on production of General Sales Tax invoice and General Sales Tax return cum payment Challan, as envisaged in Payment.</li> <li>x) Deduction of Advance payment as per pro-rata basis against each invoice.</li> </ul>
	<p>The method and conditions of payment to be made to the Supplier under this Contract shall be as follows:</p> <p><b>Payment for Goods and Services supplied from within Pakistan:</b></p> <ul style="list-style-type: none"> <li><b>A) 100% payment will be made by the Finance Director IESCO Islamabad on production of the following documents:</b> <ul style="list-style-type: none"> <li>a) Bill in triplicate mentioning clearly NTN No. &amp; GST No.</li> <li>b) Delivery Challan and GRN duly stamped and signed by the consignee (in original).</li> <li>c) Warranty Certificate.</li> <li>d) General Sales Tax Invoice.</li> <li>e) Inspection Certificates</li> <li>f) Certificate from Chief Engineer (Development) IESCO Islamabad regarding acceptance of Performance Bond.</li> <li>g) Certificate from Excise &amp; Taxation Department, certifying the fact that all payable professional taxes have been cleared by the supplier.</li> <li>h) Custom clearance certificate</li> <li>j) Certificate issued from consignee store Manager that materials</li> </ul> </li> </ul>

received vide GRN No. \_\_\_ dated \_\_\_ has been taken on stock against stock code No. \_\_\_

- k) The payment of General Sales Tax, fixed by the Government, shall be made to the firm on production of General Sales Tax return cum payment Challan
- l) Deduction of Advance payment as per pro-rata basis against each invoice.

OR

- B) Finance Director IESCO will establish a confirmed and irrevocable Letter of Credit for Rs. \_\_\_\_\_/- through any nationalized bank of Pakistan in your favor. All charges relating to opening of Letter of Credit and negotiation thereon shall be borne by contractor. The amount of material excluding General Sales Tax i.e., Rs. \_\_\_\_\_/- in the Letter of Credit shall be available for negotiation and en-cashable on submission of following documents: -
  - i) Bill in triplicate mentioning clearly NTN No. & GST No.
  - ii) Delivery Challan and GRN duly stamped and signed by the consignee
  - iii) Warranty certificate
  - iv) Inspection certificate from Nominated Inspector
  - v) Certificate issued by the Chief Engineer (Development), IESCO Islamabad regarding acceptance of Performance Bond.
  - vi) Certificate from Excise & Taxation Department, certifying the fact that all payable professional taxes have been cleared by the supplier.
  - vii) General Sales Tax Invoice.
  - viii) Certificate issued from consignee store Manager that materials received vide GRN No. \_\_\_ dated \_\_\_ has been taken on stock against stock code No. \_\_\_
  - ix) The payment of amount of 17% General Sales Tax i.e., Rs. \_\_\_\_\_/- in the Letter of Credit shall be available for negotiation and en-cashable on production of General Sales Tax invoice and General Sales Tax return cum payment Challan, as envisaged in Payment.
  - x) Deduction of Advance payment as per pro-rata basis against each invoice.

# SCHEDULE OF REQUIREMENTS, TECHNICAL SPECIFICATIONS





## 1. Technical Specification

- i. All designs, equipment, materials and workmanship shall comply with and be tested in accordance with requirements of the specification of **PPMC-DS-01:2026 having ordering code (APMS-MC-S-100), (APMS-MC-S-200) & (APMS-MC-S-400)**. Equipment or parts or additional features, which are not covered by the specifications, shall comply special requirement as per **article-2 of this section**.
- ii. AMI Energy Meter LT (ToU) CT operated is not scope of supply of APMS. The same Energy Meter shall be supplied by Procuring agency and Contractor will install in APMS Energy meter compartment.
- iii. All component of APMS either type tested acceptable to procuring agency or will undertake for fresh type testing from ILAC or IEC registered lab.
- iv. The contract shall be executed in strict conformity with the specifications and/or Drawings given or mentioned in this section and the supplier shall do no 'Work' without proper specifications, instructions and/or Drawings.
- v. Specifications and/or drawings are intended to complement each other so that if anything is shown on the drawings as required but not mentioned in the specifications or vice versa. It shall be of like effect as if shown or mentioned in both. If any error, omission or discrepancy is found in the figures, specifications and/or drawings or, if any feature shall appear to the supplier to be indefinite or unclear, the same shall be referred to the Purchaser whose written explanation and/or clarification shall be obtained before proceeding with the work.
- vi. The Manufacturer shall submit to Purchaser under intimation to the Purchaser, within **30 days** of the issuance of the Notification of Award, for approval of the Purchaser, **four (4) copies** of all drawings technical literature, data, operation and maintenance instruction books and/or manuals required under the specifications and such other documents as per required in the Technical Specifications or other provisions of the bidding documents or, if Purchaser deems necessary, require changes or modifications to be made therein, Purchaser shall return two copies to the Manufacturer/Supplier marked. "Approved", "Approved as Noted" or "Returned for Correction". Each drawing, which is noted "Returned for Correction".
- vii. The Manufacturer/Supplier after incorporating the desired changes in the drawing shall resubmit four (4) sets of the same to the Purchaser for approval. Two prints of which shall be stamped "APPROVED" by the Purchaser and returned to the Manufacturer/Supplier for his record. On completion of the Contract, the Manufacturer / Supplier shall deliver to the

Purchaser four (4) prints of all approved drawings, technical literature, data which show the work in the final or "as built" condition. The said drawings and documents shall be permanent and non-fadable. In addition to above, two soft copies of above-mentioned final drawings made on Auto CAD (latest version) on two separate CDs shall also be provided to the Purchaser.

- viii. The Manufacturer/Supplier shall allow 15 days for the Purchaser's approval of drawings in his schedule of work and in the time allowed for completion of the Contract. Extra time required for approval of drawings due to deficiencies in design or errors in submitted drawings shall be the responsibility of the Manufacturer/Supplier and no extension in time will be allowed on this account. Delays in obtained approval caused by the Purchaser beyond 15 days will entitle the Supplier to an extension of time.
- ix. Approval by the Purchaser does not relieve the Manufacturer/Supplier of his responsibility to do the work in accordance with the Contract.
- x. The Manufacturer/Supplier shall be responsible for any discrepancies, errors and omissions in any drawings or other particulars supplied by him whether the Purchaser has approved such drawings or particulars or not.
- xi. All drawings and documents furnished by the Manufacturer/Supplier in accordance with the Contract shall become the property of the Purchaser.
- xii. Wherever reference is made in the Technical Specifications to specific standards and codes to be met by the goods and materials to be furnished or tested, the provisions of the latest current edition or revision of the relevant standards or codes in effect shall apply, unless otherwise expressly stated in the Contract. Where such standards and codes are national or relates to a particular country or regions, other authoritative standards that ensure substantial equivalence to the standards and codes specified will be acceptable.
- xiii. The latest updated version of specifications shall be applicable. (Amended to date - In effect as at the date 42 days prior to bid submission)
- xiv. Copies of the Technical specifications are attached as Annexure to the bidding document.
- xv. The bidder is required to fill the requisite schedule of technical data as per attached Specifications and submit the same with the bid for each equipment / material etc. A bid without schedule of technical data (filled in) will be considered as non-responsive
- xvi. The Equipment shall be designed and constructed for indoor/Outdoor installation and shall be suitable for satisfactory operation under the following service conditions:

**a) CLIMATE CONDITION**

Sr #	Particular	Specified Value
1.	Ambient Temperature	
i.	Maximum Temperature	55° C
ii.	Minimum Temperature	-20° C
iii.	Mean Temperature in a Year	35° C
iv.	Mean Temperature in a Day	50° C
2.	Relative Humidity	10 to 100%
3.	Altitude	1000 M
4.	Isoceraunic level (day/Year)	50
5.	Wind velocity	45
6.	Seismic level (Horizontal acceleration)	0.4g
7.	Pollution	High corrosive dust

- i. It may be assumed that the air is heavily polluted by dust, smoke, aggressive gases, vapours or salt spray. However, at certain times of the year severe dust storms may be experienced
- ii. Heat dissipation glands on side walls of enclosure are necessary to dissipate heat.

**b) OPERATING CONDITIONS:**

Sr#	Particular	Specified Value
1	System Highest Voltage	415V
2	System Voltage (L-L)	415 V
3	System Voltage (L-G)	240 V
4	Frequency	50%±0.5Hz
5	Neutral Earthing	Solid Ground
9	Creepage Distance for insulator	31mm/kV
10	K factor where altitude >1000 Meter	
I	1500 Meter	K= 1.1
II	2000 Meter	K=1.2
III	2500 Meter	K=1.3

xvii. Additional Specification

AAC Conductor	P-63:2007
SID PVC Cable	DDS-2007

**2. Special Requirement**

- i. The short circuit withstand of MCCB for one second shall be equal to breaking capacity of offered type of MCCB.
- ii. APMS shall be assembled as per specification as mentioned in this section article-1(i).
- iii. Enclosure for APMS shall be fabricated in such way that each component has a separate compartment.
- iv. Although DCU is not in scope of the APMS, however, enclosure shall also possess compartment for Data concentrator Unit (DCU) and its connection facility with Energy meter.
- v. Similarly, enclosure shall have facility to connect Active Harmonic Filter if

- required at site as per drawing
- vi. Contractor is responsible for Design, supply, installation, Testing & Commissioning, Configuration/interference with IESCO AMI system.
  - vii. Contractor shall be responsible for balancing of load on each phase of Transformer with Maximum 10% deviation from each phase.
  - viii. Contractor shall responsible for replacement of two phase or damage transformer, however, IESCO will provide the new transformer.
  - ix. Contractor will responsible for fixing of Busbar with AAC WASP and Connection of APMS through 4 core cable as per drawings.
  - x. Contractor is responsible with installation of communication "SIM" provided by authorized representative of Procuring agency.
  - xi. Contractor is responsible for configuration and compliance of functionality as per specification with IESCO AMI system, Project Director (AMI) will certify for each transformer for testing, commissioning and configuration.
  - xii. Contractor is responsible for replacement of damaged D-fitting, however, D-fitting shall be provided by procuring agency.
  - xiii. Contractor is responsible for returning of damaged Transformer to Regional Store or field Store as per direction of PD (AMI) after testing of Circle Manager (MT).
  - xiv. Relevant CT meter will be mounted inside APMS enclosure by contractor. Relevant hardware e.g. screws, washers, sleeves etc. will be supplied and installed by contractor.
  - xv. Contractor will provide and install lugs/connectors at both ends of incoming and outgoing connections to ensure spark free joints.
  - xvi. IESCO CT meter is provided with auxiliary contacts to be connected with breaker / magnetic contactor. Connection diagram should be followed for connection between auxiliary contacts, breaker and magnetic contactor so that procuring agency should have option to disconnect / reconnect through breaker and magnetic contactor with first priority assigned to magnetic contactor. If any additional device required to achieve this functionality, the same will be supplied and installed by contractor. Testing of this functionality will be part of type test and FAT procedures.
  - xvii. APMS enclosure will be properly grounded and shall provide 6mm steel galvanize
  - xviii. If joints exist in busbar, incoming or outgoing cable/conductor of distribution transformer, contractor will replace them with cable / conductor provided by procuring agency.

### **3. LANGUAGE**

- i. All correspondence, literature, drawings, name plates, diagrams, applicable data, equipment details, instructions and maintenance books and manuals, spare parts, books and descriptive data shall be in the English language.

### **4. TESTS**

- ii. The APMS shall be tested as per Specification PPMC-DS-01:2026
- iii. Component of APMS shall be tested as per IEC standard or ILAC or STL lab.
- iv. The Manufacturer shall provide valid type test reports of each component and assembled APMS with the bid as per specification. In case the type test reports furnished by the bidder are not from one of the laboratories mentioned in specification or any other reputed independent testing laboratories accredited by STL (Short-Circuit Testing Liaison) or are not

relevant to the equipment offered or do not meet or comply with the ratings and other requirements of the Purchaser's Specifications included in this bidding document or are otherwise not to the satisfaction of the Purchaser in any respect, the Manufacturer bidder has to arrange Type testing at any one lab mentioned in specification at the cost and arrangement of manufacturer without disturbing the stipulated delivery period given above duly witnessed by IESCO Engineers.

- v. Manufacturer will provide unconditional undertaking for fresh /new type testing from following Labs.

### 5. Completion Period

- i. The completion period for work is 120 days , after the start date from signing of contract agreement. 0.05% of quoted bid price per day shall be load on the late completion of maximum 30 days. Completion schedule beyond 30 days from completion following stipulated time, bid shall be rejected. No credit will be given for early completion.
- ii. Each bidder shall provide implementation schedule by using MS-project or Primavera or Excel sheet in shape of GANT Chart which indicate each WBS and Milestone etc.

### 6. Personnel and Technical Team

Contractor shall ensure following Technical team during execution of Projects

Sr.	Description	No.	Role	Qualification
1	Project Director	01	Lead Team	<p>I. He will be Bachelor or Master in Electrical Engineer</p> <p>II. He must posses 15 year Experience and out of 15 years he must have 10 year Distribution experience in DISCO</p> <p>III. He must have experience to lead in Turnkey project.</p>
2	Site Manager	2	Site Engineer	<p>I. He will be Bachelor or Master in Electrical / Electronic Engineering</p> <p>II. He must possess 10-year Experience and out of 10 years he must have 5 year Distribution experience in DISCO</p> <p>III. He must have experience to lead in Turnkey project.</p>
	I & C Engineer	2		<p>I. He will be Bachelor or Master in Electrical / Electronic Engineering</p> <p>II. He must have 5-year instrumentation and Control experience</p>

				III. He must have experience to lead in Turnkey project.
3	Line Superintendent	10	Supervisor	I. He will be 3-year diploma (DAE) of Associate Engineer in Electrical. II. Experience in operation, or maintenance of Electrical Distribution system will be preferred.
4	Line Man			I. Matric in (Science) minimum required II. Good Physical fitness required III. Ability
	Assistant Lineman			
	I&C Technical	15		

### 7. Area of Installation & Scope

Feeders Detail		General Duty Transformer in KVA (No.)		
Code	Name	100	200	400
81002	PASWAL	18	22	
96801	CHAKRI	21	8	
105511	REHARA	45	13	
14704	CHIRAH	31	8	
105516	WAHEED ABAD	17	36	
14715	TUMAIR (NILORE)	30	8	1
122503	PIR SOHAWA	20	7	1
96809	PARYAL	25	7	
13705	U.TOPA	16	7	5
52105	MAIRA SHAROF	10		

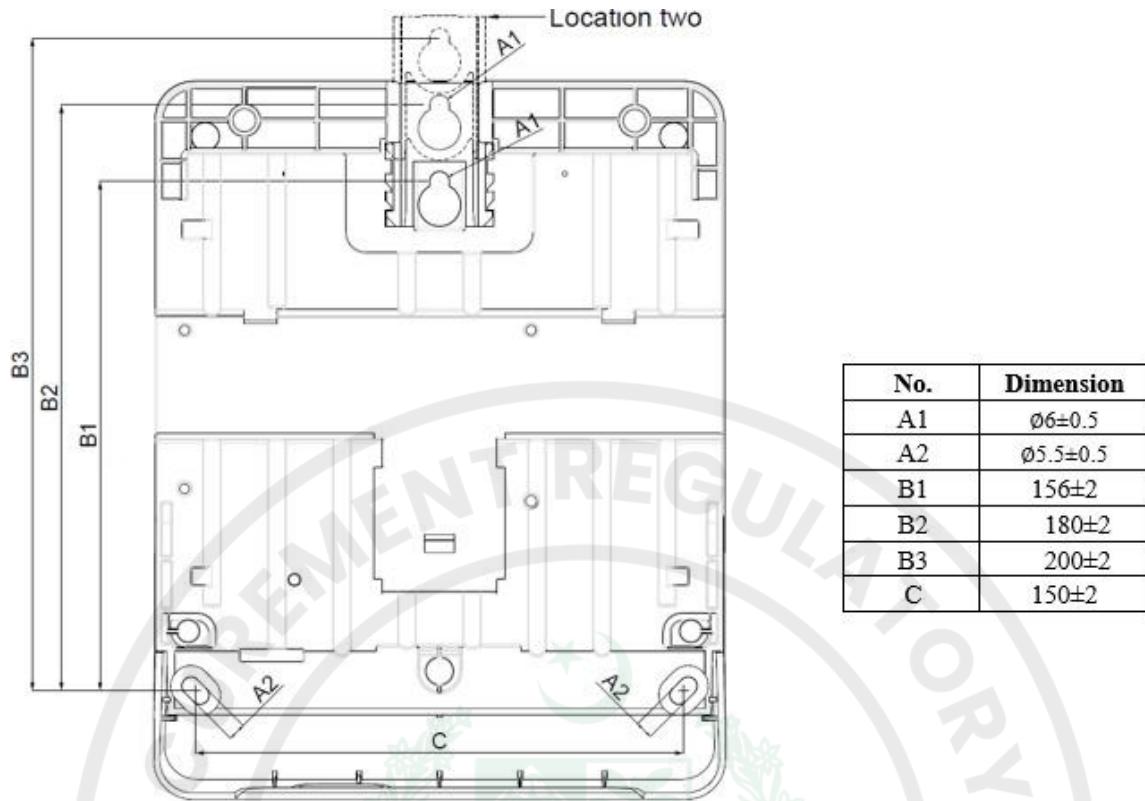
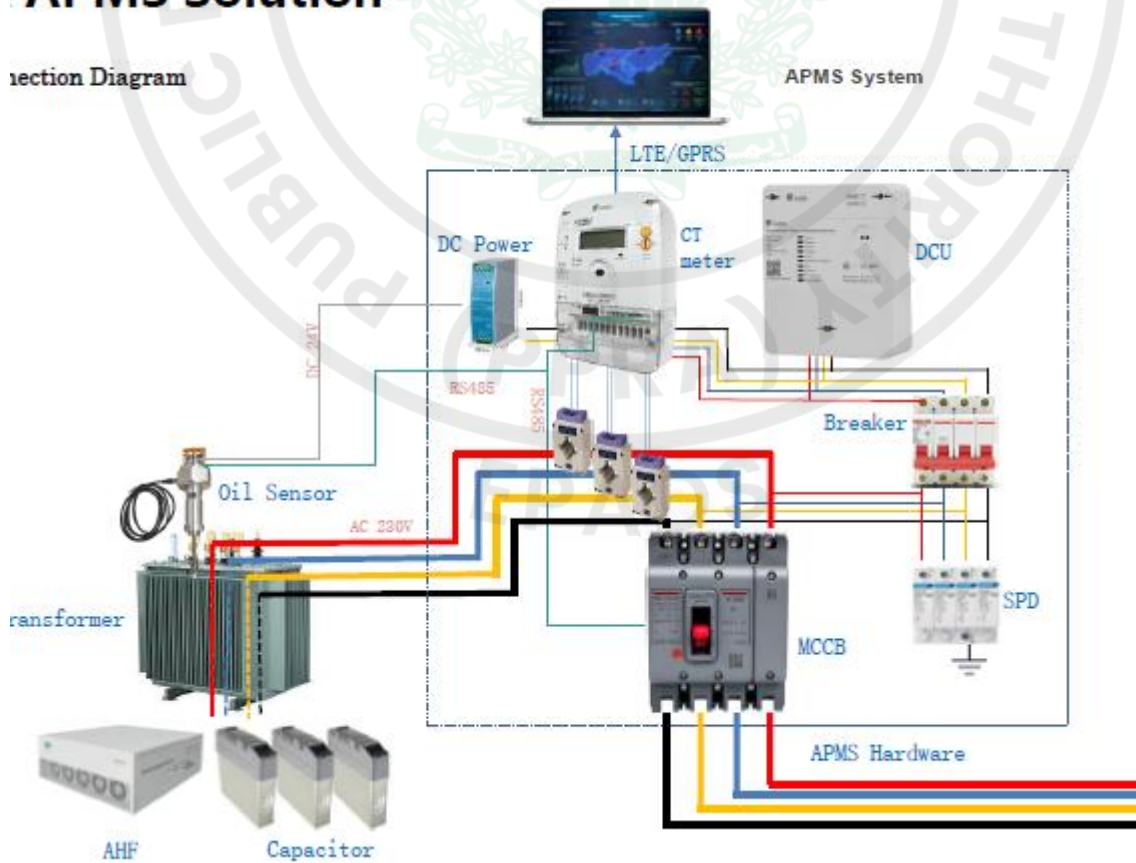
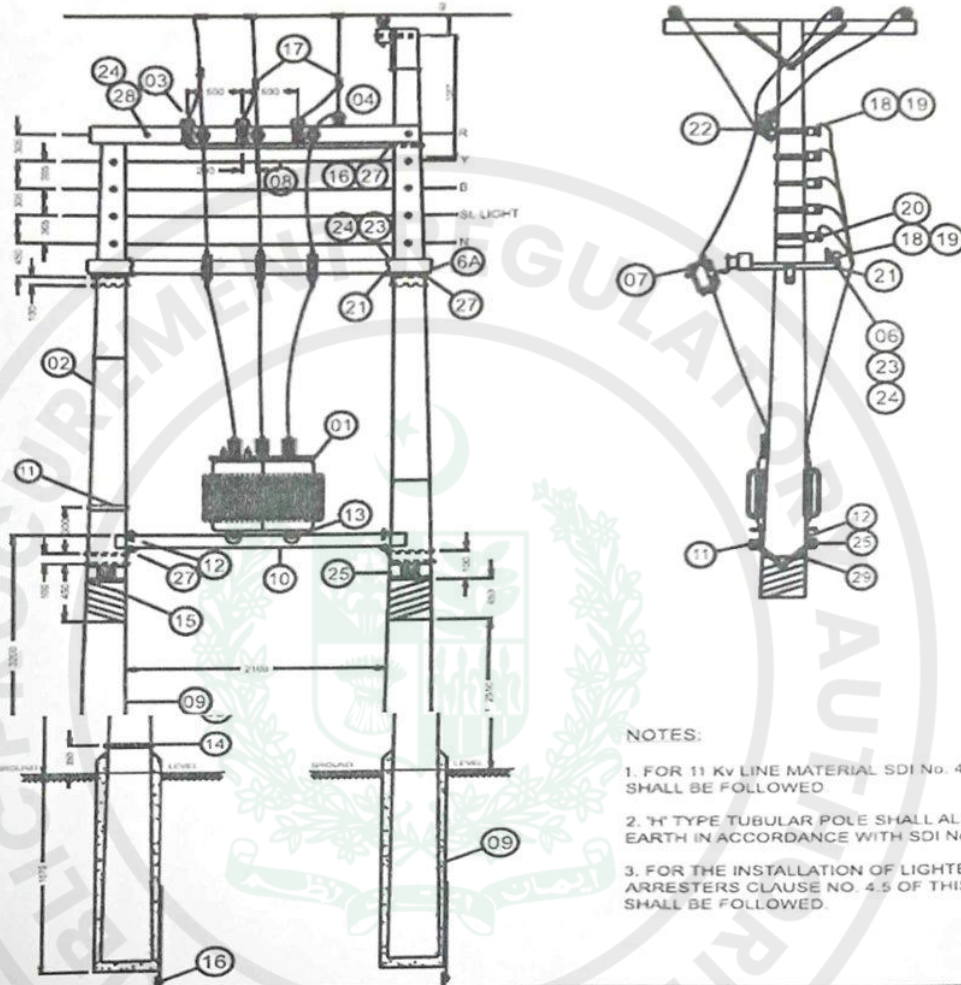


Figure - 2 Mounting point of DCU

## APMS Solution

Section Diagram





NOTES:

1. FOR 11 Kv LINE MATERIAL SDI No. 40 SHALL BE FOLLOWED
2. 'H' TYPE TUBULAR POLE SHALL ALSO BE EARTH IN ACCORDANCE WITH SDI No 59
3. FOR THE INSTALLATION OF LIGHTENING ARRESTERS CLAUSE NO. 4.5 OF THIS SDI SHALL BE FOLLOWED.

S#	DESCRIPTION	QTY	DRAWING	SPEC.	S#	DESCRIPTION	QTY	DRAWING	SPEC.
1	TRANSFORMER	1		P-13	15	ANTI CLIMBING DEVICE	13M		PD-76
2	L TYPE TUBLER POLE	1	PDW/DF-153	P-94	16	EARTHING ROD WITH CLAMP	1	POW / DF 237	P-111
3	LIGHTENING ARRESTER	3	DSW/DF 9	P-11	17	P G CLAMP	12		P-25
4	PIN INSULATOR	4		P-6	18	D SHACKLE	9		PD-68
5	INSULATOR PIN	4		P-24	19	SPOOL INSULATOR	8		P-4
6	STEEL CROSSARM	3		P-1	20	ALUMINUM REEL	1	PDW / DF 173	-
7	DORPOUT CUTOOUT ASSEMBLY	3	PDW / DF 170	P-68	21	STRANDED L IRON	2	PDW / DF 243	P-112
8	GANT CONDUCTOR	2M		P-63	22	TIE WIRE 4Ø	27M		P-22
9	G S STRANDED WIRE 10 Ø	8M		P-12	23	12Øx150mm LONG M S BOLT	14	EW / DF 286	P-19
10	CHANNEL 100 x 50 x 2000 mm	2	PDW / DF 238	P-112	24	SQUARE WASHER 18Ø HOLE	14	EW / DF 269	P-20
11	CHANNEL 100x50x600 mm C600	2	PDW / DF 238	P-112	25	12Øx37mm LONG M S BOLT	4	EW / DF 286	P-19
12	U BOLT	4	PDW / DF 240	P-112	26	ROUND WASHER 16Ø HOLE	2	EW / DF 268	P-20
13	J BOLT	4	PDW / DF 218	P-112	27	16Øx225mm LONG M S BOLT	9		P-19
14	GROUND CONDUCTOR CLAMPS	2	PDW / DF 231	P-111	28	16Øx300mm LONG M S BOLT	9		P-19
6A	WOODEN CROSSARM (X-11)	1	PDW / DF 185	P-1	29	BRACE 50x400x3mm (B P)	4	POW / DF-242	P-112

100 OR 200 KVA DISTRIBUTION TRANSFORMER STATION  
ON DOUBLE POLES (DTS-2P) STEEL CROSS ARMS

## Past Experience / Contracts

Contracts over *[insert amount]* during the last three years:

Procuring Agency	Value	Year	Goods/Services Supplied	Country of Destination



## Historical Contract Non-Performance, and Pending Litigation and Litigation History

*[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

<input type="checkbox"/> Not debarred due to deviation from commitment of Bid Securing Declaration- <input type="checkbox"/> Not debarred due to non-performance			
Year	Non-performed portion of contract	Contract Identification	Total Contract Amount (current value, currency, exchange rate and PKR equivalent)
<i>[insert year]</i>	<i>[insert amount and percentage]</i>	Contract Identification: <i>[indicate complete contract name/ number, and any other identification]</i> Name of Procuring Agency: <i>[insert full name]</i> Address of Procuring Agency: <i>[insert street/city/country]</i> Reason(s) for nonperformance: <i>[indicate main reason(s)]</i>	<i>[insert amount]</i>
Pending Litigation, in accordance with Section III, Qualification Criteria and Requirements			
<input type="checkbox"/> Pending litigation in accordance with Section III, Qualification Criteria and Requirements, Sub-Factor 2.3 as indicated below.			
Year of dispute	Amount in dispute (currency)	Contract Identification	Total Contract Amount (currency), US\$ PKR Equivalent (exchange rate)

<i>[insert year]</i>	<i>[insert amount]</i>	Contract Identification: [indicate complete contract name, number, and any other identification] Name of Procuring Agency: <i>[insert full name]</i> Address of Procuring Agency: <i>[insert street/city/country]</i> Matter in dispute: <i>[indicate main issues in dispute]</i> Party who initiated the dispute: <i>[indicate "Procuring Agency" or "Supplier"]</i>  Status of dispute: <i>[Indicate if it is being treated by the Adjudicator, under Arbitration or being dealt with by the Judiciary]</i>	<i>[insert amount]</i>
<input type="checkbox"/> No consistent history of court/arbitral award decisions in accordance with Section III, Qualification Criteria and Requirements, Sub-Factor 2.4. <input type="checkbox"/> Consistent history of court/arbitral award decisions in accordance with Section III, Qualification Criteria and Requirements, Sub-Factor 2.4 as indicated below.			
<b>Year of award</b>	<b>Outcome as percentage of Net Worth</b>	<b>Contract Identification</b>	<b>Total Contract Amount (currency), PKR Equivalent (exchange rate)</b>
<i>[insert year]</i>	<i>[insert percentage]</i>	Contract Identification: [indicate complete contract name, number, and any other identification] Name of Procuring Agency: <i>[insert full name]</i> Address of Procuring Agency: <i>[insert street/city/country]</i> Matter in dispute: <i>[indicate main issues in dispute]</i> Party who initiated the dispute: <i>[indicate "Procuring Agency" or "Supplier"]</i> Court/ arbitral award decision: <i>[Indicate if the award decision was against the Applicant or any member of a joint venture.]y]</i>	<i>[insert amount]</i>

## Current Contract Commitments / Contracts in Progress Form

1. Name of Contract(s)
2. Procuring Agency Contact Information [insert address, telephone, fax, e-mail address]
3. Value of outstanding contracts [current PKR equivalent]
4. Estimated Delivery Date
5. Average monthly invoices over the last six months (PKR/mon.)

## Financial Situation and Performance

*[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

### 1. Financial data

Type of Financial information in (currency)	Historic information for previous <i>[insert number]</i> years, <i>[insert in words]</i> (amount in currency, currency, exchange rate*, PKR equivalent)				
	Year 1	Year 2	Year 3		
Statement of Financial Position (Information from Balance Sheet)					
Total Assets (TA)					
Total Liabilities (TL)					
Total Equity/Net Worth (NW)					
Current Assets (CA)					
Current Liabilities (CL)					
Working Capital (WC)					
Information from Income Statement					
Total Revenue (TR)					
Profits Before Taxes (PBT)					
Cash Flow Information					
Cash Flow from Operating Activities					

\* Refer ITA 14 for the exchange rate

### 3. Financial documents

The Applicant and in case of JV, members of JV shall provide copies of financial statements for *[number]* years pursuant Section III, Qualifications Criteria and Requirements. The financial statements shall:

- (a) reflect the financial situation of the Applicant or in case of JV member, and not an affiliated entity (such as parent company or group member).
  - (b) be independently audited or certified in accordance with local legislation.
  - (c) be complete, including all notes to the financial statements.
  - (d) correspond to accounting periods already completed and audited.
- Attached are copies of financial statements<sup>1</sup> for the *[number]* years required above; and complying with the requirements.

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<sup>1</sup> If the most recent set of financial statements is for a period earlier than 12 months from the date of Application, the reason for this should be justified.

## 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

<b>Annual Turnover Data</b>			
<b>Year</b>	<b>Amount Currency</b>	<b>Exchange rate* (If applicable)</b>	<b>PKR equivalent</b>
<i>[indicate calendar year]</i>	<i>[insert amount and indicate currency]</i>		
		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.