

Standard Bidding Document

Supply, Installation, Testing, Commissioning, Including Civil Works,
Operation & Maintenance of Diesel Generator Sets at Gaddafi Stadium,
Lahore.
(Goods)

National

Single Stage-Two Envelope



September 30, 2026

*Pakistan Cricket Board (Pakistan Cricket Board (PCB)), Assistant Manager Procurement
Procurement Office, Pakistan Cricket Board, Gaddafi Stadium, Lahore., Lahore City, Lahore (District), Lahore
Division (Division), Punjab (Province).
Phone: +92-324-401-4858, Email: Muhammad.zarnab@pcb.com.pk*

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REQUEST FOR BIDS

PROCUREMENT OF GOODS

1. The **Pakistan Cricket Board (Pakistan Cricket Board (PCB))** has reserved Funds for the procurement planned for FY **2026-27**. The **Pakistan Cricket Board (Pakistan Cricket Board (PCB))** intends to apply part of the proceeds of this Fund to cover eligible payments under the contract for the "**Supply, Installation, Testing, Commissioning, Including Civil Works, Operation & Maintenance of Diesel Generator Sets at Gaddafi Stadium, Lahore.**" with the reference of "**P141480**"
2. The **Pakistan Cricket Board (Pakistan Cricket Board (PCB))** invites sealed Bids from eligible Bidders for procurement of goods 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 **Pay Order, Bank Guarantee** or all bids must be accompanied by bid securing declaration in the format specified in the Bidding documents
5. E-Bidding documents, containing detailed terms & conditions, specifications and requirements etc. are available on **e-Pak Acquisition and Disposal System (EPADS)** at **<https://epads.gov.pk/opportunities/federal/procurements/141480>** 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 **Wednesday, October 21, 2026 11:00 AM**. E-bids will be opened using **EPADS v2.0** on the same day at **Wednesday, October 21, 2026 11:30 AM**

. Manual submission of Bids shall not be entertained. Those vendors who have not yet registered on the new version of **EPADS v2.0**, may register themselves on <https://vendors.epads.gov.pk/>. A tutorial to explain the registration process is available at <https://www.youtube.com/watch?v=MNW6T38v7tc>

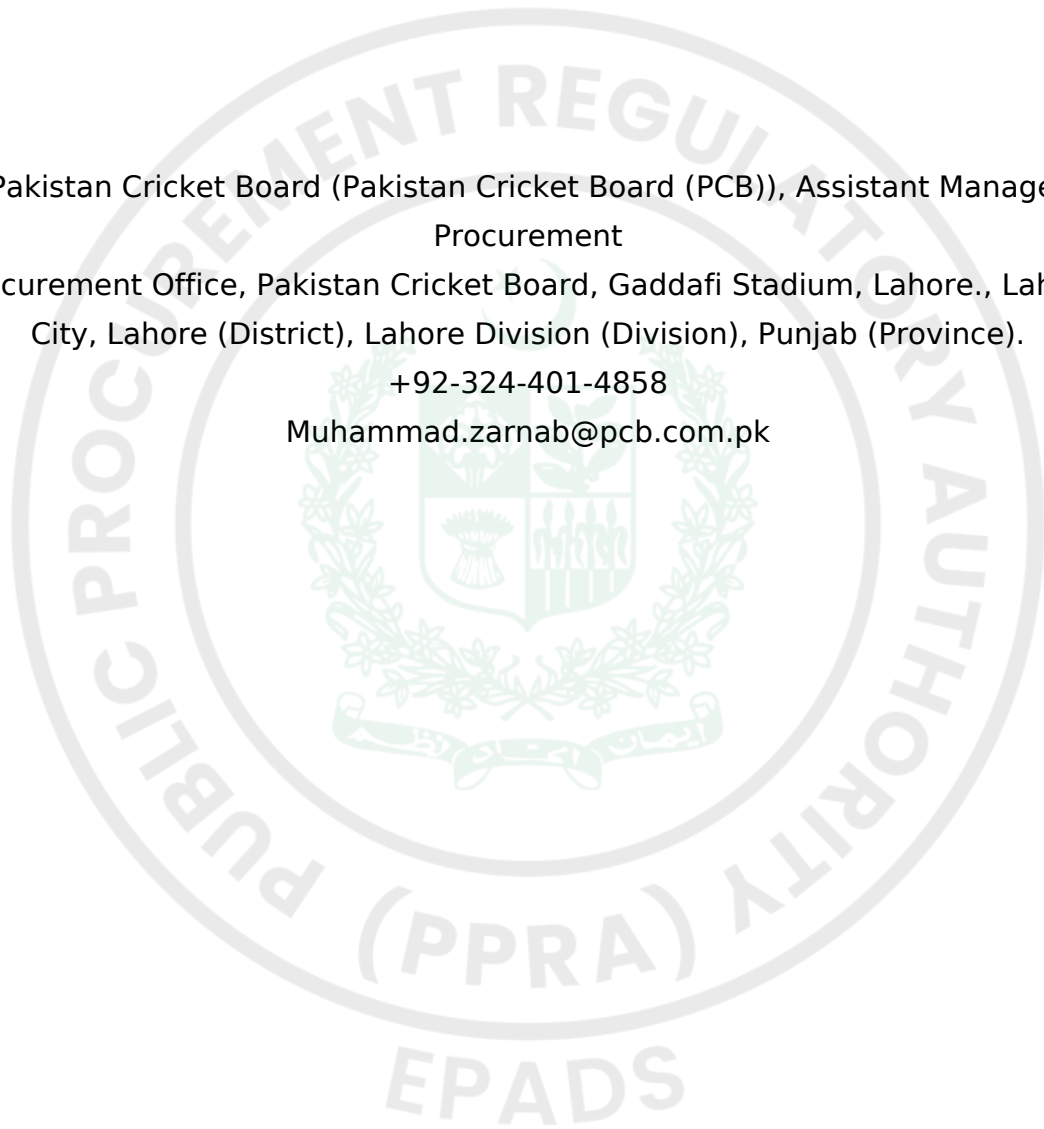
In terms of Rule 48 of Public Procurement Rules, 2004 Grievance Redressal Committee (GRC) is notified for the subject procurement and notification copy is available on the procuring agency's website and on Authority's website at (www.ppra.org.pk).

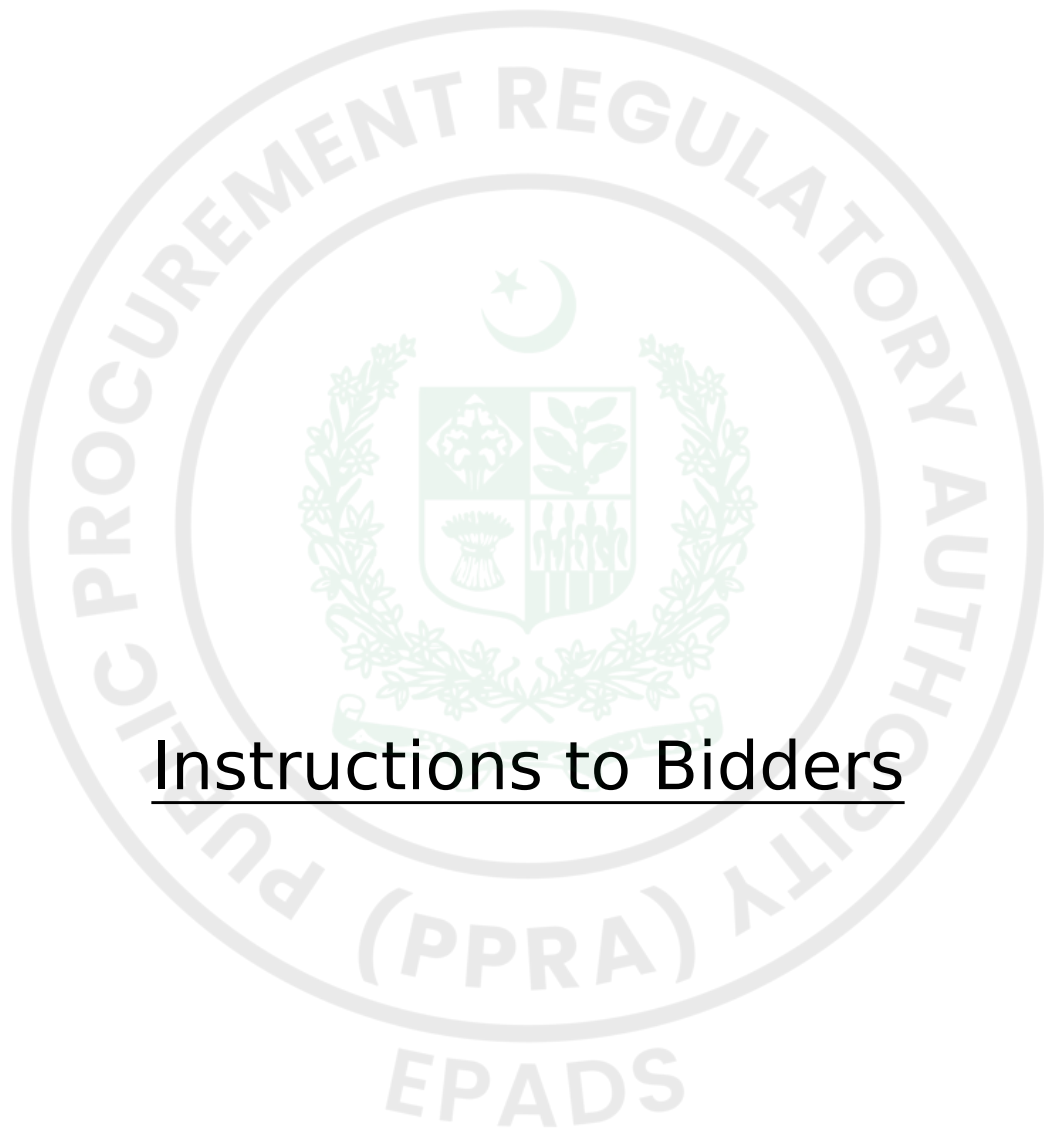
Pakistan Cricket Board (Pakistan Cricket Board (PCB)), Assistant Manager
Procurement

Procurement Office, Pakistan Cricket Board, Gaddafi Stadium, Lahore., Lahore
City, Lahore (District), Lahore Division (Division), Punjab (Province).

+92-324-401-4858

Muhammad.zarnab@pcb.com.pk





Instructions to Bidders

A. Introduction

1.Scope of Bids

1.1 The Procuring Agency (PA), as indicated in the **Bids Data Sheet (BDS)** invites Bids **through EPADS v2.0** for the provision of Goods for as specified in the BDS and **in Section V - Evaluation Criteria, Specifications & Schedule of Requirements**. The name, identification, and number of items/deliverables are provided in the **BDS**. The successful Bidders will be expected to provide the goods within the specified period and timeline(s) as stated in the **BDS**.

2. Source of Funds

2.1 Source of funds is referred in Clause-1 of Invitation for Bids.

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, consortium, or association. In the case of a joint venture, consortium, or association, 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, consortium, or association 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, consortium, or association during the Bidding process, and in case of award of contract, during the execution of the contract.

3.2 Verifiable copy of the agreement that forms a joint venture, consortium or association shall be required to be submitted as part of the Bid.

3.3 The appointment of Lead Member in the joint venture, consortium, or association shall be confirmed by submission of a valid Power of Attorney to the Procuring Agency.

3.4 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 or Association may be prescribed in BDS, in accordance with the guidelines issued by the PPRA).

3.5 The invitation for Bids is open to all prospective suppliers, manufacturers, or authorized agents / dealers subject to any provisions of incorporation or licensing by the respective national incorporating agency or statutory body established for that particular trade or business. Procuring agencies shall specify the registration/licensing requirements for the foreign bidders keeping in view the requirement of that business.

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

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 to provide consulting services for the preparation of the design, specifications and other documents to be used for the procurement of the Goods to be purchased under this Invitation for Bids.
2. have controlling shareholders in common; or
3. receive or have received any direct or indirect subsidy from any of them; or
4. have the same legal representative for purposes of this Bid; or
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 Bids of another Bidder, or influence the decisions of the Procuring Agency regarding this Bidding process; or
6. Submit more than one Bid in this Bidding process.

3.7 A Bidder may be ineligible if –

1. he is declared bankrupt or, in the case of company or firm, insolvent;
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. the Bidder is convicted, by a final judgment, of any offence involving professional conduct;

4. the Bidder is blacklisted locally or by international organizations and hence debarred due to involvement in corrupt and fraudulent practices, or performance failure or due to breach of Bid securing declaration.

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

3.9 Bidders shall submit Bids relating to the nature, conditions and modalities of sub-contracting wherever the sub-contracting of any elements of the contract amounting to more than ten (10) percent of the Bid price is envisaged.

4. Eligible Goods and Related Services

4.1 All goods and related services to be supplied under the contract shall have their origin in eligible source countries, and all expenditures made under the contract will be limited to such goods and services. For purpose of this Bid, ineligible countries are the countries declared ineligible by the Federal Government.

5. One Bid per Bidder

5.1 A bidder shall submit only one Bid, in the same bidding process, either individually as a Bidder or as a member in a joint venture or any similar arrangement.

5.2 The Bidder shall not engage a subcontractor for any portion of the contract if the value of such subcontracting exceeds thirty percent (30%) of the total contract amount.

6. Cost of Bidding

6.1 Any cost incurred by the bidder relating to the preparation and submission of its Bid shall be borne by the bidder, and the Procuring Agency shall in no case be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process.

B. Bidding Documents

7. Contents of Bidding Document

7.1 The Goods required, 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 9.1** include:

Section I -Invitation to Bids

Section II Instructions to Bidders (ITB)

Section III Bid Data Sheet (BDS)

Section IV Evaluation Criteria, Specifications, Schedule of Requirements

Section V Bid Forms

Section VI General Conditions of Contract (GCC)

Section VII Special Conditions of Contract (SCC)

Section VIII Contract Forms

7.2 The Bidder is expected to examine all instructions, forms, terms and specifications in the Bidding documents. Failure to furnish all the information required in the Bidding documents through **EPADS v2.0** will be at the Bidder's risk and may result in the rejection of his Bids.

8. Clarification of Bidding documents

8.1 A prospective Bidder requiring any clarification of the Bidding documents may notify the Procuring Agency through **EPADS v2.0**.

8.2 The Procuring Agency will within three (3) working days after receiving the request for clarification, respond to any request for clarification through **EPADS v2.0** provided that such request is received not later than three (03) days prior to the deadline for the submission of Bids as prescribed in **ITB 22**

8.3 Copies of the Procuring Agency's response will be forwarded to all identified Prospective Bidders through **EPADS v2.0**, including a description of the inquiry, but without identifying its source.

8.4 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 9**.

8.5 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 document.

8.6 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 v2.0**. 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 exclusively through the use of an Addendum pursuant to **ITB 9**. Non-attendance at the pre-Bid meeting will not be a cause for disqualification of a Bidder.

9. Amendment of Bidding documents

9.1 Before the deadline for submission of Bids, the Procuring Agency for any reason, whether at its own initiative or in response to a clarification requested by a prospective Bidder or Pre-Bid meeting may modify the Bidding documents by issuing addenda through **EPADS v2.0**.

9.2 The Procuring Agency shall promptly publish the addendum through **EPADS v2.0**.

9.3 Any addendum issued including the notice of any extension of the deadline shall also be communicated through EPADS v2.0 to all the bidders who have already submitted their bids. Such bidders shall have the right to withdraw their already submitted bid and re-submit the revised bid prior to the original or extended bid submission deadline.

9.4 To give prospective Bidders reasonable time in which to take an addendum/corrigendum into account in preparing their Bids, the Procuring Agency may, at its discretion, extend the deadline for the submission of Bids through **EPADS v2.0**:

Provided that the Procuring Agency shall extend the deadline for submission of Bids, if such an addendum is issued within last three (03) days of the Bids submission deadline.

C. Preparation of Bids

10. Language of Bid

10.1 The Bid prepared by the bidder, as well as all correspondence and documents relating to the Bids exchanged by the Bidder and the Procuring Agency shall be written in the English language unless otherwise 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 otherwise specified in the **BDS**, in which case, for purposes of interpretation of the Bidder, the translation shall govern.

11. Documents and samples Constituting the Bid

11.1 The Bid prepared by the Bidder shall constitute the documents required in the **BDS**.

Details of sample(s) where applicable and requested in the BDS.

1. Documentary evidence established in accordance with ITB that the Bidder is eligible and/or qualified for the subject bidding process;
2. Documentary evidence establish that the Bidder has been authorized by the manufacturer to deliver the goods into Pakistan, where required and where the supplier is not the manufacturer of those goods;
3. Documentary evidence establish that the goods and related services to be supplied by the Bidder are eligible goods and services, and conform to the Bidding Documents;
4. Bid security or Bid Securing Declaration furnished in accordance with **ITB 18**.

12. Documents Establishing Eligibility of the Goods and Conformity to Bidding documents

12.1 To establish the conformity of the bidder to the Bidding document, the Bidder shall furnish as part of its Bids the documentary evidence that Goods provided conform to the technical specifications and standards.

13. Documents Establishing Eligibility and Qualification of the Bidder

13.1 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.

14. Form of Bids

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

15. Bids Prices

15.1 The Bids Prices quoted by the Bidder in the Form of Bid and in the Price Schedules shall conform to the requirements specified below or exclusively mentioned hereafter in the Bidding documents.

15.2 All items in the Schedule of Requirement must be listed and priced separately in the Price Schedule(s). If a Price Schedule shows items listed but not priced and neither explicitly denied, their prices shall be construed to be included in the prices of other items.

15.3 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).

15.4 The Bid price to be quoted in the Form of Bid in accordance with **ITB 14.1** shall be the total price of the Bid.

15.5 The Bidder shall indicate on the appropriate Price Schedule, the unit prices (where applicable) and total Bid price of the Goods it proposes to provide under the contract.

15.6 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.

16. Bids Currencies

16.1 Prices shall be quoted in Pakistani Rupees unless otherwise specified in the BDS in accordance with Rule 30 (2) of the Public Procurement Rules, 2004.

17. Bids Validity Period

17.1 Bids shall remain valid for the period specified in the **BDS** after the Bid submission deadline prescribed by the Procuring Agency. A Bid valid for a shorter period shall be rejected by the Procuring Agency 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 Bids Securing Declaration as the case may be.

17.2 The procuring agency shall ordinarily be under an obligation to process and evaluate the bid and to issue letter of award within the stipulated bid validity period.

17.3 Under exceptional circumstances, prior to the expiration of the initial Bid validity period, the Procuring Agency may request the Bidders' consent to an extension of the period of validity of their Bids only once through **EPADS v2.0**, for the period not more than the period of initial bid validity. The Bid Security provided under **ITB 18** shall also be suitably extended. A Bidder may refuse the request without forfeiting its Bid security or causing to be executed its Bid Securing Declaration. A Bidder agreeing to the request will not be required nor permitted to modify its Bid, but will be required to extend the validity of its Bid Security or Bid Securing Declaration for the period of the extension.

18. Bid Security or Bid Securing Declaration

18.1 The Bidder shall furnish as part of its Bid, a Bid Security in accordance with Rule 25 of the Public Procurement Rules, 2004.

18.2 The original Bid Security shall be enclosed within the sealed envelope and to be submitted physically before closing time for submission of bids. Whereas, scanned copy of bid security shall be uploaded electronically through EPADS v2.0 before closing hours for submission of bids.

18.3 The Bidder who failed to submit the original Bids security before the submission deadline shall be disqualified straightaway.

18.4 The Bid Security or Bid Securing Declaration is required to protect the Procuring Agency against the risk of Bidder's conduct which would warrant the security's forfeiture, pursuant to **ITB 18.7**.

18.5 The Bid Security shall be denominated in the local currency, and it shall be a Bank Draft in the name of the Procuring Agency and valid for twenty-eight (28) days beyond the end of the validity of the Bid. This shall also apply if the period

for Bids/Bid Validity is extended. In either case, the form must include the complete name of the Bidder.

18.6 The Bid Security shall be payable promptly upon written demand by the Procuring Agency in case any of the conditions listed in **ITB 18** are invoked.

18.7 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 Bids Validity prescribed by the Procuring Agency pursuant to **ITB 17**. The Procuring Agency 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:

- a. the expiry of the Bid Security;
- b. the entry into force of a procurement contract and the provision of a Performance Guarantee, for the performance of the contract if such a guarantee, is required by the Bid documents;
- c. the rejection by the Procuring Agency of all Bids;
- d. the withdrawal of the Bids prior to the deadline for the submission of Bids, unless the Bids documents stipulate that no such withdrawal is permitted.

18.8 The successful Bidder's Bids Security will be discharged upon the Bidder signing the contract, or furnishing the Performance Guarantee.

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

- a. if a Bidder:
- b. withdraws its Bid during the period of Bid Validity as specified by the Procuring Agency, and referred by the Bidder on the Form of Bids except as provided for in **ITB 17.2**; or
- c. does not accept the correction of errors; or
- d. in the case of a successful Bidder, if the Bidder fails:
- e. to sign the contract; or
- f. to furnish Performance Guarantee.

19. Withdrawal, Substitution, and Modification of Bid

19.1 Before Bid submission deadline, any Bidder may withdraw, substitute, or modify its Bid after it has been submitted through EPADS v2.0. Bids requested to be withdrawn, shall be returned unopened to the Bidders through **EPADS v2.0**.

20. Format and Signing of Bid

20.1 The Bidder shall prepare and submit Bids with due diligence after carefully reading all the terms and condition **before bid submission deadline** through EPADS v2.0.

D. Submission of Bids

21. Submission of Bids through EPADS v2.0

21.1 The Technical and Financial Bids if required to submitted, shall be submitted on **EPADS v2.0**.

22. Deadline for Submission of Bids

22.1 Bids shall be received by the Procuring Agency through **EPADS v2.0** before bid submission deadline.

22.2 The Procuring Agency may, under exceptional circumstances, extend the deadline for the submission of Bids, after recording reasons in writing and in an equal opportunity manner.

In such case, all rights and obligations of the Procuring Agency and the Bidders that were previously governed by the original deadline shall thereafter be subject to the revised deadline.

E. Opening and Evaluation of Bids

23. Opening of Bids

23.1 The Bid Evaluation Committee of the Procuring Agency shall open all Bids through the EPADS v2.0, on the date and time specified in the Bid Data Sheet (BDS).

23.2 The Bid Evaluation Committee **shall generate minutes through EPADS v2.0 containing brief details of bid opening process.** The record of the Bid opening shall include, as a minimum: the name of the Bidder, the Bid price if applicable, and the presence or absence of a Bid Security or Bid Securing Declaration.

23.3 The procuring agency shall live broadcast the opening of bids on national media or on their website or digital channels, if the volume of procurement exceeds five hundred million rupees in case of goods and services and one thousand million rupees in case of works.

23.4 In case the date of opening of bid has been declared as public holiday or the procuring agency fail to open bid due to any EPADS v2.0 related issues, the submission and opening of bids shall be shifted to the next working day on the same time.

23.5 In case of Single Stage One Envelope Procedure, the Bidders names, the Bid prices, the total amount of each Bid and, the presence or absence of Bid Security, Bid Securing Declaration and such other details as the Procuring Agency may consider appropriate, will be announced by the Bid Evaluation Committee.

24. Clarification of Bids

24.1 To assist in the examination, evaluation and comparison of Bids of the Bidders, the Procuring Agency may, ask any Bidder for a clarification of its Bid including breakdown of prices.

24.2 The request for clarification and the response shall be sought through EPADS v2.0 **before three days prior to the deadline for submission of bids.** No change in the prices or substance of the Bids shall be sought, offered, or permitted.

24.3 The alteration or modification in the BIDS which in any way affect the following parameters will be considered as a change in the substance of a Bids:

1. evaluation & qualification criteria;
2. required scope of work or specifications;
3. all securities requirements;
4. tax requirements;

5. terms and conditions of Bidding documents.

6. change in the ranking of the Bidder

24.4 From the time of Bids opening to the time of Contract award if any Bidder wishes to contact the Procuring Agency on any matter related to the Bids it should do so through **EPADS v2.0**.

25. Preliminary Examination of Bids

25.1 Prior to the detailed evaluation of Bids, the Procuring Agency will determine whether each Bid:

1. meets the eligibility criteria defined in **ITB 3**;
2. has been prepared as per the format and contents defined by the Procuring Agency in the Bidding documents;
3. is accompanied by the required securities; and
4. is substantially responsive to the requirements of the Bidding documents.

25.2 The Procuring Agency's determination of a Bid's responsiveness will be based on the contents of the Bid itself.

25.3 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: -

1. affects in any substantial way the scope, quality, or performance of the Goods;
2. limits in any substantial way, inconsistent with the Bidding documents, the Procuring Agency's rights or the Bidders obligations under the Contract; or
3. if rectified, would affect unfairly the competitive position of other Bidders presenting substantially responsive Bids.

25.3 If a Bids is not substantially responsive, it will be rejected by the Procuring Agency and may not subsequently be evaluated for complete technical responsiveness.

26. Examination of Terms and Conditions; Technical Evaluation

26.1 The Procuring Agency shall examine the Bids to confirm that all terms and conditions specified in the **GCC** and the **SCC** have been accepted by the Bidder without any material deviation or reservation.

26.2 The Procuring Agency shall evaluate the technical aspects of the Bids submitted, to confirm that all requirements specified in Schedule of Requirements and Technical Specifications of the Bidding documents have been met without material deviation or reservation.

26.3 If after the examination of the terms and conditions and the technical evaluation, the Procuring Agency determines that the Bid is not substantially responsive in accordance with **ITB 25.2**, it shall reject the Bid.

27. Correction of Errors

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

1. if there is a discrepancy between unit prices and the total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail, and the total price shall be corrected, unless in the opinion of the Procuring Agency 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;
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
3. where there is a discrepancy between the amounts in figures and in words, the amount in words will govern.
4. Where there is discrepancy between grand total of price schedule and amount mentioned on the Form of Bids, the amount referred in Price Schedule shall be treated as correct subject to elimination of other errors.

27.2 The amount stated in the Bid will, be adjusted by the Procuring Agency 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 will then be rejected, and the Bid Security may be forfeited or the Bids Securing Declaration may be executed.

28. Conversion to Single Currency

28.1 To facilitate evaluation and comparison, the Procuring Agency will convert all Bids prices expressed in the amounts in various currencies in which the Bids prices are payable. For the purposes of comparison of bids quoted in different currencies, the price shall be converted into a single currency specified in the bidding documents. The rate of exchange shall be the selling rate prevailing on the date of opening of financial bids specified in the bidding documents, in accordance with weighted average customer exchange rates list issued by the State Bank of Pakistan on that day.

29. Evaluation of Bids

29.1 The Bids, quotations, or proposals shall be evaluated by the respective evaluation committees as per evaluation criteria described in the Bidding Documents in accordance with Rule 29 and 30 of the Public Procurement Rules, 2004.

1. Least Cost Based Selection (LCBS)

After meeting the requirements of eligibility, qualification and substantial responsiveness, the bid in compliance with all the mandatory (technical) specifications/requirements and/or requisite quality threshold (if any), and having lowest evaluated cost (or financial proposal) shall be considered Successful Bid.

2. Quality and Cost Based Selection (QCBS)

In such combination, there shall be some specific weightage of both the technical features and financial aspects of the proposal. The financial marks shall be awarded on the basis of inverse proportion calculations. The successful bid shall be declared, on the basis of combined evaluation.

3. Quality Based Selection (QBS)

After meeting the requirements of eligibility, qualification and substantial responsiveness the bid in compliance with all the mandatory (technical) specifications/requirements and attaining highest marks in the Technical Evaluation considering all other qualitative and/or quantitative parameters (or point rated criteria) for technical proposal(s) such as working methodology, implementation plan, resource allocation, additional functionalities, risk management approach, knowledge transfer techniques, post implementation methodology etc. shall be treated as highest ranked bid. Later on, the financial proposal of highest ranked bidder shall be opened, however, in case of failure to proceed further with such a bidder, the procuring agency may resort to second

highest bidder and so on.

29.2 In case of tie of bids, the bidders shall be provided an opportunity to offer their best and final monetary offer through EPADS v2.0. However, in no case the rates shall be higher than the original financial bids.

30. Domestic Preference

30.1 The procuring agency shall evaluate and compare bids, allow for preference to domestic bidders, while competing with the international bidders in accordance with the policies of Federal Government.

The percentage of preference, to be accorded shall be clearly mentioned in the bidding documents under the bid evaluation criteria.

31. Determination of Successful Bid

31.1 Selection technique will be adopted for determining the Successful Bid in accordance with the criteria referred in the BDS or prescribed in the separate section titled as Evaluation Criteria.

31.2 In case where the Procuring Agency adopts the Cost Based Evaluation Technique and, the Bid with the lowest evaluated price from amongst those which are eligible, compliant and substantially responsive shall be the Successful Bid.

31.3 The Procuring Agency may adopt the Quality & Cost Based Selection Technique due to the following two reasons:

1. Where the Procuring Agency knows about the main features, usage and output of the products; however not clear about the complete features, technical specifications and functionalities of the goods to be procured and requires the bidders to submit their proposals defining those features, specifications and functionalities; or
2. Where the Procuring Agency, in addition to the mandatory requirements and mandatory technical specifications, requires parameters specified in Evaluation Criteria to be evaluated while determining the quality of the goods.

31.4 In such cases, the Procuring Agency may allocate certain weightage to these factors as a part of Evaluation Criteria, and may determine the ranking of the bidders on the basis of combined evaluation in accordance with provisions of Rule 2(1)(h) of the Public Procurement Rules, 2004.

32. Abnormally Low Financial Bids

32.1 Where the Bid price is considered to be abnormally low, the Procuring Agency shall perform price analysis either during determination of Successful Bids or as a part of the post-qualification process.

32.2 The Procuring Agency may reject an Abnormally low financial bids.

32.3 In order to identify the Abnormally Low Bids (ALB) following approaches can be considered to minimize the scope of subjectivity:

1. Comparing the Bids price with the cost estimate;
2. Comparing the Bids price with the Bids offered by other Bidders submitting substantially responsive Bids; and
3. Comparing the Bids price with prices paid in similar contracts in the recent past either government- or development partner-funded.

32.4 The Procuring Agency will determine to its satisfaction whether the Bidder that is selected as having submitted the successful bid is qualified to perform the contract satisfactorily.

32.5 The determination will take into account the Bidder's financial, technical, and production capabilities. It will be based upon an examination of the documentary evidence of the Bidder's qualifications submitted by the Bidder, as well as such other information as the Procuring Agency deems necessary and appropriate. Factors not included in these Bidding documents shall not be used in the evaluation of the Bidders' qualifications.

32.6 Procuring Agency may seek "Certificate for Independent Price Determination" from the Bidder and the results of reference checks may be used in determining an 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.

32.7 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 Bids, in which event the Procuring Agency will proceed to the next ranked Bidder to make a similar determination of that Bidder's capabilities to

perform satisfactorily.

F. Award of Contract

33. Criteria of Award

33.1 The Procuring Agency will award the Contract to the Bidder whose Bids has been determined to be substantially responsive to the Bidding documents and who has been declared as Most Advantageous Bidder.

34. Negotiations

34.1 The procuring agency shall not engage in negotiations with respect to scope and price with the bidder except when the procuring agency conducts a procurement using direct **or negotiated** contracting or a request for proposals with evaluation based on quality alone.

34.2 The procuring agency may negotiate with the most advantageous bid with a view to streamline the work or task execution, at the time of contract finalization on methodology, work plan, staffing, finalizing payment arrangements, delivery arrangements, minor amendments to the special conditions of the contract.

35. Procuring Agency Right to reject all bids

35.1 The Procuring Agency reserves the right to reject all bids or proposals at any time prior to the issuance of the Letter of Award, without incurring any liability, in accordance with Rule 33 of the Public Procurement Rules, 2004.

36. Procuring Agency's Right to Vary Quantities at the Time of Award

36.1 The Procuring Agency reserves the right at the time of contract award to increase or decrease the **quantity of** Goods originally specified in these Bidding documents provided this does not exceed **by** 15%, without any change in unit price or other terms and conditions of the Bids and Bidding documents.

37. Notification of Award

37.1 Prior to the award of contract, the procuring agency shall announce and publish the result of bid evaluation on **EPADS v2.0** in accordance with Rule 35

of the Public Procurement Rules, 2004.

37.2 The Bidder whose Bids has been accepted will be notified of the award by the Procuring Agency prior to expiration of the Bids/Bid Validity period. The Letter of Award will state the sum that the Procuring Agency will pay the successful Bidder in consideration for the delivery of Goods as prescribed by the Contract (hereinafter and in the Contract called the "Contract Price).

37.3 The Letter of award will constitute the formation of the Contract, subject to the Bidder furnishing the Performance Guarantee and signing of the contract.

38. Signing of Contract

38.1 Promptly after issuance of Letter of award, Procuring Agency shall send the successful Bidder the draft Contract, incorporating all terms and conditions as agreed by the parties to the contract.

38.2 Immediately after the Redressal of grievance by the GRC (if any), mandatory standstill period in accordance with Rule 35 of the Public Procurement Rules, 2004 and **after fulfillment of all condition's precedent** of the Contract Form, the successful Bidder and the Procuring Agency shall sign the Contract.

39. Corrupt & Fraudulent Practices

39.1 Procuring Agencies (including beneficiaries of Government funded projects and procurement) as well as Bidders/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.

F. Grievance Redressal & Complaint Review Mechanism

40. Constitution of Grievance Redressal

40.1 The Grievance Redressal Committee shall address the grievance, if any submitted by any party, including the bidder, in accordance with Rule 48 of the Public Procurement Rules, 2004 to be read with Redressal of Grievances Regulations, 2021.

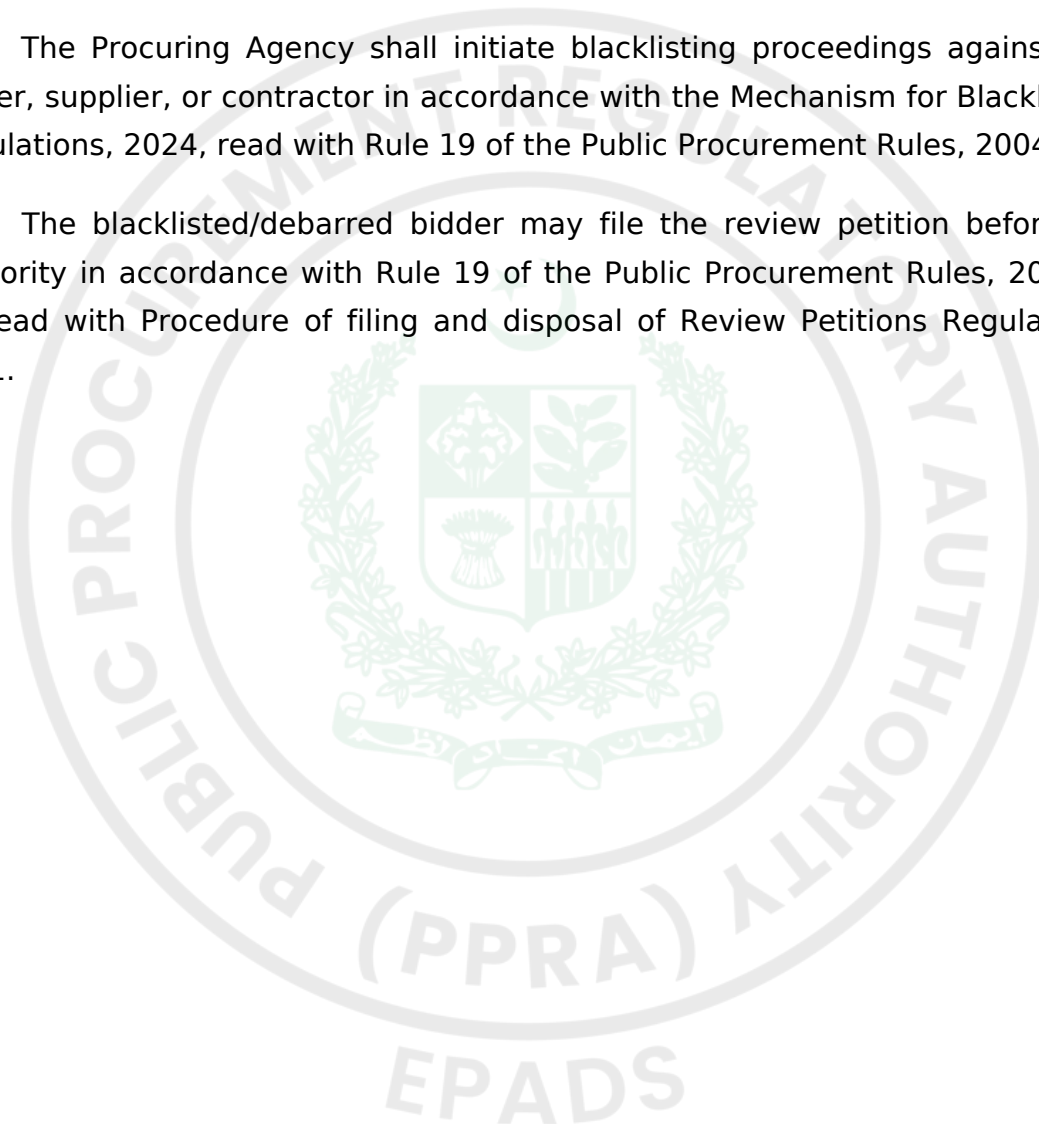
40.2 In case if any party or the bidder is not satisfied with the decision of the GRC or if it fails to decide within ten days, the bidder or the party may file an appeal before the Appellate Committee of the Authority in accordance with Rule 48 of the Public Procurement Rules, 2004 to be read with Redressal of Grievances Regulations, 2021.

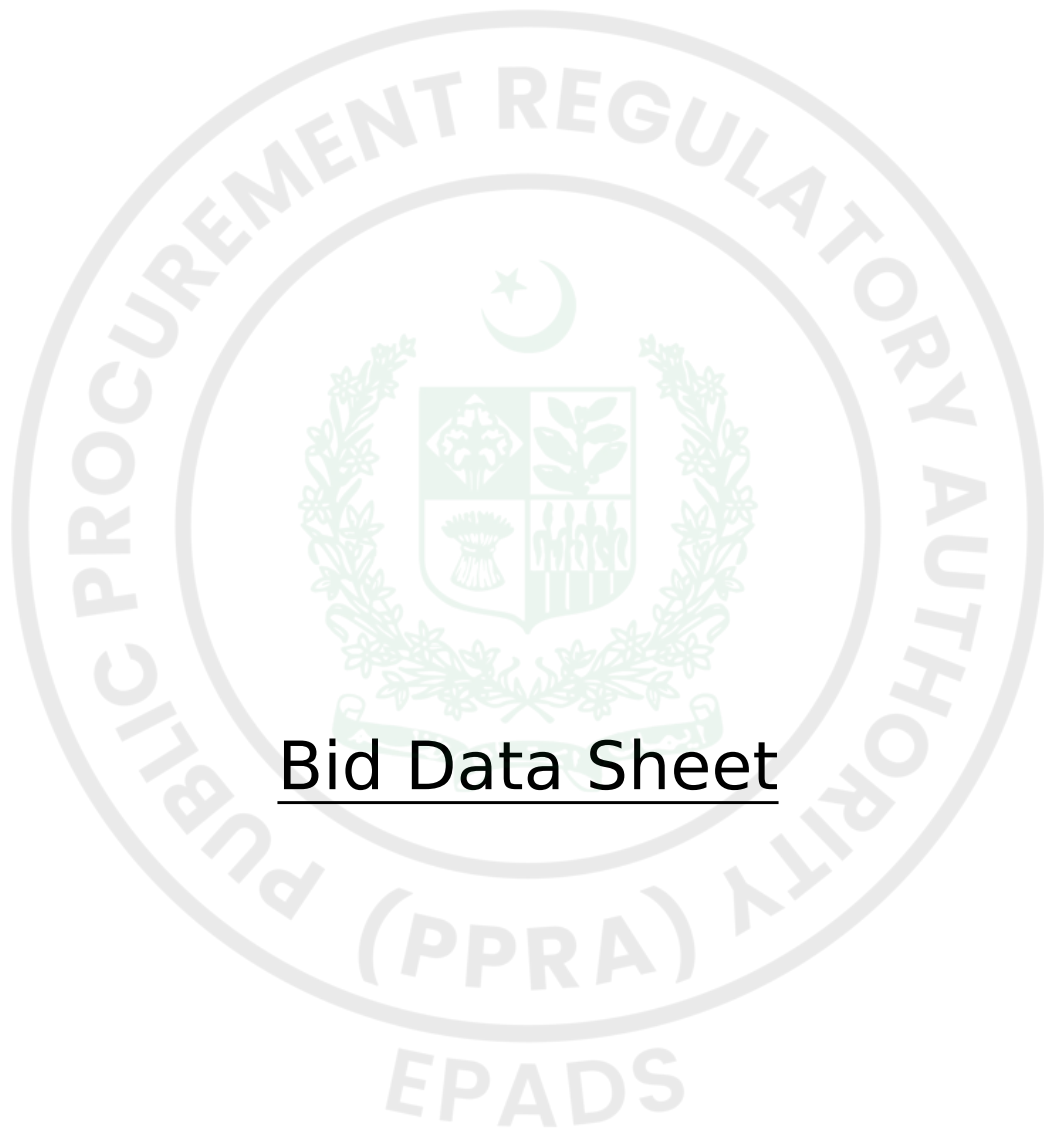
G. Mechanism of Blacklisting

41. Mechanism of Blacklisting

41.1 The Procuring Agency shall initiate blacklisting proceedings against any bidder, supplier, or contractor in accordance with the Mechanism for Blacklisting Regulations, 2024, read with Rule 19 of the Public Procurement Rules, 2004.

41.2 The blacklisted/debarred bidder may file the review petition before the Authority in accordance with Rule 19 of the Public Procurement Rules, 2004 to be read with Procedure of filing and disposal of Review Petitions Regulations, 2021.





Bid Data Sheet

Bids Data Sheet (BDS)

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

BDS Clause Number

ITB Number

Amendments of, and Supplements to, Clauses in the Instruction to Bidders

A. Introduction

BDS Clause Number 1

ITB Number 1.1

Name of Procuring Agency: **Pakistan Cricket Board (Pakistan Cricket Board (PCB))**

The subject of procurement is: **Supply, Installation, Testing, Commissioning, Including Civil Works, Operation & Maintenance of Diesel Generator Sets at Gaddafi Stadium, Lahore.**

Expected commencement date: **Friday, October 30, 2026**

BDS Clause Number 2

ITB Number 2.1

Financial year for the operations of the Procuring Agency: **2026-27**

Name and identification number of the Contract: **P141480**

BDS Clause Number 3

ITB Clause Number 3.1

JV/Consortium or Association Allowed: **Yes**

Number of JV/Consortium Members: **2**

see section of eligibility criteria.

B. Bidding Documents

BDS Clause Number 4

ITB Number 8.1

The Bidders may seek clarifications through **EPADS v2.0** : Clarification Date: Wednesday, October 14, 2026

C. Preparation of Bids

BDS Clause Number 5

ITB Number 10.1

The Language of all correspondences and documents related to the Bids shall be in: **English**

List of documents required along with the bid: No

BDS Clause Number 6

ITB Number 11.1

Items/Lots and threre related documents:

See section items and Lots

BDS Clause Number 7

ITB Number 12.1

Items / Lots Specifications:

see section of items specifications.

BDS Clause Number 8

ITB Number 15.6

The price shall be **Fixed**.

BDS Clause Number 9

ITB Number 16.1

Currency of the Bids shall be : **PKR**

BDS Clause Number 10

ITB Number 17.1

The Bids/Bid Validity period shall be: **90 Days**

BDS Clause Number 11

ITB Number 18.1

The amount of Bid Security shall be as defined in Bid Security Section for items and lots given in **BDS 6**

The Bid Security shall be in the form of: **Pay Order, Bank Guarantee**

D. Submission of Bids

BDS Clause Number 12

ITB Number 20.1

Bid shall be submitted online on EPADS v2.0 whereas hard copy of the bid security should be submitted to the following;

Procurement Office, Pakistan Cricket Board, Gaddafi Stadium, Lahore., Lahore City, Lahore (District), Lahore Division (Division), Punjab (Province). before bid submission deadline.

Bids that are not submitted on EPADS v2.0 shall be disqualified.

The deadline for Bids submission is: **Wednesday, October 21, 2026 11:00 AM**

E. Opening and Evaluation of Bids

BDS Clause Number 13

ITB Number 23.1

The Bids opening shall take place on **EPADS v2.0**.

Day : **Wednesday**

Date: **Wednesday, October 21, 2026**

Time : **11:30 AM**

BDS Clause Number 14

ITB Number 31.1

Selection technique adopted will be: **Least Cost Based Selection (LCBS)**
see Evaluation Criteria

F. Review of Procurement Decisions

BDS Clause Number 15

ITB Number 41.1

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

Arbitrator shall be appointed by mutual consent of the both parties.



Eligibility Criteria

Bidder's Type	Required Registration
Individual / Individual Consultant	NADRA CITIZENSHIP (CNIC/NICOP)
Sole Proprietorship	FBR (NTN)
Partnership Firm	FBR (GSTN)
Company (Private Limited)	SECP
Company (Public Limited)	

Eligibility Criteria	Document
A Bidder may be a natural person, company, firm, public or semi-public agency of Pakistan or any foreign country, or a JV, consortium, or association formed under a formal agreement on judicial papers. All members shall be jointly and severally liable for the Contract. The JV, consortium, or association shall nominate a Lead Member authorized to conduct all business during bidding and contract execution. The maximum number of members shall be as prescribed in the BDS.	No
The appointment of Lead Member in the joint venture, consortium, or association shall be confirmed by submission of a valid Power of Attorney to the Procuring Agency.	Yes
Verifiable copy of the agreement that forms a joint venture, consortium or association shall be required to be submitted as part of the Bid.	Yes

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.	No
The invitation for Bids is open to all prospective suppliers, manufacturers or authorized agents/dealers subject to any provisions of incorporation or licensing by the respective national incorporating agency or statutory body established for that particular trade or business.	No
Foreign Bidders must be registered with the appropriate national incorporating or statutory body before participating in national/international competitive tendering, except procurements by Pakistan's foreign missions. The registration process must be initiated before bid submission, with evidence submitted with the bid. Award shall remain subject to completion of the required registration.	Yes
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 meet the any of the conditions mentioned in the ITB 3.7 of the RFP (attached as annexures)	No
A Bidder may be ineligible if the bidder meets any of the conditions mentioned in the ITB 3.8 of the RFP (Attached as annexure)	No
Bidders shall provide to the Procuring Agency evidence of their eligibility, proof of compliance with the necessary legal requirements to carry out the contract effectively	No
Bidders shall provide such evidence of their continued eligibility to the satisfaction of the Procuring Agency, as the Procuring Agency shall reasonably request.	No
Bidders shall submit proposals relating to the nature, conditions and modalities of sub-contracting wherever the sub-contracting of any elements of the contract amounting to the more than ten (10) percent of the Bid price is envisaged.	No

All goods and related services to be supplied under the contract shall have their origin in eligible source countries, and all expenditures made under the contract will be limited to such goods and services. For purpose of this Bid, ineligible countries are stated in the section-4 titled as “Eligible Countries” of the RFP (Attached as annexures)	No
For purposes of this Clause, “origin” means the place where the goods are mined, grown, cultivated, produced, manufactured, or processed, or through manufacture, procession, or assembly, another commercially recognized article results that differs substantially in its basic characteristics from its imported components or the place from where the related services are/to be supplied.	No
The nationality of the supplier that supplies, assembles, distributes, or sells the goods and services shall not determine the origin of the goods.	No
To establish the eligibility of the Goods and the related services, Bidders shall fill the country of origin declarations included in the Form of Bid.	No
If so required in the BDS, the Bidder shall demonstrate that it has been duly authorized by the manufacturer of the goods to deliver in Pakistan (or in respective country in case of procurement by the Pakistani Missions abroad), the goods indicated in its Bid.	Yes

Evaluation Criteria

Eligible bidder(s) with substantially responsive bid(s) offering **Least Cost Based Selection (LCBS)** shall be consider for the award of contract(s).

Least Cost Based Selection (LCBS)

Weightage

Technical Evaluation %	
100	

Technical Marks	100
Passing Marks	50
Experience in Contracts of Similar Size and Nature	
The proposed manufacturer must have at least Thirty (30) years' experience in the manufacturing of Diesel Engine and Alternator provided in the DG Set and the Bidder must provide the documentary proof of above said experience. (Quantitative)(Doc Required)	10
In case the Bidder is not the manufacturer, the bidder must have at least ten (10) years' experience in supply & installation of the DG Sets and the Bidder must provide the documentary proof of above said experience. The bidder shall provide documentary evidence of the same. (Quantitative)(Doc Required)	10

In case the Bidder is not the manufacturer, Bidder shall submit documentary evidence on Generator manufacturer's letter head that the bidder is the authorized agent of the manufacturer for Sales, Service and After Sales Backup Support. (Quantitative)(Doc Required)	10
The Bidder must provide signed purchase orders/performance/completion certificates of 5 + similar projects (of equal/higher capacity, i.e., 150kVA, 250kVA, 350kVA, 750kVA and 1000kVA) in past 05 Years. (Quantitative)(Doc Required)	10
The Bidder must have successful experience of at least Ten (10) years for the operation and maintenance of the DG Sets having capacity equal to or greater than the specified DG Sets. (Quantitative)(Doc Required)	10
The Bidder or its proposed manufacturer must have supplied offered DG Sets (as a complete factory-assembled and coupled unit) internationally. The Bidder shall furnish documentary evidence along with the project name, client/end-user, country, manufacturer, model, rated capacity and date of supply. (Quantitative)(Doc Required)	10
The Bidder must provide Type Test Reports of applicable standards from the specified independent authorized institution/laboratory for the offered model/make of the Diesel Generator Sets as stipulated in the Specifications (Quantitative)(Doc Required)	10
Financial Soundness	
The Bidder shall have minimum average annual turnover in the last three (03) years not less than PKR 350 Million, calculated as total certified payments received for contracts in progress or completed, within the last three (03) years (Bidder shall provide the audited balance sheets and income statements containing UDIN for the last 3 years) (Quantitative)(Doc Required)	10
The Bidder's net worth, calculated as the difference between total assets and total liabilities, in the last three (03) years should be positive (Quantitative)(Doc Required)	10

he bidder shall demonstrate that it has access to, or has available, liquid assets, unencumbered real assets, lines of credit, and other financial means (independent of any contractual advance payment) sufficient to meet the construction cash flow requirements PKR 200 Million for the subject contract(s) net of the Bidders other commitments (Quantitative)(Doc Required)

10



Items/Lots

Items Without Lots :

Item	UNSPSC	Delivery Schedule	Quantity	Bid Security	Manufacturer / Dealer Authorization	Warranty
As per attached Financial bid form in RFP (attached in Annexures)	Diesel generators	Address: Procurement Office, Pakistan Cricket Board, Gaddafi Stadium, Lahore., Lahore City, Lahore (District), Lahore Division (Division), Punjab (Province). Schedule: 4 months Quantity: 10/Qty	10/Qty	15000000 PKR	--	1 Years

Related Services of Goods:

Yes

Item	UNSPSC	Related Services
As per attached Financial bid form in RFP (attached in Annexures)	Diesel generators	As defined in the RFP (attached in annexures)

Items/Lot Specification

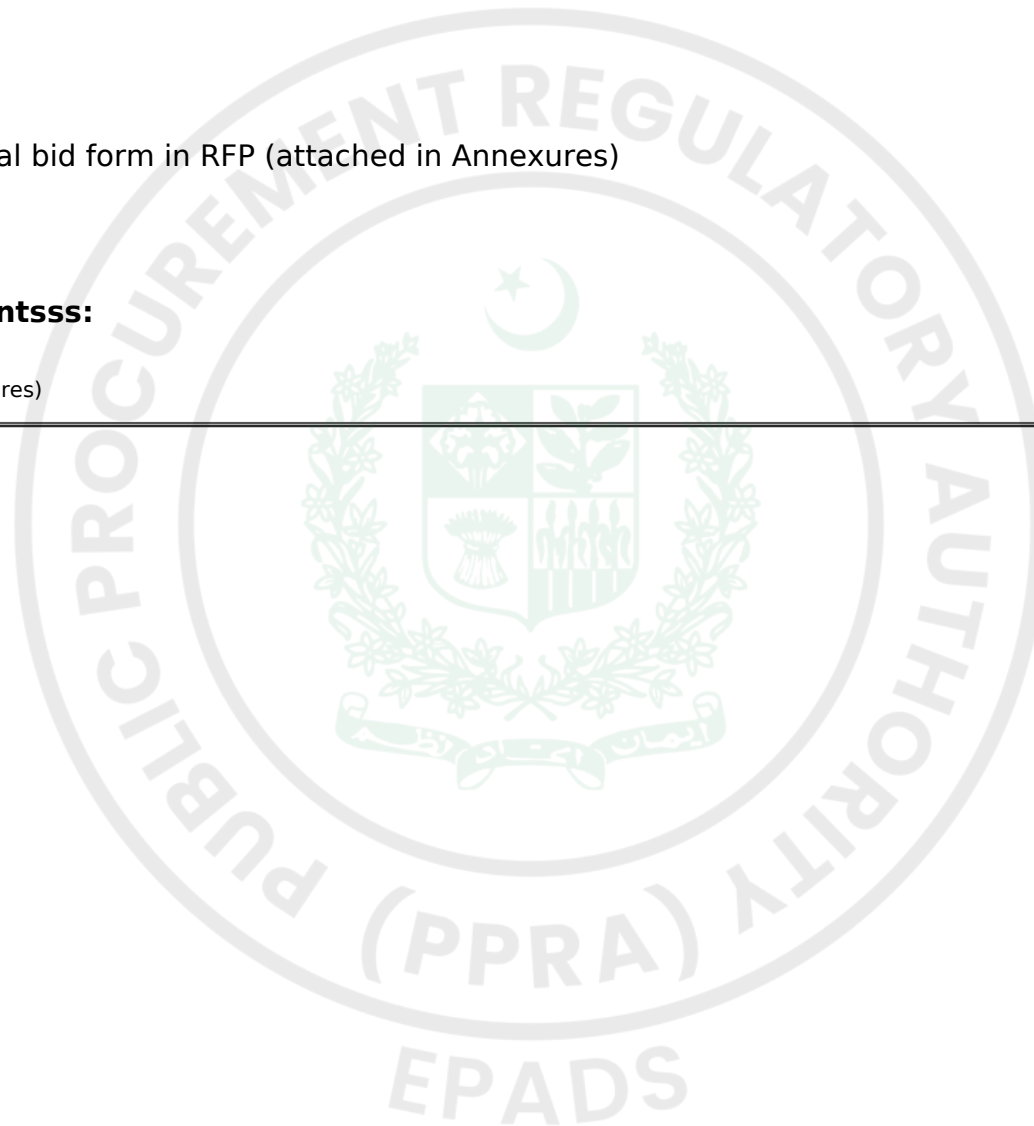
Items Without Lots :

Item: As per attached Financial bid form in RFP (attached in Annexures)

UNSPSC: Diesel generators

Specifications / Requirementss:

as per defined in RFP (attached in annexures)



Price Schedule

For Individual Items

#	Item 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

- a. "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;
- b. "Procuring Agency" means:-
 - a. any Ministry, Division, Department or any Office of the Government;
 - b. any authority, corporation, body or organization established by or under a Law or which is owned or controlled by the Government;
- c. "The Contract" means an agreement enforceable by law;
- d. "The Contract Price" means the price payable to the Bidder under the Contract for the full and proper performance of its contractual obligations;
- e. "Ancillary Services" means those services ancillary to the provision of Goods, 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 Bidder covered under the Contract;
- f. "GCC" means the General Conditions of Contract contained in this section;
- g. "SCC" means the Special Conditions of Contract by which the GCC may be amended or supplemented;
- h. "Day" means calendar day unless indicated otherwise.
- i. "Effective Date" means the date on which this Contract comes into force and effect.
- j. "The Bidder" means the individual or corporate body whose Bids to provide the Goods has been accepted by the Procuring Agency;
- k. "The Project Site," where applicable, means the place or places named in Bids Data Sheet and technical Specifications;
- l. "Government" means the Government of Pakistan;
- m. "Subcontractor" means any entity to which the Bidder subcontracts any part of the Goods.
- n. "Service" means any object of procurement other than goods or works;
- o. "Party" means the Procuring Agency or the Bidder, as the case may be, and "Parties" means both of them;
- p. "Foreign Currency" means any currency other than the currency of the country of the Procuring Agency;

q. "Completion Date" means the date of completion of the contract by the Bidder as certified by the Procuring Agency;

r. "In Writing" means communicated in written form with proof of receipt;

s. "Local Currency" means the currency of Pakistan;

2. Application and Interpretation

2.1 These General Conditions shall apply to the extent that they are not superseded by provisions of other parts of the Contract.

2.2 In interpreting these Conditions of Contract headings and marginal notes are used for convenience only and shall not affect their interpretations unless specifically stated; references to singular include the plural and vice versa; and masculine include the feminine. Words have their ordinary meaning under the language of the Contract unless specifically defined.

3. Applicable Law

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

4. Governing Language

4.1 The Contract as well as all correspondence and documents relating to the Contract exchanged between the Bidder 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.

5. Notices

5.1 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**.

6. Delivery/Location

6.1 The Goods shall be delivered to such locations as the Procuring Agency may approve and as specified in **SCC**.

7. Authorized Representatives / Authority of Member in charge

7.1 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 Bidder may be taken or executed by the officials specified in the **SCC**.

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

8. Effectiveness of Contract

8.1 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**.

9. Commencement of Services

9.1 The Bidder 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.

10. Program

10.1 Before commencement of the Services, the Bidder 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.

11. Starting Date/Expiration Date

11.1 The Bidder 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.

11.2 Unless terminated earlier pursuant to Clause **GCC 15** hereof, this Contract shall expire at the end of such time period after the Effective Date as specified in the SCC.

12. Entire Agreement

12.1 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.

13. Modification

13.1 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 Bids for modification or variation made by the other Party.

13.2 In cases of any modifications or variations, the prior written consent of the Procuring Agency is required.

14. Force Majeure

14.1 Definition

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

14.2 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.

14.3 Extension of Time

Any period within which a Party 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.

14.4 Payments

During the period of their inability to perform the Services as a result of an event of Force Majeure, the Bidder 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.

15. Termination

15.1 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 Bidder 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);

- a. If the Bidder fails to remedy a failure in the performance of its obligations hereunder, as specified in a notice of suspension;
- b. If the Bidder becomes (or, if the Bidder 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;
- c. If the Bidder fails to comply with any final decision reached as a result of arbitration proceedings;
- d. If, as the result of Force Majeure, the Bidder is unable to perform a material portion of the Services for a period of not less than sixty (60) calendar days;
- e. If the Procuring Agency, in its sole discretion and for any reason whatsoever, decides to terminate this Contract;

15.2 By the Bidder

The Bidder 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.

- a. If the Procuring Agency fails to pay any money due to the Bidder pursuant to this Contract and not subject to dispute within forty-five (45) calendar days after receiving written notice from the Bidder that such payment is overdue.
- b. If, as the result of Force Majeure, the Bidder is unable to perform a material portion of the Services for a period of not less than sixty (60) calendar days.
- c. If the Procuring Agency fails to comply with any final decision reached as a result of arbitration.
- d. 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 Bidder's notice specifying such breach.

C. Obligations of the Bidder

16. General

16.1 Standard of Performance

1. The Bidder shall deliver the product 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 Bidder 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.

16.2 Law Applicable to Goods

The Bidder shall deliver the goods 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.

17. Conflict of Interests

17.1 Bidder Not to Benefit from Commissions and Discounts.

The remuneration of the Bidder shall constitute the Bidder's sole remuneration in connection with this Contract or the Services, and the Bidder 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 Bidder 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.

17.2 Bidder and Affiliates Not to be Otherwise Interested in Project

The Bidder agree that, during the term of this Contract and after its termination, the Bidder and its affiliates, as well as any Subcontractor and any of its affiliates, shall be disqualified from providing Goods for any project resulting from or closely related to the Services.

17.3 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:

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

18. Confidentiality

18.1 Except with the prior written consent of the Procuring Agency, the Bidder and the Experts shall not at any time communicate to any person or entity any confidential information acquired in the course of the contract.

19. Insurance to be Taken Out by the Bidder

19.1 The Bidder(a) shall take out and maintain, and shall cause any Subcontractors to take out and maintain, at its (or the Subcontractors', as the case may be) own cost but on terms and conditions approved by the Procuring Agency, insurance against the risks, loss or damage, 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.

20. Bidder's Actions Requiring Procuring Agency's Prior Approval

20.1 The Bidder shall obtain the Procuring Agency's prior approval in writing before taking any of the following actions:

- (a) appointing such members of the Personnel not provided by the Bidder;
- (b) changing the Program of activities; and
- (c) any other action that may be specified in the SCC.

21. Reporting Obligations

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

22. Liquidated Damages

22.1 If the Supplier fails to deliver any or all of the Goods or to perform the Services within the period(s) specified in the Contract, the Procuring Agency shall, without prejudice to its other remedies under the Contract, deduct from the Contract Price, as liquidated damages, a sum equivalent to the percentage specified in SCC of the delivered price of the delayed Goods or unperformed Services for each week or part thereof of delay until actual delivery or performance, up to a maximum deduction of the performance security (or guarantee) specified in SCC. Once the said maximum is reached, the Procuring Agency may consider termination of the Contract pursuant to **GCC Clause 15**.

22.2 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 Bidder by adjusting the next payment certificate. The Bidder shall be paid interest on the overpayment, calculated from the date of payment to the date of repayment, at the rates specified in SCC.

22.3 Lack of performance penalty

If the Bidder 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 Bidder. The amount to be paid will be calculated as a percentage of the cost of having the Defect corrected, assessed as specified in the SCC.

23. Performance Guarantee

23.1 Within Seven (07) days from the issuance of acceptance letter from the Procuring Agency, the successful Bidder shall furnish the Performance Guarantee in shape of ----- at the discretion of the PA in the amount **specified in SCC**. In case the amount of Bids security is equal or greater than

23.2 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.

23.3 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.

23.4 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**.

24. Fraud and Corruption

24.1 The Procuring Agency requires the Supplier to disclose any commissions or fees that may have been paid or are to be paid to agents or any other party with respect to the Bidding process or execution of the Contract. The information disclosed must include at least the name and address of the agent or other party, the amount and currency, and the purpose of the commission, gratuity or fee.

25. Sustainable Procurement

25.1 The Bidder shall conform to the sustainable procurement contractual provisions, if and as specified in the SCC.

D. Bidder's Personnel

26. Description of Personnel

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

27. Removal and/or Replacement of Personnel

27.1 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 Bidder, it becomes necessary to replace any of the Key Personnel, the Bidder shall provide as a replacement a person of equivalent or better qualifications.

27.2 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 Bidder 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.

27.3 The Bidder 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

28. Assistance and Exemptions

28.1 The Procuring Agency shall use its best efforts to ensure that the Government shall provide the Bidder such assistance and exemptions as specified in the SCC.

29. Change in the Applicable Law

29.1 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 related Services rendered by the Bidder, then the remuneration and reimbursable expenses otherwise payable to the Bidder 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.

30. Services and Facilities

30.1 The Procuring Agency shall make available to the Bidder and the Experts, for the purposes of the Services and free of any charge, the services, facilities and property described , at the times and in the manner specified in the SCC or terms of reference.

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

F. Payments to the Bidder

31. Contract Price

31.1 The price payable shall be in Pakistani Rupees unless otherwise specified in the SCC. Prices charged by the Supplier for Goods delivered under the Contract shall not vary from the prices quoted by the Supplier in its Bid.

32. Terms and Conditions of Payment

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

32.2 Unless otherwise stated in the SCC, the advance payment shall be made against the provision by the Bidder 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 Bidder have submitted an invoice to the Procuring Agency specifying the amount due.

33. Currency of Payment

33.1 Any payment under this Contract shall be made in the currency(ies) specified in the SCC.

G. Quality Control

34. Identifying Defects

34.1 The principle and modalities of Inspection of the Goods by the Procuring Agency shall be as indicated in the SCC. The Procuring Agency shall check the Bidder's performance and notify him of any Defects that are found. Such checking shall not affect the Bidder's responsibilities. The Procuring Agency may instruct the Bidder 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.

35. Correction of Defects, and

Lack of Performance Penalty

35.1 The Procuring Agency shall give notice to the Bidder 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.

35.2 Every time notice a Defect is given, the Bidder shall correct the notified Defect within the length of time specified by the Procuring Agency's notice.

35.3 If the Bidder 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 Bidder will pay this amount, and a Penalty for Lack of Performance.

36. Taxes and Duties

36.1 A Supplier shall be entirely responsible for all taxes, duties, fees, etc., incurred until delivery of the contracted Goods to the Procuring Agency.

H. Settlement of Disputes

37. Alternate Dispute Resolution

37.1 The disputes between the parties to the contract may be settled in accordance with Public Procurement Rules, 2004.

37.2 The procuring agency shall refer the matter to the Chief Justice Islamabad High Court or Managing Director PPRA or the Secretary Ministry of Law & Justice for appointment of Arbitrator.

37.3 The fee for the Arbitrator shall be specified in Pak Rupees as determined by the appointing authority which shall be borne and shared equally by the contracting parties.



Special Conditions of Contract

SECTION VIII. SPECIAL CONDITIONS OF CONTRACT

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

Number of GC Clause

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

Number of GC Clause 1

Definitions

The Procuring Agency is: Pakistan Cricket Board (Pakistan Cricket Board (PCB)), Assistant Manager Procurement Procurement Office, Pakistan Cricket Board, Gaddafi Stadium, Lahore., Lahore City, Lahore (District), Lahore Division (Division), Punjab (Province).

The Supplier is:

The title of the subject procurement is: Supply, Installation, Testing, Commissioning, Including Civil Works, Operation & Maintenance of Diesel Generator Sets at Gaddafi Stadium, Lahore.

Number of GC Clause 3

Applicable/Governing Law:

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

Number of GC Clause 4

Language:

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

Number of GC Clause 5

Notices:

The addresses for the notices are:

Procuring Agency:

Pakistan Cricket Board (Pakistan Cricket Board (PCB)), Assistant Manager Procurement Procurement Office, Pakistan Cricket Board, Gaddafi Stadium, Lahore., Lahore City, Lahore (District), Lahore Division (Division), Punjab (Province).
+92-324-401-4858
Muhammad.zarnab@pcb.com.pk

Contractor/ Bidder:

[Name, address and telephone number].

The Contractor/ Bidder's Representative(s)

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

Number of GC Clause 7.1

The Authorized Representatives are:

For the Procuring Agency:

Pakistan Cricket Board (Pakistan Cricket Board (PCB)), Assistant Manager Procurement
Procurement Office, Pakistan Cricket Board, Gaddafi Stadium, Lahore., Lahore City, Lahore (District),
Lahore Division (Division), Punjab (Province).

+92-324-401-4858

Muhammad.zarnab@pcb.com.pk

For the Bidder:

Name:

Designation:

Address:

Number of GC Clause 8

Effectiveness of the contract

Number of GC Clause 9

Commencement of Contract:

Number of GC Clause 11.2

Expiration of Contract:

Number of GC Clause 15

Termination

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

Number of GC Clause 17

Conflict of Interest:

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

Number of GC Clause 22

Liquidated Damages

If the Bidder fails to provide services as required under the contract or in case of any data loss/data breach or any incident compromising the data security or other such failures related to any services, the Bidder shall pay to the Procuring Agency as Liquidated Damages at a rate of **0.25% to 10.00%** of the Contract value, in accordance with the extent of performance failure & the cost of investigating such incidents as judged by the Authority.

Number of GC Clause 23

Performance Guarantee:

The amount of performance guarantee shall be **10.00%** of the contract price in acceptable form of **Bank Guarantee**

Number of GC Clause 32

Payment terms:

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

Number of GC Clause 33

Currency of Payment:

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

Number of GC Clause 34

Identifying Defects:

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

Inspections & Tests Requirements

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

For Physical Fitness having No Damages (Certificate from supplier)

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

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

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

Delivery & Documents

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

Copy of Delivery note

Copies of the packing list identifying contents of each package;

Insurance Certificate;

Manufacturer's or Supplier's Valid Warranty Certificate;

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

Certificate of Origin.

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

Number of GC Clause 37

Following is the guidance for Dispute Resolution

- i. If any dispute of any kind whatsoever shall arise between the Authority and the Bidder in connection with or arising out of the Contract, 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.
- ii. At future of negotiation the dispute shall be resolved through mediation and mediator shall be appointed with the mutual consent of the both parties.
- iii. 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.
- iv. 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.
- v. 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.

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 Islamabad. The award of the arbitrator shall be final and shall be binding on the parties.





Bid Securing Declaration

Form 9: Bid Securing Declaration

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

Bid No.: **P141480**

To: **Pakistan Cricket Board (Pakistan Cricket Board (PCB)), Assistant Manager Procurement Office, Pakistan Cricket Board, Gaddafi Stadium, Lahore., Lahore City, Lahore (District), Lahore Division (Division), Punjab (Province).**

We, the undersigned, declare that:

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

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

1. have withdrawn or modified our Bid during the period of Bid Validity specified in the Form of Bid;
2. Disagreement to arithmetical correction made to the Bid price; or
3. having been notified of the acceptance of our Bid by the Procuring Agency during the period of Bid Validity, (i) failure to sign the contract if required by Procuring Agency to do so or (ii) fail or refuse to furnish the Performance Security or to comply with any other condition precedent to signing the contract specified in the Bidding Documents.

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

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



Contract Form

SECTION IX: CONTRACT FORMS

THIS AGREEMENT made the ____ day of _____ 20____ between **Pakistan Cricket Board (Pakistan Cricket Board (PCB)), Assistant Manager Procurement Procurement Office, Pakistan Cricket Board, Gaddafi Stadium, Lahore., Lahore City, Lahore (District), Lahore Division (Division), Punjab (Province).**

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

WHEREAS the Procuring Agency invited Bids for provision of goods, viz., **Supply, Installation, Testing, Commissioning, Including Civil Works, Operation & Maintenance of Diesel Generator Sets at Gaddafi Stadium, Lahore. (P141480)** 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.

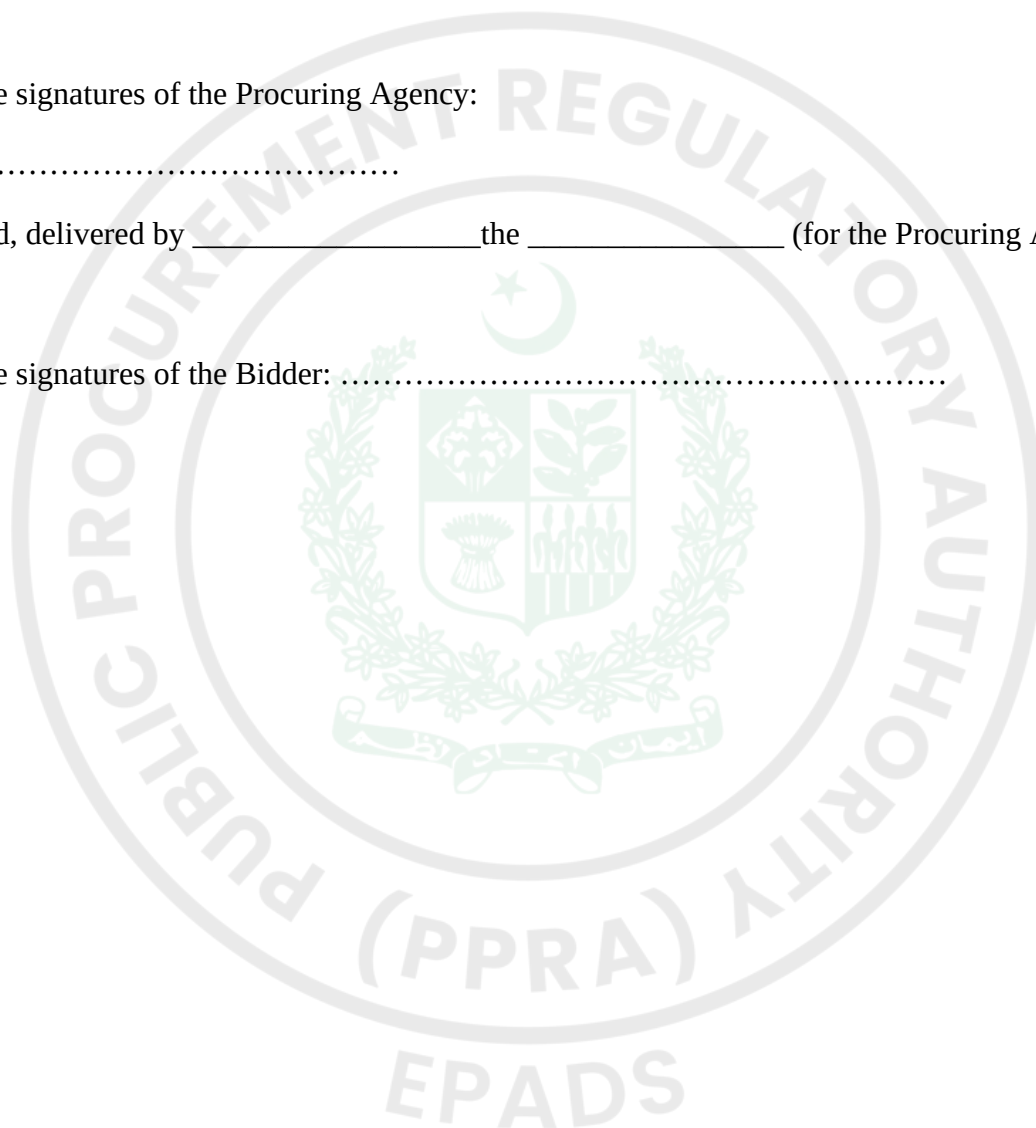
Signed, sealed, delivered by _____ the _____ (for the Procuring Agency)

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: **Pakistan Cricket Board (Pakistan Cricket Board (PCB)), Assistant Manager Procurement Procurement Office, Pakistan Cricket Board, Gaddafi Stadium, Lahore., Lahore City, Lahore (District), Lahore Division (Division), Punjab (Province).**

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

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

AND WHEREAS we have agreed to give the Bidders guarantee:

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

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

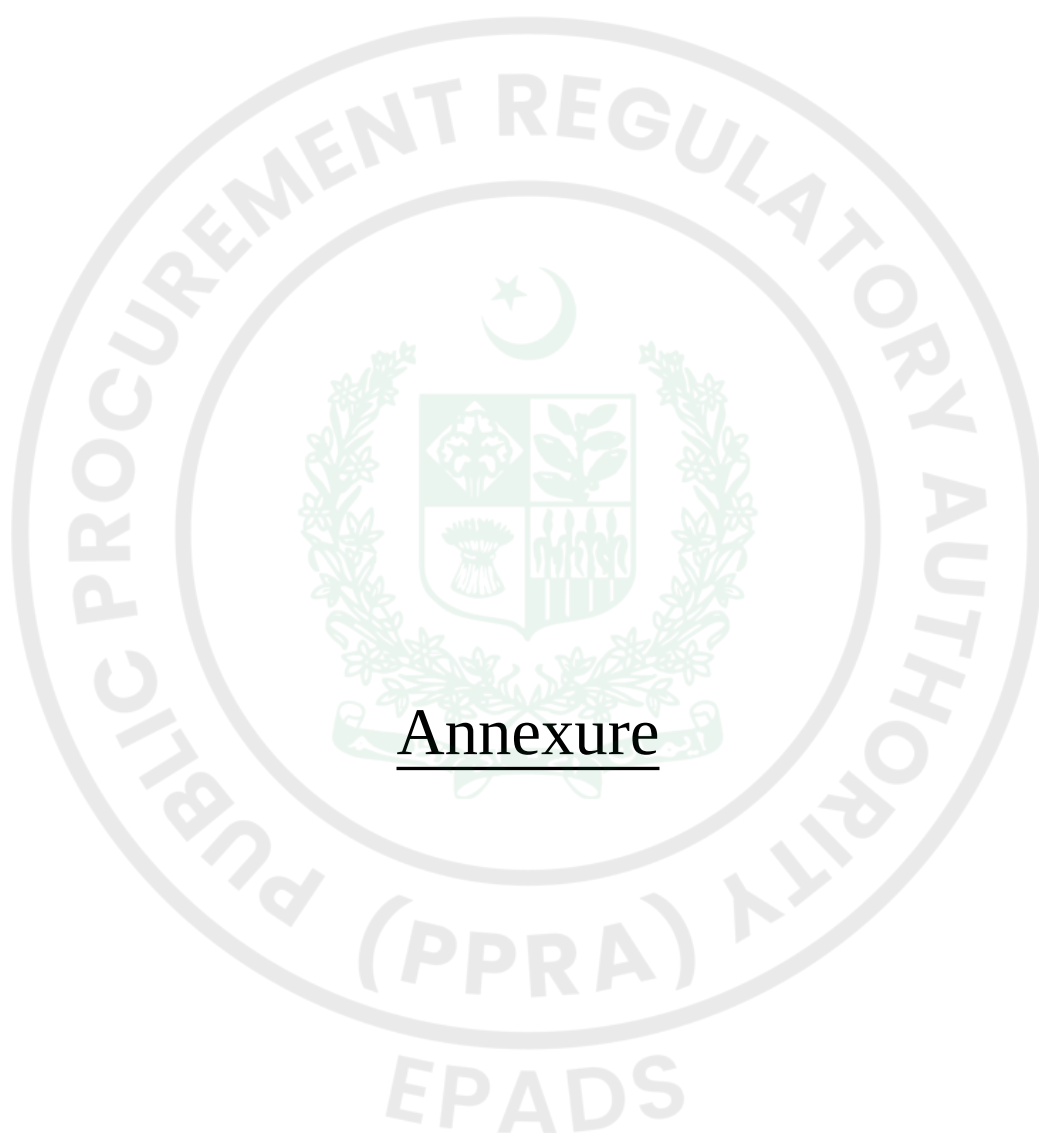
Signature and seal of the Guarantors

[name of bank or financial institution]

[address]

[date]





Annexure

RFP

RFP

Information (Read-Only)

See Form Under Additional Forms and Documents: **RFP** (page number: 71)





Procurement Forms







Additional Forms and Documents



PAKISTAN CRICKET BOARD

**Bidding Documents
for
Supply, Installation, Testing, Commissioning, Including
Civil Works, Operation & Maintenance of Diesel
Generator Sets at Gaddafi Stadium, Lahore**

September 2026

Bidding Documents for Supply, Installation, Testing, Commissioning, Including Civil Works, Operation & Maintenance of Diesel Generator Sets at Gaddafi Stadium, Lahore

PART-A – BIDDING PROCEDURE & REQUIREMENTS

Section I - Invitation to e-Bid

Section II- Instructions to Bidders (ITB)

This Section provides information to help Bidders prepare their Bids. Information is also provided on the submission, opening, and evaluation of Bids and on the award of Contracts.

Section III- Bid Data Sheet (BDS)

This Section includes provisions specific to procurement and to supplement Section-II, Instructions to Bidders.

Section IV - Eligible Countries

This Section contains information regarding eligible countries.

Section V - Technical Specifications, Schedule of Requirements

This Section includes the details of specifications for the goods to be procured and schedule of requirements.

Section VI - Standard Forms

This Section includes the standard forms for the Bid Submission, Price Schedules, and Bid Security etc. These forms are to be completed and submitted by the Bidder as part of its Bid.

PART-B – CONDITIONS OF CONTRACT AND CONTRACT FORMS

Section VII - General Conditions of Contract (GCC)

This Section includes the general clauses to be applied in this Contract.

Section VIII - Special Conditions of Contract (SCC)

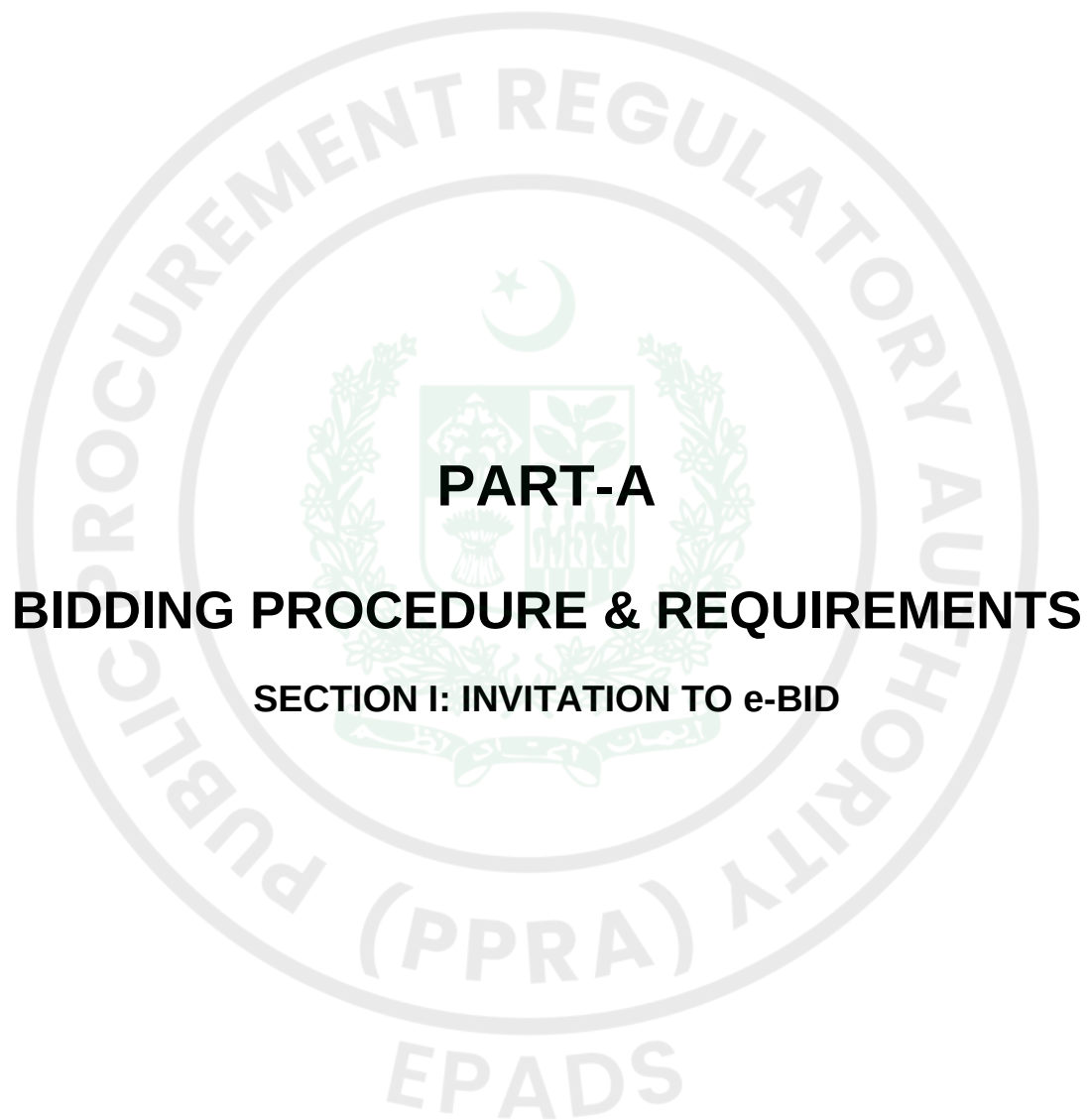
This Section consists of Contract data and specific provisions which contains clauses specific to this Contract.

Section IX - Contract Forms

This Section contains forms which, once completed, will become part of the Contract. The form for Performance Security will be submitted by the successful bidder to whom Letter of Acceptance is issued, before the award of Contract.

Integrity Pact

The successful bidder shall be required to furnish Integrity Pact as per the attached format.





Supply, Installation, Testing, Commissioning, Including Civil Works, Operation & Maintenance of Diesel Generator Sets at Gaddafi Stadium, Lahore

INVITATION TO e-BID

Date:

1. This Invitation to e-Bid follows the Procurement Advertisement of the subject Project/Procurement which appeared in in the daily newspapers.
2. The Procuring Agency has reserved the funds for the procurement planned during the financial year 2026-27. It is intended that part of the proceeds of the fund will be used to cover eligible payment under the Contract for the Supply, Installation, Testing, Commissioning, Including Civil Works, Operation & Maintenance of Diesel Generator Sets at Gaddafi Stadium, Lahore.
3. The Pakistan Cricket Board now invites e-Bids through EPADS 2 (WWW.EPADS.GOV.PK) from the eligible suppliers, manufacturers or authorized agents/dealers for the Supply, Installation, Testing, Commissioning, Including Civil Works, Operation & Maintenance of following Diesel Generator Sets at Gaddafi Stadium, Lahore.
 - 150 kVA DG Set (For Small Digital Screen)
 - 250 kVA DG Set (For Big Digital Screen)
 - 350 kVA DG Set (For Flood Lights on Poles)
 - 750 kVA DG Set (For Far End Building)
 - 1000 kVA DG Set (For Main & Pavilion Building)
4. The bidding shall be conducted in line with the Single Stage – Two Envelope procedure of the Public Procurement Rules, 2004 and any Regulations, Regulatory Guides, Procurement Guidelines or Instructions issued by the Authority (from time to time), and is open to all potential bidders.
5. Electronic copy of the Bidding Documents containing detailed terms and conditions, specifications and requirements etc. are available for the registered Bidders on EPADS 2 (WWW.EPADS.GOV.PK), Public Procurement Regulatory Authority (PPRA) website www.ppra.org.pk and on the Procuring Agency's website www.pcb.com.pk.
6. All Bids must be accompanied by a Bid Security in an acceptable form in the amount of PKR 15,000,000 (Pak Rupees Fifteen million only).
7. The Bids must be submitted through EPADS 2 (WWW.EPADS.GOV.PK) on or before September 04, 2026 by 1100 hours. The Bids, not submitted through EPADS 2 (WWW.EPADS.GOV.PK), will not be entertained by the Procuring Agency. Bid Security in original must be submitted by the Bidders to the Procuring Agency at the address given below on or before the above mentioned deadline for submission of Bids otherwise such Bid shall be rejected. Copy of the original Bid Security must be uploaded through EPADS 2 (WWW.EPADS.GOV.PK) online portal along with the Technical Proposal.

8. The Technical Proposal of the Bids will be opened through EPADS 2 (WWW.EPADS.GOV.PK) promptly thereafter in public and in the presence of Bidders' representatives who choose to attend in the opening at the office given below.

**Director, Infra & Real Estate
Pakistan Cricket Board
Gaddafi Stadium, Ferozepur Road, Lahore
Phone: 042-3571-7231-4, Fax: 042-3571-1860**



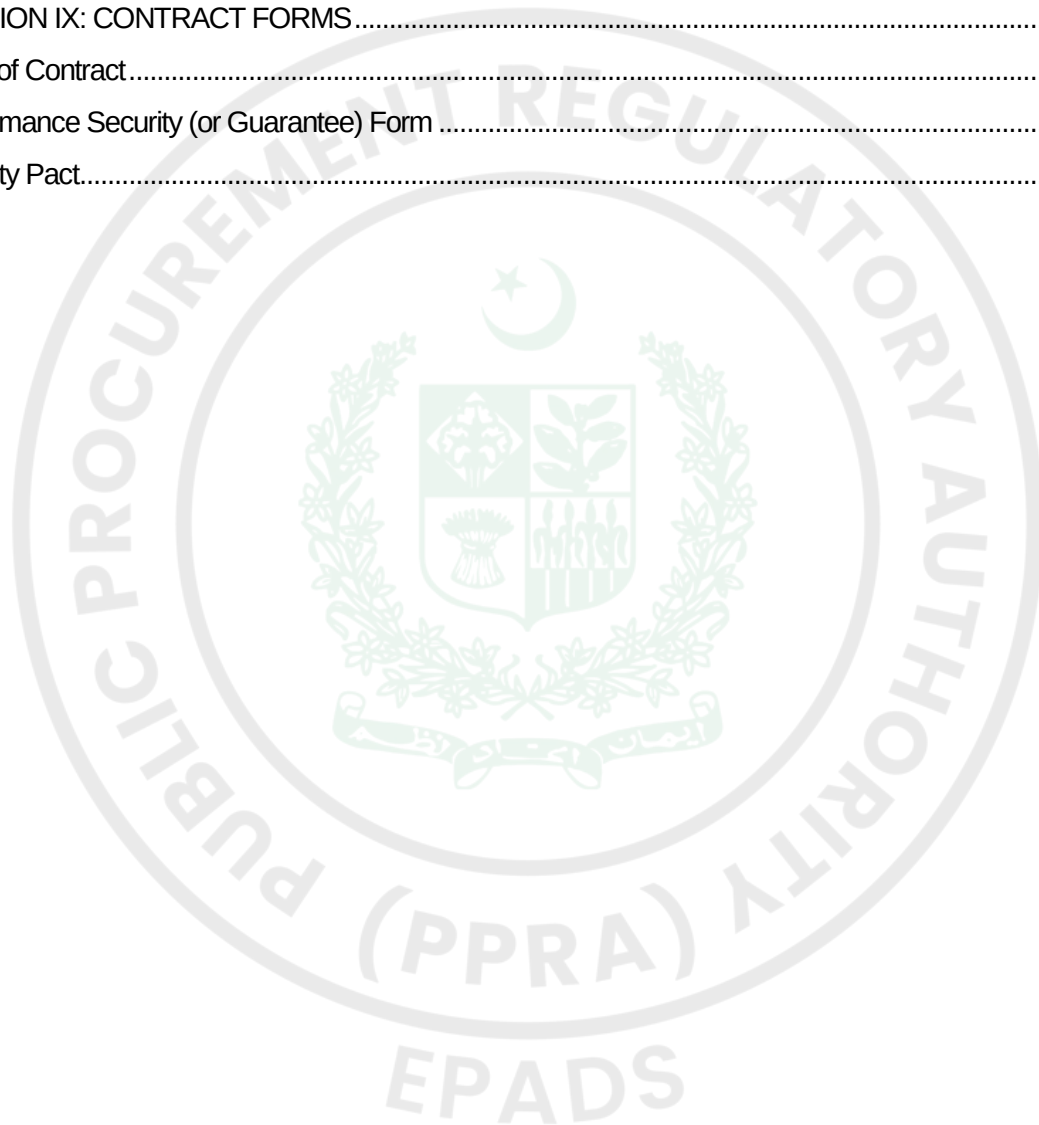
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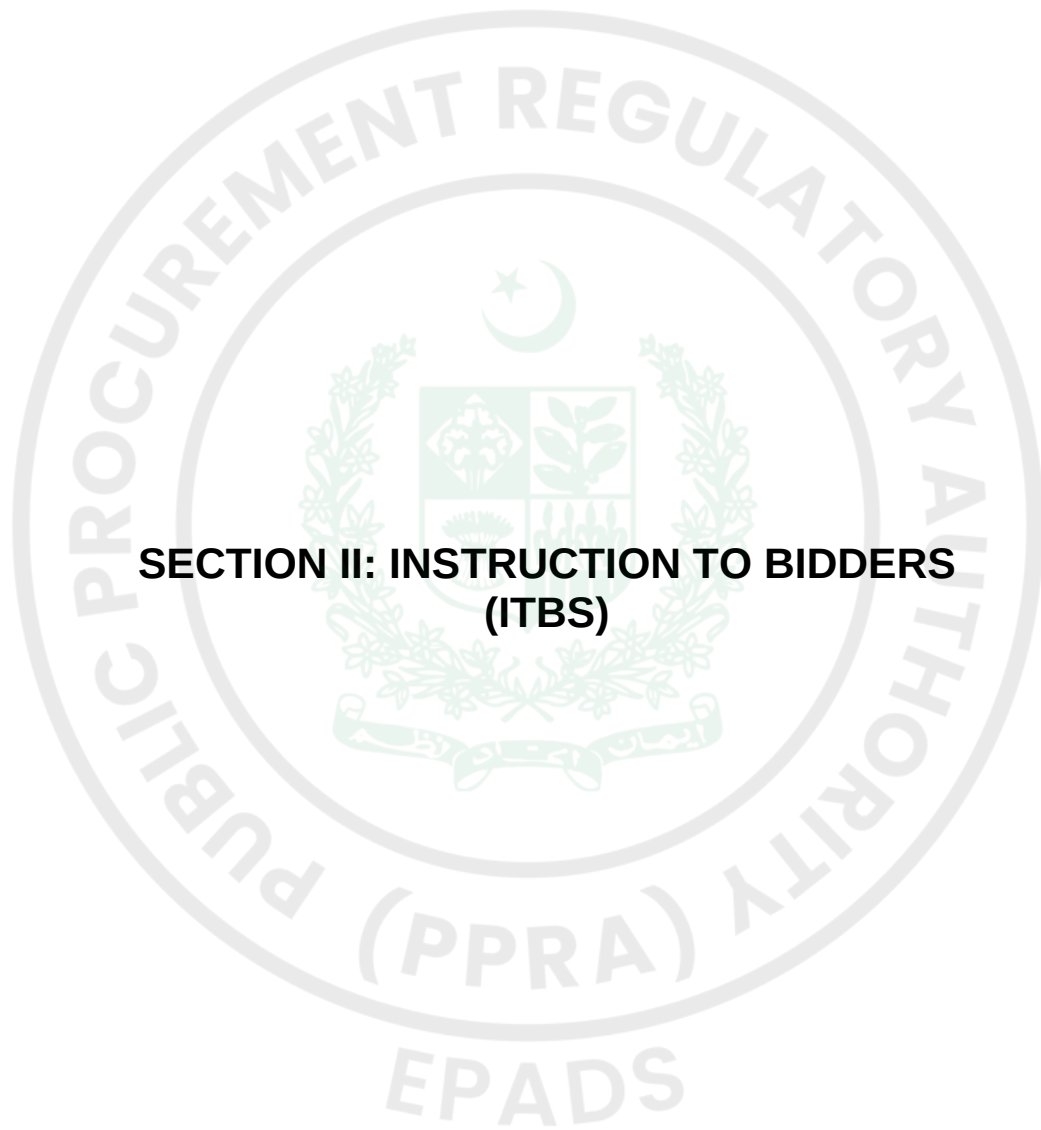
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SECTION II: INSTRUCTION TO BIDDERS (ITBS)

A. INTRODUCTION

1. Scope of Bid	1.1. The Procuring Agency (PA), as indicated in the Bid Data Sheet (BDS) invites Bids for the provision of Goods as specified in the BDS and Section V - Technical Specifications & Schedule of Requirements. The successful Bidders will be expected to deliver the goods within the specified period and timeline(s) as stated in the BDS.
2. Source of Funds	2.1. Source of funds is referred in Clause-2 of Invitation for Bids.
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, consortium, or association. In the case of a joint venture, consortium, or association, 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, consortium, or association 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, consortium, or association during the Bidding process, and in case of award of contract, during the execution of contract. The limit on the number of members of JV or Consortium or Association is prescribed in BDS. 3.2. The appointment of Lead Member in the joint venture, consortium, or association shall be confirmed by submission of a valid Power of Attorney to the Procuring Agency. 3.3. Verifiable copy of the agreement that forms a joint venture, consortium or association shall be required to be submitted as part of the Bid. 3.4. 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. 3.5. The invitation for Bids is open to all prospective suppliers, manufacturers or authorized agents/dealers subject to any provisions of incorporation or licensing by the respective national incorporating agency or statutory body established for that particular trade or business. 3.6. Foreign Bidders must be locally registered with the appropriate national incorporating body or the statutory body, before participating in the national/international competitive tendering with the exception of such procurements made by the foreign missions of Pakistan. For such purpose the bidder must have to initiate the registration process before the bid submission and the necessary evidence shall be submitted to the procuring agency along with their bid, however, the final award will be

	subject to the complete registration process. 3.7. 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: a) 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 to provide consulting services for the preparation of the design, specifications and other documents to be used for the procurement of the goods to be purchased under this Invitation for Bids; b) have controlling shareholders in common; or c) receive or have received any direct or indirect subsidy from any of them; or d) have the same legal representative for purposes of this Bid; or e) 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 regarding this Bidding process; or f) Submit more than one Bid in this Bidding process. 3.8. A Bidder may be ineligible if – a) he is declared bankrupt or, in the case of company or firm, insolvent; b) 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; c) legal proceedings are instituted against such Bidder involving an order suspending payments and which may result, in accordance with the national laws, in a declaration of bankruptcy or in any other situation entailing the total or partial loss of the right to administer and dispose of the property; d) the Bidder is convicted, by a final judgment, of any offence involving professional conduct; e) the Bidder is blacklisted and hence debarred due to involvement in corrupt and fraudulent practices, or performance failure or due to breach of bid securing declaration; f) the firm, supplier and contractor is blacklisted or debarred by a foreign country, international organization, or other foreign institutions for the period defined by them. 3.9. Bidders shall provide to the Procuring Agency evidence of their eligibility, proof of compliance with the necessary legal requirements to carry out the contract effectively.
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	3.10. Bidders shall provide such evidence of their continued eligibility to the satisfaction of the Procuring Agency, as the Procuring Agency shall reasonably request. 3.11. Bidders shall submit proposals relating to the nature, conditions and modalities of sub-contracting wherever the sub-contracting of any elements of the contract amounting to the more than ten (10) percent of the Bid price is envisaged.
4. Eligible Goods and Related Services	4.1. All goods and related services to be supplied under the contract shall have their origin in eligible source countries, and all expenditures made under the contract will be limited to such goods and services. For purpose of this Bid, ineligible countries are stated in the section-4 titled as "Eligible Countries". 4.2. For purposes of this Clause, "origin" means the place where the goods are mined, grown, cultivated, produced, manufactured, or processed, or through manufacture, procession, or assembly, another commercially recognized article results that differs substantially in its basic characteristics from its imported components or the place from where the related services are/to be supplied. 4.3. The nationality of the supplier that supplies, assembles, distributes, or sells the goods and services shall not determine the origin of the goods. 4.4. To establish the eligibility of the Goods and the related services, Bidders shall fill the country of origin declarations included in the Form of Bid. 4.5. If so required in the BDS, the Bidder shall demonstrate that it has been duly authorized by the manufacturer of the goods to deliver in Pakistan (or in respective country in case of procurement by the Pakistani Missions abroad), the goods indicated in its Bid.
5. One Bid per Bidder	5.1. A bidder shall submit only one Bid, in the same bidding process, either individually as a Bidder or as a member in a joint venture or any similar arrangement. 5.2. No bidder can be a sub-contractor while submitting a Bid individually or as a member of a joint venture in the same Bidding process. 5.3. A person or a firm cannot be a sub-contractor with more than one bidder in the same bidding process.
6. Cost of Bidding	6.1. The Bidder shall bear all costs associated with the preparation and submission of its Bid, and the Procuring Agency shall in no case be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process.

B. BIDDING DOCUMENTS

7. Contents of Bidding Documents	7.1. The goods required, bidding procedures, and terms and conditions of the contract are prescribed in the Bidding Documents. In addition to the Invitation to Bid, the Bidding Documents which should be read in conjunction with any addenda issued in accordance with ITB 9.2 include: Section I Invitation to Bid
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	Section II Instructions to Bidders (ITBs) Section III Bid Data Sheet (BDS) Section IV Eligible Countries Section V Technical Specifications, Schedule of Requirements Section VI Standard Forms Section VII General Conditions of Contract (GCC) Section VIII Special Conditions of Contract (SCC) Section IX Contract Forms 7.2. The number of copies to be completed and returned with the Bid is specified in the BDS. 7.3. The Procuring Agency is not responsible for the completeness of the Bidding Documents and their addenda, if they were not obtained directly from the Procuring Agency or the signed pdf version downloaded from the website of the Procuring Agency. However, Procuring Agency shall place both the pdf and same editable version to facilitate the bidder for filling the forms. 7.4. The Bidder is expected to examine all instructions, forms, terms and specifications 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.
8. Clarification of Bidding Documents	8.1. A prospective Bidder requiring any clarification of the Bidding Documents may notify the Procuring Agency in writing or in electronic form that provides record of the content of communication at the Procuring Agency's address indicated in the BDS. 8.2. The Procuring Agency will within three (3) working days after receiving the request for clarification, respond in writing or in electronic form to any request for clarification provided that such request is received not later than three (03) days prior to the deadline for the submission of Bids as prescribed in ITB 23.1. However, this clause shall not apply in case of alternate methods of Procurement. 8.3. Copies of the Procuring Agency's response will be forwarded to all identified Prospective Bidders through an identified source of communication, including a description of the inquiry, but without identifying its source. In case of downloading of the Bidding Documents from the website of PA, the response of all such queries will also be available on the same link available at the website. 8.4. Should the Procuring Agency deem it necessary to amend the Bidding Documents as a result of a clarification, it shall do so following the procedure under ITB 9. 8.5. 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. 8.6. 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 transmitted promptly to all prospective Bidders who have obtained the Bidding Documents. 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 exclusively through the use of an Addendum pursuant to ITB 9. Non-attendance at the pre-Bid meeting will not be a cause for disqualification of a Bidder.
9. Amendment of Bidding Documents	9.1. Before the deadline for submission of Bids, the Procuring Agency for any reason, whether at its own initiative or in response to a clarification requested by a prospective Bidder or pre-Bid meeting may modify the Bidding Documents by issuing addenda. 9.2. Any addendum issued including the notice of any extension of the deadline shall be part of the Bidding Documents pursuant to ITB 7.1 and shall be communicated in writing or in any identified electronic form that provide record of the content of communication to all the bidders who have obtained the Bidding Documents from the Procuring Agency. The Procuring Agency shall promptly publish the Addendum at the Procuring Agency's web page identified in the BDS: Provided that the bidder who had either already submitted their bid or handed over the bid to the courier prior to the issuance of any such addendum shall have the right to withdraw his already filed bid and submit the revised bid prior to the original or extended bid submission deadline. 9.3. To give prospective Bidders reasonable time in which to take an addendum/corrigendum into account in preparing their Bids, the Procuring Agency may, at its discretion, extend the deadline for the submission of Bids: Provided that the Procuring Agency shall extend the deadline for submission of Bid, if such an addendum is issued within last three (03) days of the Bid submission deadline.

C. PREPARATION OF BIDS

10. Language of Bid	10.1. 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 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.
11. Documents and Sample(s) Constituting the Bid	11.1. The Bid prepared by the Bidder shall constitute the following components: a) Form of Bid and Bid Prices completed in accordance with ITB 14 and 15; b) Details of the Sample(s) where applicable and requested in the BDS;

	c) Documentary evidence established in accordance with ITB 13 that the Bidder is eligible and/or qualified for the subject bidding process; d) Documentary evidence established in accordance with ITB 13.3(a) that the Bidder has been authorized by the manufacturer to deliver the goods into Pakistan, where required and where the supplier is not the manufacturer of those goods; e) Documentary evidence established in accordance with ITB 12 that the goods and related services to be supplied by the Bidder are eligible goods and services, and conform to the Bidding Documents; f) Bid security or Bid Securing Declaration furnished in accordance with ITB 18; g) Duly Notarized Power of Attorney authorizing the signatory of the Bidder to submit the bid; and h) Any other document required in the BDS. 11.2. Where a sample(s) is required by a procuring agency, the sample shall be: a) submitted as part of the bid, in the quantities, dimensions and other details requested in the BDS; b) carriage paid; c) received on, or before, the closing time and date for the submission of bids; and d) evaluated to determine compliance with all characteristics listed in the BDS. 11.3. The Procuring Agency shall retain the sample(s) of the successful Bidder. A Procuring Agency shall reject the Bid if the sample(s)- a) do(es) not conform to all characteristics prescribed in the bidding documents; and b) is/are not submitted within the specified time clearly mentioned in the Bid Data Sheet. 11.4. Where it is not possible to avoid using a propriety article as a sample, a Bidder shall make it clear that the propriety article is displayed only as an example of the type or quality of the goods being Bided for, and that competition shall not thereby be limited to the extent of that article only. 11.5. Samples made up from materials supplied by a Procuring Agency shall not be returned to a Bidder nor shall a Procuring Agency be liable for the cost of making them. 11.6. All samples produced from materials belonging to an unsuccessful Bidder shall be kept by the Procuring Agency till thirty (30) days from the date of award of contract or exhaust of all the grievance forums (including those pending at Authority's Level or in some Court of Law).
12. Documents Establishing Eligibility of Goods and	12.1. Pursuant to ITB 11, 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

Related Services and Conformity to Bidding Documents	goods and related services which the Bidder proposes to deliver. 12.2. The documentary evidence of the eligibility of the goods and related services shall consist of a statement in the Price Schedule of the country of origin of the goods and related services offered which shall be confirmed by a certificate of origin issued at the time of shipment. 12.3. The documentary evidence of conformity of the goods and related services to the Bidding Documents may be in the form of literature, drawings, and data, and shall consist of: a) a detailed description of the essential technical specifications and performance characteristics of the goods; b) an item-by-item commentary on the Procuring Agency's Technical Specifications demonstrating substantial responsiveness of the Goods and Services to those specifications, or a statement of deviations and exceptions to the provisions of the Technical Specifications; c) Any other procurement specific documentation requirement as stated in the BDS. 12.4. The Bidder shall also furnish a list giving full particulars, including available sources and current prices of goods, spare parts, special tools, etc., necessary for the proper and continuing functioning of the Goods during the period specified in the BDS following commencement of the use of the goods by the Procuring Agency. 12.5. For purposes of the commentary to be furnished pursuant to ITB 12.3(c) above, the Bidder shall note that standards for workmanship, material, and equipment, as well as references to brand names or catalogue numbers designated by the Procuring Agency in its Technical Specifications, are intended to be descriptive only and not restrictive. The Bidder may substitute alternative standards, brand names, and/or catalogue numbers in its Bid, provided that it demonstrates to the Procuring Agency's satisfaction that the substitutions ensure substantial equivalence to those designated in the Technical Specifications. 12.6. 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.
13. Documents Establishing Eligibility and Qualification of the Bidder	13.1. Pursuant to ITB 11, 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. 13.2. The documentary evidence of the Bidder's eligibility to Bid shall establish to the satisfaction of the Procuring Agency that the Bidder, at the time of submission of its bid, is from an eligible country as defined in Section-4 titled as "Eligible Countries". 13.3. The documentary evidence of the Bidder's qualifications to perform the contract if its Bid is accepted shall establish to the satisfaction of Procuring Agency that: a) in the case of a Bidder offering to deliver goods under the

	contract which the Bidder did not manufacture or otherwise produce, the Bidder has been duly authorized by the goods' Manufacturer or producer to deliver the goods in Pakistan; b) the Bidder has the financial, technical, and supply/production capability necessary to perform the Contract, meets the qualification criteria specified in BDS; c) in the case of a Bidder not doing business within Pakistan, the Bidder is or will be (if awarded the contract) represented by an Agent in Pakistan equipped, and able to carry out the Supplier's maintenance, repair, and spare parts-stocking obligations prescribed in the Conditions of Contract and/or Technical Specifications; d) that the Bidder meets the qualification criteria listed in the Bid Data Sheet.
14. Form of Bid	14.1. The Bidder shall fill the Form of Bid furnished in the Bidding Documents. The Bid Form must be completed without any alterations to its format and no substitute shall be accepted.
15. Bid Prices	15.1. The Bid Prices and discounts quoted by the Bidder in the Form of Bid and in the Price Schedules shall conform to the requirements specified below in ITB Clause 15 or exclusively mentioned hereafter in the bidding documents. 15.2. All items in the Statement of Work must be listed and priced separately in the Price Schedule(s). If a Price Schedule shows items listed but not priced, their prices shall be construed to be included in the prices of other items. 15.3. 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: a) where there is only one (substantially) responsive bidder, or b) where there is provision for alternate proposals and the respective items are not listed in the other bids, the procuring agency may fix the price of missing items in accordance with market survey, and the same shall be considered as final price. 15.4. The Bid price to be quoted in the Form of Bid in accordance with ITB 15.1 shall be the total price of the Bid, including any discounts offered. 15.5. The Bidder shall indicate on the appropriate Price Schedule, the unit prices (where applicable) and total Bid price of the goods it proposes to deliver under the contract. 15.6. Prices indicated on the Price Schedule shall be entered separately in the following manner: a) For goods manufactured from within Pakistan (or within the country where procurement is being done in case of

	foreign missions abroad): i) the price of the goods quoted EXW (ex-works, ex-factory, ex-warehouse, ex-showroom, or off-the-shelf, as applicable), including all customs duties and sales and other taxes already paid or payable: A. on the components and raw material used in the manufacturing or assembly of goods quoted ex-works or ex-factory; or B. on the previously imported goods of foreign origin quoted ex-warehouse, ex-showroom, or off-the-shelf. ii) all applicable taxes which will be payable on the goods if the contract is awarded. iii) the price for inland transportation, insurance, and other local costs incidental to delivery of the goods to their final destination, if specified in the BDS. iv) the price of other (incidental or allied) services, if any, listed in the BDS. b) For goods offered from abroad: i) the price of the goods shall be quoted CIF named port of destination, or CIP border point, or CIP named place of destination, in the Procuring Agency's country, as specified in the BDS. In quoting the price, the Bidder shall be free to use transportation through carriers registered in any eligible countries. Similarly, the Bidder may obtain insurance services from any eligible source country; or ii) the price of the goods quoted FOB port of shipment (or FCA, as the case may be), if specified in the BDS; or iii) the price of goods quoted CFR port of destination (or CPT as the case may be), if specified in the BDS; iv) the price for inland transportation, insurance, and other local costs incidental to delivery of the goods from the port of entry to their final destination, if specified in the BDS; v) the price of (incidental) services, if any, listed in the BDS. 15.7. Prices proposed on the Price Schedule for goods and related services shall be disaggregated, where appropriate as indicated in this Clause. This desegregation shall be solely for the purpose of facilitating the comparison of Bids by the Procuring Agency. This, shall not in any way limit the Procuring Agency's right to contract on any of the terms and conditions offered: - a) For Goods: - i) the price of the Goods, quoted as per applicable INCOTERMS as specified in the BDS, ii) all customs duties, sales tax, and other taxes applicable on goods or on the components and raw materials used in their manufacture or assembly, if the contract is awarded to the Bidder, and
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	b) For Related Services i) The price of the related services, and ii) All customs duties, sales tax and other taxes applicable in Pakistan, paid or payable, on the related services, if the contract is awarded to the Bidder. 15.8. 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 28. 15.9. If so indicated in the Invitation to Bid and Instructions to Bidders, that Bids are being invited for individual contracts (Lots) or for any combination of contracts (packages), Bidders wishing to offer any price reduction for the award of more than one contract shall specify in their Bid the price reductions applicable to each package, or alternatively, to individual contracts (Lots) within a package.
16. Bid Currencies	16.1. Prices shall be quoted in the following currencies: a) For goods and services that the Bidder will deliver from within Pakistan, the prices shall be quoted in Pakistani Rupees, unless otherwise specified in the BDS. b) For goods and related services that the Bidder will deliver from outside Pakistan, or for imported parts or components of goods and related services originating outside Pakistan, the Bid prices shall be quoted in any freely convertible currency of another country. If the Bidder wishes to be paid in a combination of amounts in different currencies, it may quote its price accordingly but use no more than three foreign currencies. 16.2. For the purposes of comparison of bids quoted in different currencies, the price shall be converted into a single currency specified in the bidding documents. The rate of exchange shall be the selling rate, prevailing on the date of opening of (financial part of) bids specified in the bidding documents, as notified by the State Bank of Pakistan on that day. 16.3. Bidders shall indicate details of their expected foreign currency requirements in the Bid. 16.4. Bidders may be required by the Procuring Agency to clarify their foreign currency requirements and to substantiate that the amounts included in Lump Sum and in the SCC are reasonable and responsive to ITB 16.1.
17. Bid Validity Period	17.1. Bids shall remain valid for the period specified in the BDS after the Bid submission deadline prescribed by the Procuring Agency. A Bid valid for a shorter period shall be rejected by the Procuring Agency 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. 17.2. Under exceptional circumstances, prior to the expiration of the initial Bid validity period, the Procuring Agency may request the Bidders' consent to an extension of the period of validity of their

	Bids only once, for the period not more than the period of initial bid validity. The request and the Bidders responses shall be made in writing or in electronic forms that provide record of the content of communication. The Bid Security provided under ITB 18 shall also be suitably extended. A Bidder may refuse the request without forfeiting its Bid security or causing to be executed its Bid Securing Declaration. A Bidder agreeing to the request will not be required nor permitted to modify its Bid, but will be required to extend the validity of its Bid Security or Bid Securing Declaration for the period of the extension, and in compliance with ITB 18 in all respects. 17.3. If the award is delayed by a period exceeding sixty (60) days beyond the expiry of the initial Bid validity period, the contract price may be adjusted by a factor specified in the request for extension. However, the Bid evaluation shall be based on the already quoted Bid Price without taking into consideration on the above correction.
18. Bid Security or Bid Securing Declaration	18.1. Pursuant to ITB 11, unless otherwise specified in the BDS, the Bidder shall furnish as part of its Bid, a Bid Security in form of fixed amount not exceeding five percent of the estimated value of procurement determined by the procuring agency and in the amount and currency specified in the BDS or Bid Securing Declaration as specified in the BDS in the format provided in Section VI (Standard Forms). 18.2. The Bid Security or Bid Securing Declaration is required to protect the Procuring Agency against the risk of Bidder's conduct which would warrant the security's forfeiture, pursuant to ITB 18.9. 18.3. 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: a) 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 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; b) a cashier's or certified cheque; or c) another security if indicated in the BDS. 18.4. 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 VI (Standard Forms) or another form approved by the Procuring Agency prior to the Bid submission. 18.5. The Bid Security shall be payable promptly upon written demand by the Procuring Agency in case any of the conditions listed in ITB 18.9 are invoked. 18.6. Any Bid not accompanied by a Bid Security or Bid Securing Declaration in accordance with ITB 18.1 or 18.3 shall be rejected by the Procuring Agency as non- responsive, pursuant

	to ITB 28. 18.7. 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 pursuant to ITB 17. The Procuring Agency 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: a) the expiry of the Bid Security; b) 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; c) the rejection by the Procuring Agency of all Bids; d) 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. 18.8. The successful Bidder's Bid Security will be discharged upon the Bidder signing the contract pursuant to ITB 41, or furnishing the performance security (or guarantee), pursuant to ITB 42. 18.9. The Bid Security may be forfeited or the Bid Securing Declaration executed: a) if a Bidder: i) withdraws its Bid during the period of Bid Validity; ii) as specified by the Procuring Agency, and referred by the bidder on the Form of Bid except as provided for in ITB 17.2; or iii) does not accept the correction of errors pursuant to ITB 30.3; or b) in the case of a successful Bidder, if the Bidder fails: i) to sign the contract in accordance with ITB 41; or ii) to furnish performance security (or guarantee) in accordance with ITB 42.
19. Alternative Bids by Bidders	19.1. Bidders shall submit offers that comply with the requirements of the Bidding Documents, including the basic Bidder's technical design as indicated in the specifications and Schedule of Requirements. Alternatives will not be considered, unless specifically allowed for in the BDS. If so allowed, ITB 19.2 shall prevail. 19.2. When alternative schedule for delivery of goods is explicitly invited, a statement of that effect will be included in the BDS as will the method for evaluating different schedule for delivery of goods. 19.3. If so allowed in the BDS, Bidders wishing to offer technical alternatives to the requirements of the Bidding Documents must also submit a Bid that complies with the requirements of the Bidding Documents, including the basic technical design as indicated in the specifications. In addition to submitting the basic

	Bid, the Bidder shall provide all information necessary for a complete evaluation of the alternative by the Procuring Agency, including technical specifications, breakdown of prices, and other relevant details. Only the technical alternatives, if any, of the Most Advantageous Bidder conforming to the basic technical requirements (without altering the bid price) shall be considered by the Procuring Agency.
20. Withdrawal, Substitution, and Modification of Bids	20.1. 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 substitution or modification must accompany the respective written notice. 20.2. Bids requested to be withdrawn in accordance with ITB 20.1 shall be returned unopened to the Bidders.
21. Format and Signing of Bid	21.1. The Bidder shall prepare an original and the number of copies of the Bid as indicated in the BDS, clearly marking each "ORIGINAL" and "COPY," as appropriate. In the event of any discrepancy between them, the original shall prevail: Provided that except in Single Stage One Envelope Procedure, the Bid shall include only the copies of technical proposal. 21.2. The original and the copy or copies of the Bid shall be typed or written in indelible ink and shall be signed by the Bidder or a person or persons duly authorized to sign on behalf of the Bidder. This authorization shall consist of a written confirmation as specified in the BDS and shall be attached to the Bid. The name and position held by each person signing the authorization must be typed or printed below the signature. All pages of the Bid, except for un-amended printed literature, shall be initialed by the person or persons signing the Bid. 21.3. Any interlineations, erasures, or overwriting shall be valid only if they are signed by the person or persons signing the Bidder.

D. SUBMISSION OF BIDS

22. Sealing and Marking of Bids	22.1 In case of Single Stage One Envelope Procedure, the Bidder shall seal the original and each copy of the Bid in separate envelopes, duly marking the envelopes as "ORIGINAL" and "COPY." The envelopes shall then be sealed in an outer envelope securely sealed in such a manner that opening and resealing cannot be achieved undetected. Note: The envelopes shall be sealed and marked in accordance with the bidding procedure adopted as referred in Rule-36 of PPR-2004. 22.2 The inner and outer envelopes shall: - be addressed to the Procuring Agency at the address given in the BDS; and - bear the title of the subject procurement or Project name, as the case may be as indicated in the BDS, the Invitation to Bids (ITB) title and number indicated in the BDS, and a statement: "DO NOT OPEN BEFORE," to be completed with
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	the time and the date specified in the BDS, pursuant to ITB 23.1. 22.3 In case of Single Stage Two Envelope Procedure, The Bid shall comprise two envelopes submitted simultaneously, one called the Technical Proposal and the other Financial Proposal. Both envelopes to be enclosed together in an outer single envelope called the Bid. Each Bidder shall submit his bid as under: a) Bidder shall submit his TECHNICAL PROPOSAL and FINANCIAL PROPOSAL in separate inner envelopes and enclosed in a single outer envelope. b) ORIGINAL and each copy of the Bid shall be separately sealed and put in separate envelopes and marked as such. c) The envelopes containing the ORIGINAL and copies will be put in one sealed envelope and addressed / identified as given in Sub- Clause 22.4. 22.4 The inner and outer envelopes shall: a) be addressed to the Procuring Agency at the address provided in the Bid Data Sheet; b) bear the name and identification number of the contract as defined in the Bid Data Sheet; and provide a warning not to open before the time and date for bid opening, as specified in the Bidding Data pursuant to ITB 23.1; c) In addition to the identification required in Sub- Clause 21.2 hereof, the inner envelope shall indicate the name and address of the bidder to enable the bid to be returned unopened in case it is declared "late" pursuant to Clause IB.24. If all envelopes are not sealed and marked as required by ITB 22.2, ITB 22.3 and ITB 22.4 or incorrectly marked, the Procuring Agency will assume no responsibility for the misplacement or premature opening of Bid.
23. Deadline for Submission of Bids	23.1. Bids shall be received by the Procuring Agency no later than the date and time specified in the BDS. 23.2. The Procuring Agency may, in exceptional circumstances and at its discretion, extend the deadline for the submission of Bids by amending the Bidding Documents in accordance with ITB 9, in which case all rights and obligations of the Procuring Agency and Bidders previously subject to the deadline will thereafter be subject to the new deadline.
24. Late Bids	24.1. The Procuring Agency shall not consider for evaluation any Bid that arrives after the deadline for submission of Bids, in accordance with ITB 23. 24.2. Any Bid received by the Procuring Agency after the deadline for submission of Bids shall be declared late, recorded, rejected and returned unopened to the Bidder.
25. Withdrawal of Bids	25.1. A Bidder may withdraw its Bid after it has been submitted, provided that written notice of the withdrawal of the Bid, is received by the Procuring Agency prior to the deadline for

	submission of Bids. 25.2. Revised bid may be submitted after the withdrawal of the original bid in accordance with the provisions referred in ITB 22.
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E. OPENING AND EVALUATION OF BIDS

26. Opening of Bids	26.1. The Procuring Agency will open all Bids, in public, in the presence of Bidders' or their representatives who choose to attend, and other parties with a legitimate interest in the Bid proceedings at the place, on the date and at the time, specified in the BDS. The Bidders' representatives present shall sign a register as proof of their attendance. 26.2. First, envelopes marked "WITHDRAWAL" shall be opened and read out and the envelope with the corresponding bid shall not be opened, but returned to the Bidder. No bid withdrawal shall be permitted unless the corresponding Withdrawal Notice contains a valid authorization to request the withdrawal and is read out at bid opening. 26.3. Second, outer envelopes marked "SUBSTITUTION" shall be opened. The inner envelopes containing the Substitution Bid shall be exchanged for the corresponding Original Bid being substituted, which is to be returned to the Bidder unopened. No envelope shall be substituted unless the corresponding Substitution Notice contains a valid authorization to request the substitution and is read out and recorded at bid opening. 26.4. Next, outer envelopes marked "MODIFICATION" shall be opened. No Technical Proposal and/or Financial Proposal shall be modified unless the corresponding Modification Notice contains a valid authorization to request the modification and is read out and recorded at the opening of the Bids. Any Modification shall be read out along with the Original Bid except in case of Single Stage Two Envelope Procedure where only the Technical Proposal, both Original as well as Modification, are to be opened, read out, and recorded at the opening. Financial Proposal, both Original and Modification, will remain unopened till the prescribed financial bid opening date. 26.5. Other envelopes holding the Bids shall be opened one at a time, in case of Single Stage One Envelope Procedure, the Bidders names, the Bid prices, the total amount of each Bid and of any alternative Bid (if alternatives have been requested or permitted), any discounts, the presence or absence of Bid Security, Bid Securing Declaration and such other details as the Procuring Agency may consider appropriate, will be announced by the Procurement Evaluation Committee. 26.6. In case of Single Stage Two Envelope Procedure, the Procuring Agency will open the Technical Proposals in public at the address, date and time specified in the BDS in the presence of Bidders' designated representatives who choose to attend and other parties with a legitimate interest in the Bid proceedings. The Financial Proposals will remain unopened and will be held in custody of the Procuring Agency until the specified time of their opening.
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	26.7. The envelopes holding the Technical Proposals shall be opened one at a time, and the following read out and recorded: (a) the name of the Bidder; (b) whether there is a modification or substitution; (c) the presence of a Bid Security, if required; and (d) Any other details as the Procuring Agency may consider appropriate. 26.8. Bids not opened and not read out at the Bid opening shall not be considered further for evaluation, irrespective of the circumstances. In particular, any discount offered by a Bidder which is not read out at Bid opening shall not be considered further. 26.9. Bidders are advised to send in a representative with the knowledge of the content of the Bid who shall verify the information read out from the submitted documents. Failure to send a representative or to point out any un- read information by the sent Bidder's representative shall indemnify the Procuring Agency against any claim or failure to read out the correct information contained in the Bidder's Bid. 26.10. No Bid will be rejected at the time of Bid opening except for late Bids which will be returned unopened to the Bidder, pursuant to ITB 24. 26.11. The Procuring Agency shall prepare minutes of the Bid opening. The record of the Bid opening shall include, as a minimum: the name of the Bidder and whether or not there is a withdrawal, substitution or modification, the Bid price if applicable, including any discounts and alternative offers and the presence or absence of a Bid Security or Bid Securing Declaration. 26.12. The Bidders' representatives who are present shall be requested to sign on the attendance sheet. The omission of a Bidder's signature on the record shall not invalidate the contents and affect the record. A copy of the record shall be distributed to all the Bidders. 26.13. A copy of the minutes of the Bid opening shall be furnished to individual Bidders upon request. 26.14. In case of Single Stage Two Envelop Bidding Procedure, after the evaluation and approval of technical proposal the procuring agency, shall at a time within the bid validity period, publically open the financial proposals of the technically accepted bids only. The financial proposal of bids found technically non-responsive shall be returned un-opened to the respective bidders subject to redress of the grievances from all tiers of grievances.
27. Confidentiality	27.1. 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. 27.2. Any effort by a Bidder to influence the Procuring Agency processing of Bids or award decisions may result in the rejection of its Bid. 27.3. Notwithstanding ITB 27.2 from the time of Bid opening to the

	time of contract award, if any Bidder wishes to contact the Procuring Agency on any matter related to the Bidding process, it should do so in writing or in electronic forms that provides record of the content of communication.
28. Clarification of Bids	28.1. To assist in the examination, evaluation and comparison of Bids (and post-qualification if applicable) of the Bidders, the Procuring Agency may, ask any Bidder for a clarification of its Bid including breakdown of prices. Any clarification submitted by a Bidder that is not in response to a request by the Procuring Agency shall not be considered. 28.2. The request for clarification and the response shall be in writing or in electronic forms that provide record of the content of communication. In case of Single Stage Two Envelope Procedure, no change in the prices or substance of the Bid shall be sought, offered, or permitted, whereas in case of Single Stage One Envelope Procedure, only the correction of arithmetic errors discovered by the Procuring Agency in the evaluation of Bids should be sought in accordance with ITB 31. 28.3. The alteration or modification in the Bid which in any affect the following parameters will be considered as a change in the substance of a bid: a) evaluation & qualification criteria; b) required scope of work or specifications; c) all securities requirements; d) tax requirements; e) terms and conditions of bidding documents; f) change in the ranking of the bidder. 28.4. From the time of Bid opening to the time of Contract award if any Bidder wishes to contact the Procuring Agency on any matter related to the Bid it should do so in writing or in electronic forms that provide record of the content of communication.
29. Preliminary Examination of Bids	29.1. Prior to the detailed evaluation of Bids, the Procuring Agency will determine whether each Bid: a) meets the eligibility criteria defined in ITB 3 and ITB 4; b) has been prepared as per the format and contents defined by the Procuring Agency in the Bidding Documents; c) has been properly signed; d) is accompanied by the required securities; and e) is substantially responsive to the requirements of the Bidding Documents. The Procuring Agency's determination of a Bid's responsiveness will be based on the contents of the Bid itself. 29.2. 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: - a) affects in any substantial way the scope, quality, or performance of the Services; b) limits in any substantial way, inconsistent with the Bidding

	Documents, the Procuring Agency's rights or the Bidders obligations under the Contract; or c) if rectified, would affect unfairly the competitive position of other Bidders presenting substantially responsive Bids. 29.3. The Procuring Agency will confirm that the documents and information specified under ITB 11, 12 and 13 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. 29.4. The Procuring Agency 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 supplies or services being acquired. The Procuring Agency 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. Examples of minor informalities or irregularities include failure of a bidder to – a) Submit the number of copies of signed bids required by the invitation; b) Furnish required information concerning the number of its employees; c) 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. 29.5. Provided that a Technical Bid is substantially responsive, the Procuring Agency 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. 29.6. Provided that a Technical Bid is substantially responsive, the Procuring Agency 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.
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	29.7. If a Bid is not substantially responsive, it will be rejected by the Procuring Agency and may not subsequently be evaluated for complete technical responsiveness.
30. Examination of Terms and Conditions; Technical Evaluation	30.1. The Procuring Agency shall examine the Bid to confirm that all terms and conditions specified in the GCC and the SCC have been accepted by the Bidder without any material deviation or reservation. 30.2. The Procuring Agency shall evaluate the technical aspects of the Bid submitted in accordance with ITB 22, to confirm that all requirements specified in Section V – Schedule of Requirements, Technical Specifications of the Bidding Documents have been met without material deviation or reservation. 30.3. If after the examination of the terms and conditions and the technical evaluation, the Procuring Agency determines that the Bid is not substantially responsive in accordance with ITB 29, it shall reject the Bid.
31. Correction of Errors	31.1. Bids determined to be substantially responsive will be checked for any arithmetic errors. Errors will be corrected as follows: - a) if there is a discrepancy between unit prices and the total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail, and the total price shall be corrected, unless in the opinion of the Procuring Agency 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; b) 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 c) where there is a discrepancy between the amounts in figures and in words, the amount in words will govern. d) 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. 31.2. The amount stated in the Bid will, be adjusted by the Procuring Agency 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 will then be rejected, and the Bid Security may be forfeited or the Bid Securing Declaration may be executed in accordance with ITB 18.9.
32. Conversion to Single Currency	32.1. To facilitate evaluation and comparison, the Procuring Agency will convert all Bid prices expressed in the amounts in various currencies in which the Bid prices are payable. For the purposes of comparison of bids quoted in different currencies, the price shall be converted into a single currency specified in the bidding documents. The rate of exchange shall be the selling rate, prevailing on the date of opening of (financial part of) bids specified in the bidding documents, as notified by the State Bank

	of Pakistan on that day. 32.2. The currency selected for converting Bid prices to a common base for the purpose of evaluation, along with the source and date of the exchange rate, are specified in the BDS.
33. Evaluation of Bids	33.1. The Procuring Agency shall evaluate and compare only the Bids determined to be substantially responsive, pursuant to ITB 29. 33.2. In evaluating the Technical Proposal of each Bid, the Procuring Agency shall use the criteria and methodologies listed in the BDS and in terms of Statement of Requirements and Technical Specifications. No other evaluation criteria or methodologies shall be permitted. 33.3. The Procuring Agency's evaluation of a Bid will take into account: a) in the case of goods manufactured in Pakistan or goods of foreign origin already imported in Pakistan, Income Tax, General Sales Tax and other similar/applicable taxes, which will be payable on the goods if a contract is awarded to the Bidder; and b) in the case of goods of foreign origin offered from abroad, customs duties and other similar import taxes which will be payable on the goods if the contract is awarded to the Bidder. 33.4. The comparison shall be between the EXW price of the goods offered from within Pakistan, such price to include all costs, as well as duties and taxes paid or payable on components and raw material incorporated or to be incorporated in the goods, and the price of the goods quoted named port of destination, border point, or named place of destination in accordance with applicable INCOTERM of the goods offered from outside Pakistan such price to include customs duties and other similar import taxes which will be payable on the goods if the contract is awarded to the Bidder. 33.5. In evaluating the Bids, the evaluation committee will, in addition to the Bid price quoted in accordance with ITB 15.1, take account of one or more of the following factors as specified in the BDS, and quantified in ITB 33.6: a) Cost of inland transportation, insurance, and other costs within the Pakistan incidental to delivery of the goods to their final destination; b) delivery schedule offered in the Bid; c) deviations in payment schedule from that specified in the Special Conditions of Contract; d) the cost of components, mandatory spare parts, and service; e) the availability (in Pakistan) of spare parts and after-sales services for the equipment offered in the Bid; f) the projected operating and maintenance costs during the life of the equipment; g) the performance and productivity of the equipment offered; and/or

	h) other specific criteria indicated in the TBS and/or in the Technical Specifications. 33.6. For factors retained in BDS, pursuant to ITB 33.5 one or more of the following quantification methods will be applied, as detailed in the BDS: a) Inland transportation from EXW/port of entry/border point, Insurance and incidentals Inland transportation, insurance, and other incidental costs for delivery of the goods from EXW/port of entry/border point to Project Site named in the BDS will be computed for each Bid by the PA on the basis of published tariffs by the rail or road transport agencies, insurance companies, and/or other appropriate sources. To facilitate such computation, Bidder shall furnish in its Bid the estimated dimensions and shipping weight and the approximate EXW or as per applicable INCOTERM value of each package. The above cost will be added by the Procuring Agency to EXW or as per applicable INCOTERM price. b) Delivery schedule i) The Procuring Agency requires that the goods under the Invitation for Bids shall be delivered (shipped) at the time specified in the Schedule of Requirements. The estimated time of arrival of the goods at the Project Site will be calculated for each Bid after allowing for reasonable international and inland transportation time. Treating the Bid resulting in such time of arrival as the base, a delivery "adjustment" will be calculated for other Bids by applying a percentage, specified in the BDS, of the EXW or as per applicable INCOTERM price for each week of delay beyond the base, and this will be added to the Bid price for evaluation. No credit shall be given to early delivery. Or ii) The goods covered under this invitation are required to be delivered (shipped) within an acceptable range of weeks specified in the Schedule of Requirement. No credit will be given to earlier deliveries, and Bids offering delivery beyond this range will be treated as non-responsive. Within this acceptable range, an adjustment per week, as specified in the BDS, will be added for evaluation to the Bid price of Bids offering deliveries later than the earliest delivery period specified in the Schedule of Requirements. Or iii) The goods covered under this invitation are required to be delivered (shipped) in partial shipments, as specified in the Schedule of Requirements. Bids offering deliveries earlier or later than the specified deliveries will be adjusted in the evaluation by adding to the Bid price a factor equal to a percentage, specified in the BDS, of EXW or as per applicable INCOTERM price per week of
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	variation from the specified delivery schedule. c) Deviation in payment schedule i) Bidders shall state their Bid price for the payment schedule outlined in the SCC. Bids will be lowest on the basis of this base price. Bidders are, however, permitted to state an alternative payment schedule and indicate the reduction in Bid price they wish to offer for such alternative payment schedule. The Procuring Agency may consider the alternative payment schedule offered by the selected Bidder. Or ii) The SCC stipulates the payment schedule offered by the Procuring Agency. If a Bid deviates from the schedule and if such deviation is considered acceptable to the Procuring Agency, the Bid will be evaluated by calculating interest earned for any earlier payments involved in the terms outlined in the Bid as compared with those stipulated in this invitation, at the rate per annum specified in the BDS. d) Cost of spare parts i) The list of items and quantities of major assemblies, components, and selected spare parts, likely to be required during the initial period of operation specified in the BDS, is annexed to the Technical Specifications. The total cost of these items, at the unit prices quoted in each Bid, will be added to the Bid price. Or ii) The Procuring Agency will draw up a list of high-usage and high-value items of components and spare parts, along with estimated quantities of usage in the initial period of operation specified in the BDS. The total cost of these items and quantities will be computed from spare parts unit prices submitted by the Bidder and added to the Bid price. Or iii) The Procuring Agency will estimate the cost of spare parts usage in the initial period of operation specified in the BDS, based on information furnished by each Bidder, as well as on past experience of the Procuring Agency or other Procuring Agency's in similar situations. Such costs shall be added to the Bid price for evaluation. e) Spare parts and after sales service facilities in Pakistan The cost to the Procuring Agency of establishing the minimum service facilities and parts inventories, as outlined in the BDS or elsewhere in the Bidding Documents, if quoted separately, shall be added to the Bid price. f) Operating and maintenance costs Since the operating and maintenance costs of the goods under procurement form a major part of the life cycle cost of
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	the equipment, these costs will be evaluated in accordance with the criteria specified in the BDS or in the Technical Specifications. g) Performance and productivity of the equipment i) Bidders shall state the guaranteed performance or efficiency in response to the Technical Specification. For each drop in the performance or efficiency below the norm of 100, an adjustment for an amount specified in the BDS will be added to the Bid Price, representing the capitalized cost of additional operating costs over the life of the plant, using the methodology specified in the BDS or in the Technical Specifications. Or ii) Goods offered shall have a minimum productivity specified under the relevant provision in the Technical Specifications to be considered responsive. Evaluation shall be based on the cost per unit of the actual productivity of goods offered in the Bid, and adjustment will be added to the Bid price using the methodology specified in the BDS or in the Technical Specifications. h) Specific additional criteria Other specific additional criteria to be considered in the evaluation and the evaluation method shall be detailed in the BDS and/or the Technical Specifications. 33.7. 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, including any discounts offered in the Form of Bid, is specified in the BDS.
34. Domestic Preference	34.1. If the BDS so specifies, the Procuring Agency will grant a margin of preference to certain goods in line with the rules, regulations, regulatory guides or instructions issued by the Authority from time to time.
35. Determination of Most Advantageous Bid	35.1. In case where the Procuring Agency adopts the Cost Based Evaluation Technique and, the Bid with the lowest evaluated price from amongst those which are eligible, compliant and substantially responsive shall be the Most Advantageous Bid. 35.2. The Procuring Agency may adopt the Quality & Cost Based Selection Technique due to the following two reasons: i) Where the Procuring Agency knows about the main features, usage and output of the products; however not clear about the complete features, technical specifications and functionalities of the goods to be procured and requires the bidders to submit their proposals defining those features, specifications and functionalities; or ii) Where the Procuring Agency, in addition to the mandatory requirements and mandatory technical specifications, requires parameters specified in Evaluation Criteria to be

	evaluated while determining the quality of the goods; In such cases, the Procuring Agency may allocate certain weightage to these factors as a part of Evaluation Criteria, and may determine the ranking of the bidders on the basis of combined evaluation in accordance with provisions of Rule 2(1)(h) of PPR-2004.
36. Post-qualification of Bidder and/or Abnormally Low Financial Proposal	36.1. After determining the Most Advantageous Bid, if neither the pre-qualification was undertaken separately nor any qualification parameters were undertaken as part of determining the Most Advantageous Bid, the Procuring Agency shall carry out the post-qualification of the Bidder using only the requirements specified in the BDS. In case of International Tendering, the parameters for incorporation or licensing within Pakistan may be fulfilled as part of post qualification. 36.2. Where the Bid price is considered to be abnormally low, the Procuring Agency shall perform price analysis either during determination of Most Advantageous Bid or as a part of the post-qualification process. The following process shall apply: - The Procuring Agency may reject a Bid if the Procuring Agency has determined that the price in combination with other constituent elements of the Bid is abnormally low in relation to the subject matter of the procurement (i.e. scope of the procurement or ancillary services) and raises concerns as to the capability and capacity of the respective Bidder to perform that contract; - Before rejecting an abnormally low Bid the Procuring Agency shall request the Bidder an explanation of the Bid or of those parts which it considers contribute to the Bid being abnormally low; take account of the evidence provided in response to a request in writing; and subsequently verify the Bid or parts of the Bid being abnormally low; - The decision of the Procuring Agency to reject a Bid and reasons for the decision shall be recorded in the procurement proceedings and promptly communicated to the Bidder concerned; - The Procuring Agency shall not incur any liability solely by rejecting abnormally Bid; and - An abnormally low Bid means, in the light of the Procuring Agency'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. Guidance for Procuring Agency: In order to identify the Abnormally Low Bid (ALB) following approaches can be considered to minimize the scope of subjectivity: - Comparing the bid price with the cost estimate; - Comparing the bid price with the bids offered by other bidders submitting substantially responsive bids; and

	iii) Comparing the bid price with prices paid in similar contracts in the recent past either government- or development partner-funded. 36.3. The Procuring Agency will determine to its satisfaction whether the Bidder that is selected as having submitted the most advantageous Bid is qualified to perform the contract satisfactorily, in accordance with the criteria listed in ITB 13.3. 36.4. The determination will take into account the Bidder's financial, technical, and production capabilities. It will be based upon an examination of the documentary evidence of the Bidder's qualifications submitted by the Bidder, pursuant to ITB 13.3, as well as such other information as the Procuring Agency deems necessary and appropriate. Factors not included in these Bidding Documents shall not be used in the evaluation of the Bidders' qualifications. 36.5. Procuring Agency 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. 36.6. 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 will proceed to the next ranked bidder to make a similar determination of that Bidder's capabilities to perform satisfactorily.
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F. AWARD OF CONTRACT

37. Criteria of Award	37.1. Subject to ITB 36 and 38, the Procuring Agency 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 Most Advantageous Bidder, provided that such Bidder has been determined to be: a) eligible in accordance with the provisions of ITB 3; b) is determined to be qualified to perform the Contract satisfactorily; and c) Successful negotiations have been concluded, if any.
38. Negotiations	38.1. Negotiations may be undertaken with the Most Advantageous Bid relating to the following areas: a) a minor alteration to the technical details of the statement of requirements; b) reduction of quantities for budgetary reasons, where the reduction is in excess of any provided for in the Bidding documents; c) a minor amendment to the special conditions of Contract; d) finalizing payment arrangements;

	e) delivery arrangements; f) the methodology for provision of related services; or g) clarifying details that were not apparent or could not be finalized at the time of Bidding. 38.2. Where negotiation fails to result into an agreement, the Procuring Agency may invite the next ranked Bidder for negotiations. Where negotiations are commenced with the next ranked Bidder, the Procuring Agency shall not reopen earlier negotiations.
39. Procuring Agency's Right to reject All Bids	39.1. Notwithstanding ITB 37, the Procuring Agency reserves the right to reject all the bids, and to annul the Bidding process at any time prior to award of contract, without thereby incurring any liability to the affected Bidder or Bidders. However, the Authority (i.e. PPRA) may call from the Procuring Agency the justification of those grounds. 39.2. Notice of the rejection of all Bids shall be given promptly to all Bidders that have submitted Bids. 39.3. The Procuring Agency shall upon request communicate to any Bidder the grounds for its rejection of its Bids, but is not required to justify those grounds.
40. Procuring Agency's Right to Vary Quantities at the Time of Award	40.1. The Procuring Agency reserves the right at the time of contract award to increase or decrease the quantity of goods or related services originally specified in these Bidding Documents (schedule of requirements) provided this does not exceed by the percentage indicated in the BDS, without any change in unit price or other terms and conditions of the Bid and Bidding Documents.
41. Notification of Award	41.1. Prior to the award of contract, the Procuring Agency shall issue a Final Evaluation Report giving justification for acceptance or rejection of the bids. 41.2. Where no complaints have been lodged, the Bidder whose Bid has been accepted will be notified of the award by the Procuring Agency prior to expiration of the Bid Validity period in writing or electronic forms that provide record of the content of communication. The Letter of Acceptance will state the sum that the Procuring Agency will pay the successful Bidder in consideration for the execution of the scope of works as prescribed by the Contract (hereinafter and in the Contract called the "Contract Price). 41.3. 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 43 and signing of the contract in accordance with ITB 42.2. 41.4. Upon the successful Bidder's furnishing of the performance security (or guarantee) pursuant to ITB 43, the Procuring Agency 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 Bidders pursuant to ITB 18.7.
42. Signing of	42.1. Promptly after notification of award, Procuring Agency shall send

Contract	the successful Bidder the draft agreement, incorporating all terms and conditions as agreed by the parties to the Contract. 42.2. 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 shall sign the contract. 42.3. Where no formal signing of a contract is required, purchase order issued to the bidder shall be construed to be the contract.
43. Performance Security (or Guarantee)	43.1. After the receipt of the Letter of Acceptance, the successful Bidder, within the specified time, shall deliver to the Procuring Agency a Performance Security (or Guarantee) in the amount and in the form stipulated in the BDS and SCC, denominated in the type and proportions of currencies in the Letter of Acceptance and in accordance with the Conditions of Contract. 43.2. If the Performance Security (or 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: a) certified cheque, cashier's or manager's cheque, or bank draft; b) irrevocable letter of credit issued by a Scheduled bank 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; c) bank guarantee confirmed by a reputable local bank or, in the case of a successful foreign Bidder, bonded by a foreign bank; or d) surety bond callable upon demand issued by any reputable surety or insurance company. Any Performance Security (or guarantee) submitted shall be enforceable in Pakistan. 43.3. Failure of the successful Bidder to comply with the requirement of ITB 43.1 shall constitute sufficient grounds for the annulment of the award and forfeiture of the Bid Security, in which event the Procuring Agency may make the award to the next ranked Bidder or call for new Bids.
44. Advance Payment	44.1. The advance payment will not be provided in normal circumstances. However, in case where international incoterms are involved, the same will be dealt with standard international practices and in the manner as prescribed in ITB 44.2. 44.2. The Procuring Agency will provide an Advance Payment as stipulated in the Conditions of Contract, subject to a maximum amount, as stated in the BDS. The Advance Payment request shall be accompanied by an Advance Payment Security (Guarantee) in the form provided in Section IX. For the purpose of receiving the Advance Payment, the Bidder shall make and estimate of, and include in its Bid, the expenses that will be incurred in order to commence Delivery of Goods. These expenses 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's "Notice to

	Commence” as specified in the SCC.
45. Arbitrator	45.1. The Arbitrator shall be appointed by mutual consent of the both parties as per the provisions specified in the SCC.
46. Corrupt & Fraudulent Practices	46.1. 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

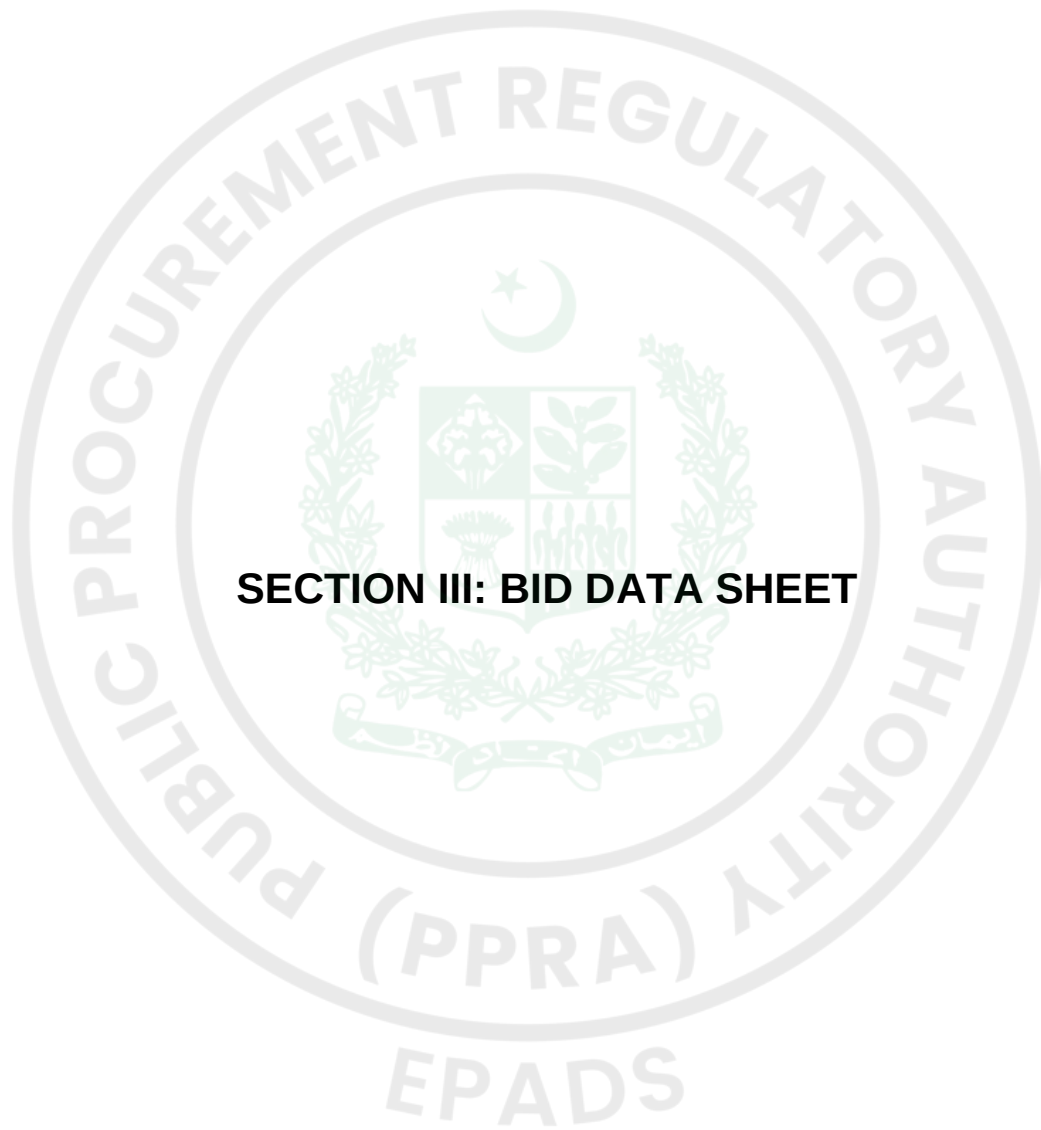
47. Constitution of Grievance Redressal	47.1. Procuring agency shall constitute a Grievance Redressal Committee (GRC) comprising of odd number of person with proper power and authorization to address the complaint. The GRC shall not have any of the members of Procurement Evaluation Committee. The committee must have one subject specialist depending the nature of the procurement.
48. GRC Procedure	48.1. Any party can file its written complaint against the eligibility parameters or any other terms and conditions prescribed in the prequalification or bidding documents found contrary to provision of Procurement Regulatory Framework, and the same shall be addressed by the GRC well before the bid submission deadline. 48.2. Any Bidder feeling aggrieved by any act of the procuring agency after the submission of his bid may lodge a written complaint concerning his grievances not later than seven days of the announcement of technical evaluation report and five days after issuance of final evaluation report. 48.3. In case, the complaint is filed against the technical evaluation report, the GRC shall suspend the procurement proceedings. 48.4. In case, the complaint is filed after the issuance of the final evaluation report, the complainant cannot raise any objection on technical evaluation of the report: Provided that the complainant may raise the objection on any part of the final evaluation report in case where single stage one envelop bidding procedure is adopted. 48.5. The GRC, in both the cases shall investigate and decide upon the complaint within ten days of its receipt. 48.6. Any bidder or the procuring agency not satisfied with the decision of the GRC may file Appeal before the Appellate Committee of the Authority on prescribed format after depositing the prescribed fee. 48.7. The Committee, upon receipt of the Appeal against the decision of the GRC complete in all respect shall serve notices in writing upon all the parties to Appeal. 48.8. The committee shall call the record from the concerned procuring agency or the GRC as the case may be, and the same shall be provided within prescribed time.

	48.9. The committee may after examination of the relevant record and hearing all the concerned parties, shall decide the complaint within fifteen (15) days of receipt of the Appeal. 48.10. The decision of the Committee shall be in writing and shall be signed by the Head and each Member of the Committee. The decision of the committee shall be final.
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H. MECHANISM OF BLACKLISTING

49. Mechanism of Blacklisting	49.1. The Procuring Agency shall bar for not more than the time prescribed in Rule-19 of the Public Procurement Rules, 2004, from participating in their respective procurement proceedings, bidder or contractor who either: i) Involved in corrupt and fraudulent practices as defined in Rule-2 of Public Procurement Rules; ii) Fails to perform his contractual obligations; and iii) Fails to abide by the id securing declaration. 49.2. The show cause notice shall contain: (a) precise allegation, against the bidder or contractor; (b) the maximum period for which the Procuring Agency proposes to debar the bidder or contractor from participating in any public procurement of the Procuring Agency; and (c) the statement, if needed, about the intention of the Procuring Agency to make a request to the Authority for debarring the bidder or contractor from participating in public procurements of all the procuring agencies. 49.3. The procuring agency shall give minimum of seven days to the bidder or contractor for submission of written reply of the show cause notice. 49.4. In case, the bidder or contractor fails to submit written reply within the requisite time, the Procuring Agency may issue notice for personal hearing to the bidder or contractor/ authorize representative of the bidder or contractor and the procuring agency shall decide the matter on the basis of available record and personal hearing, if availed. 49.5. In case the bidder or contractor submits written reply of the show cause notice, the Procuring Agency may decide to file the matter or direct issuance of a notice to the bidder or contractor for personal hearing. 49.6. The Procuring Agency shall give minimum of seven days to the bidder or contractor for appearance before the specified officer of the Procuring Agency for personal hearing. The specified officer shall decide the matter on the basis of the available record and personal hearing of the bidder or contractor, if availed. 49.7. The procuring Agency shall decide the matter within fifteen days from the date of personal hearing unless the personal hearing is adjourned to a next date and in such an eventuality, the period of personal hearing shall be reckoned from the last date of personal hearing. 49.8. The Procuring Agency shall communicate to the bidder or contractor the order of debarring the bidder or contractor from
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	participating in any public procurement with a statement that the bidder or contractor may, within thirty days, prefer a representation against the order before the Authority. 49.9. Such blacklisting or barring action shall be communicated by the procuring agency to the Authority and respective bidder or bidders in the form of decision containing the grounds for such action. The same shall be publicized by the Authority after examining the record whether the procedure defined in blacklisting and debarment mechanism has been adhered to by the procuring agency. 49.10. The bidder may file the review petition before the Review Petition Committee Authority within thirty days of communication of such blacklisting or barring action after depositing the prescribed fee and in accordance with "Procedure of filing and disposal of review petition under Rule-19(3) Regulations, 2021". The Committee shall evaluate the case and decide within ninety days of filing of review petition. 49.11. The committee shall serve a notice in writing upon all respondent of the review petition. The notices shall be accompanied by the copies of review petition and all attached documents of the review petition including the decision of the procuring agency. The parties may file written statements along with essential documents in support of their contentions. The Committee may pass such order on the representation may deem fit. 49.12. The Authority on the basis of decision made by the committee either may debar a bidder or contractor from participating in any public procurement process of all or some of the procuring agencies for such period as the deemed appropriate or acquit the bidder from the allegations. The decision of the Authority shall be final.
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SECTION III: BID DATA SHEET

Bid Data Sheet (BDS)

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

BDS Clause Number	ITB Clause Number	Amendments of, and Supplements to, Clauses in the Instruction to Bidders
A. Introduction		
1.	1.1	Name of Procuring Agency: Pakistan Cricket Board The subject of procurement is: Supply, Installation, Testing, Commissioning, Including Civil Works, Operation & Maintenance of Diesel Generator Sets at Gaddafi Stadium, Lahore Period for delivery of Goods and Related Services: 04 months from the Commencement Date followed by an Operation & Maintenance Period of two (02) years Commencement Date for delivery of Goods and Related Services: The Commencement Date shall be same as Effective Contract Date.
2.	3.1	Maximum number of members in the Joint Venture or Consortium or Association shall be: Two (02)
3.	3.8	Following paragraph is added at the end: (g) the bidder is a defaulter of the Procuring Agency or with whom the Procuring Agency has a previous or current unsettled dispute or an unresolved claim or outstanding balance and any such entity shall not be eligible to apply.
4.	4.5	Demonstration of authorization by manufacturer: Required
B. Bidding Documents		
5.	7.2	N/A
6.	7.3	Sub-Clause is substituted as under: The Procuring Agency is not responsible for the completeness of the Bidding Documents and their addenda, if they were not downloaded from the EPADS 2 (WWW.EPADS.GOV.PK).
7.	8.1	Clarifications regarding the Bidding Documents should be requested through EPADS 2 (WWW.EPADS.GOV.PK), and the responses will be uploaded on EPADS 2 (WWW.EPADS.GOV.PK).
8.	8.2	Sub-Clause is substituted as under: The Procuring Agency will immediately respond through EPADS 2 (WWW.EPADS.GOV.PK) to any request for clarification provided that such request is received not later than three (03) days prior to the deadline for the submission of Bids.
9.	8.3	The following paragraph is added to the Sub-Clause: Procuring Agency's response will be uploaded on EPADS 2

		(WWW.EPADS.GOV.PK).
10.	8.5	Pre-bid meeting will be held: Venue: Office of the Director, Infra & Real Estate Pakistan Cricket Board Gaddafi Stadium, Ferozepur Road, Lahore Phone: 042-3571-7231-4, Fax: 042-3571-1860 Time: Date:
11.	8.6	Minutes of the pre-Bid meeting, if applicable, will be transmitted promptly to all prospective Bidders through EPADS 2 (WWW.EPADS.GOV.PK).
12.	9.2	Sub-Clause is substituted as under: Any addendum issued including the notice of any extension of the deadline shall be part of the Bidding Documents pursuant to ITB 7.1 and shall promptly be published on the EPADS 2 (WWW.EPADS.GOV.PK) and on EPMS. Provided that the Bidder who had either already submitted the Bid on EPADS 2 (WWW.EPADS.GOV.PK) prior to the issuance of any such addendum, shall have the right to withdraw already uploaded Bid and submit the revised Bid prior to the original or extended Bid submission deadline.
C. Preparation of Bids		
13.	10.1	The Language of all correspondences and documents related to the Bid is: English
14.	11.1	Sub-Clause is substituted as under: The Bid shall be made as per Rule 36(b) of PPR-2004. Single Stage Two Envelope. The Bid shall comprise two parts submitted simultaneously, one called the 'Technical Proposal' and the other called the 'Financial Proposal', each containing the documents listed hereunder, and both must be submitted online through EPADS 2 (WWW.EPADS.GOV.PK). <u>Technical Proposal</u> - Duly filled-in Letter of Bid–Technical Proposal in accordance with ITB 14; - Documentary evidence established in accordance with ITB 12 that the goods and related services to be supplied by the Bidder are eligible goods and services, and conform to the Bidding Documents; - Documentary evidence established in accordance with ITB 13 that the Bidder is eligible and qualified for the subject bidding process; - Bid Security furnished in accordance with ITB 18. Scanned copy of Bid Security to be provided on EPADS 2 (WWW.EPADS.GOV.PK) with Technical Proposal & original shall be submitted to the Procuring Agency's address

		specified in Invitation to e-Bid before the Bid submission deadline; e) Duly Notarized Power of Attorney authorizing the signatory of the Bid to submit the Bid; f) Integrity Pact; and g) Any other document required in the Bidding Documents. <u>Financial Proposal</u> a) Duly filled-in Letter of Bid–Financial Proposal in accordance with ITB 14; and b) Duly filled-in Price Schedules Forms completed in accordance with ITB 15.
15.	11.2 to 11.6	N/A
16.	12.3 (c)	Other procurement specific documentation requirements are: N/A
17.	12.4	N/A
18.	13.3 (b) & (d)	The qualification criteria is specified in Section VI: Standard Forms.
19.	15.6	Sub-Clause is substituted as under: Prices indicated on the Price Schedule shall be entered in the following manner: For Goods manufactured within Pakistan or offered from abroad, the price quoted shall be inclusive of all costs of customs duties, sales tax and other applicable taxes, inland transportation, insurance, and all other local costs incidental to delivery of the Goods to their final destination at the Project Site, as well as the cost of all Related Services including supply, installation, testing, commissioning, civil works and other incidental works necessary for the proper and complete installation and functioning of each item in accordance with the Specifications and Drawings, and all costs associated with the operation and maintenance of the supplied Goods for a period of two (2) years.
20.	15.8	The prices shall be fixed.
21.	16.1	Sub-Clause is substituted as under: For goods and related services that the Bidder will deliver from within or outside Pakistan, or for imported parts or components of goods and related services originating outside Pakistan, the prices shall be quoted in Pakistani Rupees only. A Bidder expecting to incur expenditures in other currencies for inputs to the goods and related services originating outside Pakistan shall bear all costs and risks for arranging such currencies including currency exchange rate parity.
22.	16.2, 16.3 & 16.4	N/A
23.	17.1	The Bid Validity period shall be 90 days.
24.	18.1	The amount of Bid Security shall be PKR 15,000,000. The currency of the Bid Security shall be: Pak Rupees

		Bid Securing Declaration is not applicable.
25.	18.3 (a) & (b)	The Bid Security shall be in the form of bank guarantee or a Pay Order issued by a Scheduled bank in Pakistan.
26.	18.3 (c)	Other forms of security are: N/A
27.	19.1	Alternative Bids to the requirements of the Bidding Documents will not be permitted.
28.	19.2&19.3	N/A
29.	20.1	Sub-Clause is substituted as under: Any Bidder may withdraw, substitute, or modify their bid through EPADS 2 (WWW.EPADS.GOV.PK) before the Bid submission deadline.
30.	20.2	Sub-Clause is substituted as under: If the Bidder intends to withdraw the submitted bids pursuant to Sub-Clause 20.1, it can be deleted from EPADS 2 (WWW.EPADS.GOV.PK) before Bid submission deadline.
31.	21.1	The Bids shall be submitted through EPADS 2 (WWW.EPADS.GOV.PK).
32.	21.2	Written confirmation of authorization are: Duly Notarized Power of Attorney in original duly signed and stamped.
D. Submission of Bids		
33.	22.1 & 22.2	N/A
34.	22.3 & 22.4	The Bid shall consist of two separate documents: The 'Technical Proposal' and the 'Financial Proposal'. Each document should include the information specified in Sub-Clause 11.1, and both must be submitted online through EPADS. Bid submitted through any mode other than EPADS shall not be considered.
35.	22.4 (b)	Name and identification number of the Contract: Supply, Installation, Testing, Commissioning, Including Civil Works, Operation & Maintenance of Diesel Generator Sets at Gaddafi Stadium, Lahore
36.	23.1	The deadline for Bid submission is: As notified in Invitation to e-Bid
37.	24	Sub-Clause is substituted as under: In case the Bidder is not able to upload its bid before the Bid submission deadline or the Bid is not submitted through EPADS due to any reason, the Procuring Agency shall not consider any such Bid.
E. Opening and Evaluation of Bids		
38.	26.1, 26.2, 26.3, 26.4, 26.5	N/A
39.	26.6	The opening of Technical Proposal shall take place at:

		Venue: Office of the: Director, Infra & Real Estate Pakistan Cricket Board Gaddafi Stadium Ferozepur Road, Lahore-Pakistan Time and Date: As notified in Invitation to e-Bid
40.	26.7	Sub Clause is substituted as: The Technical Proposals shall be downloaded from EPADS 2 (WWW.EPADS.GOV.PK) one at a time, and the following read out and recorded: (a) the name of the Bidder; (b) the presence or absence of Original Bid Security and (c) Any other details as the Procuring Agency may consider appropriate.
41.	26.11	Sub Clause is substituted as: The Procuring Agency shall prepare minutes of the Bid opening. The record of the Technical Proposal opening shall include, as a minimum: the name of the Bidder and the presence or absence of Original Bid Security.
42.	26.13	Sub-Clause is deleted.
43.	26.14	The Sub-Clause is substituted as: The method will be single stage two envelope as per Rule 36(b) of PPR-2004 In Single Stage Two Envelope Bidding Procedure, after the evaluation and approval of Technical Proposals the Procuring Agency, shall at a time within the bid validity period, publicly open the Financial Proposals of the substantially responsive Technical Proposals only. The Financial Proposals of the Bids found technically non-responsive shall not be opened. At the time of opening of Financial Proposals, the Procuring Agency will announce the Bidder's name, Bid Prices, any discount offered, and such other details as the Procuring Agency at its discretion may consider appropriate.
44.	32.2	Conversion to single currency: N/A
45.	33.3, 33.4, 33.5 & 33.6	The Sub-Clauses are deleted in its entirety.
46.	33.7	N/A
47.	35	ITB 35.1 is modified as under and ITB 35.2 is deleted. After meeting the requirements of eligibility, qualification, the bid in compliance with all the mandatory (technical) specifications/requirements and/or requisite quality threshold (if any) and substantial responsiveness, having lowest evaluated cost shall be considered Most Advantageous Bid.
48.	36.1	ITB 36.1 is deleted.
F. Award of Contract		
49.	40.1	N/A
50.	43.1	The amount of Performance Security shall be ten (10) percent of the Contract Price stated in the Letter of Acceptance.

51.	43.2	The Performance Security shall be in the form of a bank guarantee on the format provided in the Bidding Documents.
52.	44.2	Maximum amount of Advance payment shall be:10%



SECTION IV. ELIGIBLE COUNTRIES

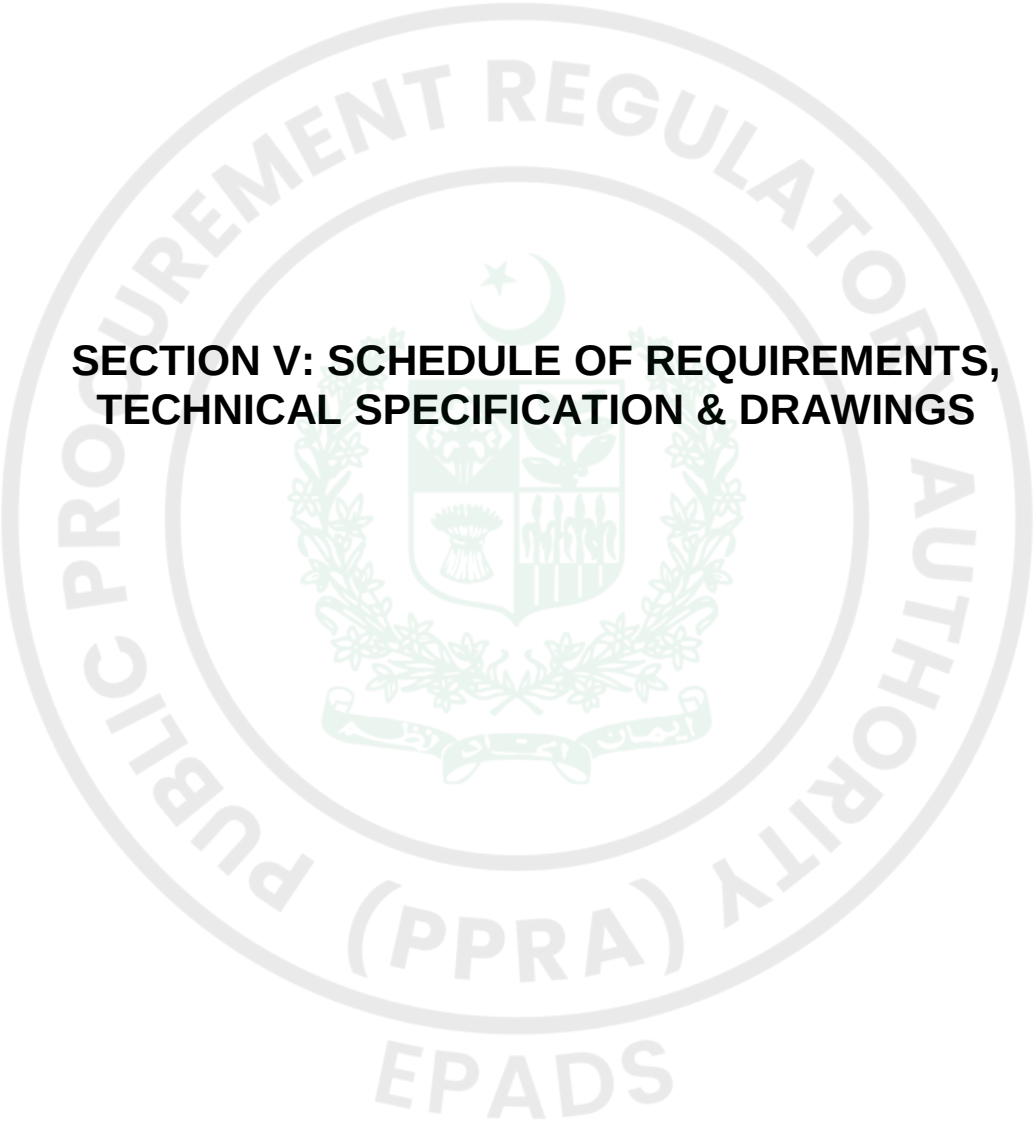
All the bidders are allowed to participate in the subject procurement without regard to nationality, except bidders of some nationality, prohibited in accordance with policy of the Federal Government.

The ineligible countries are India and Israel.

Ministry of Interior, Government of Pakistan has notified List of Business Friendly Countries (BVL), information can be accessed through following link:

<https://visa.nadra.gov.pk/business-visa-list.bvl/>





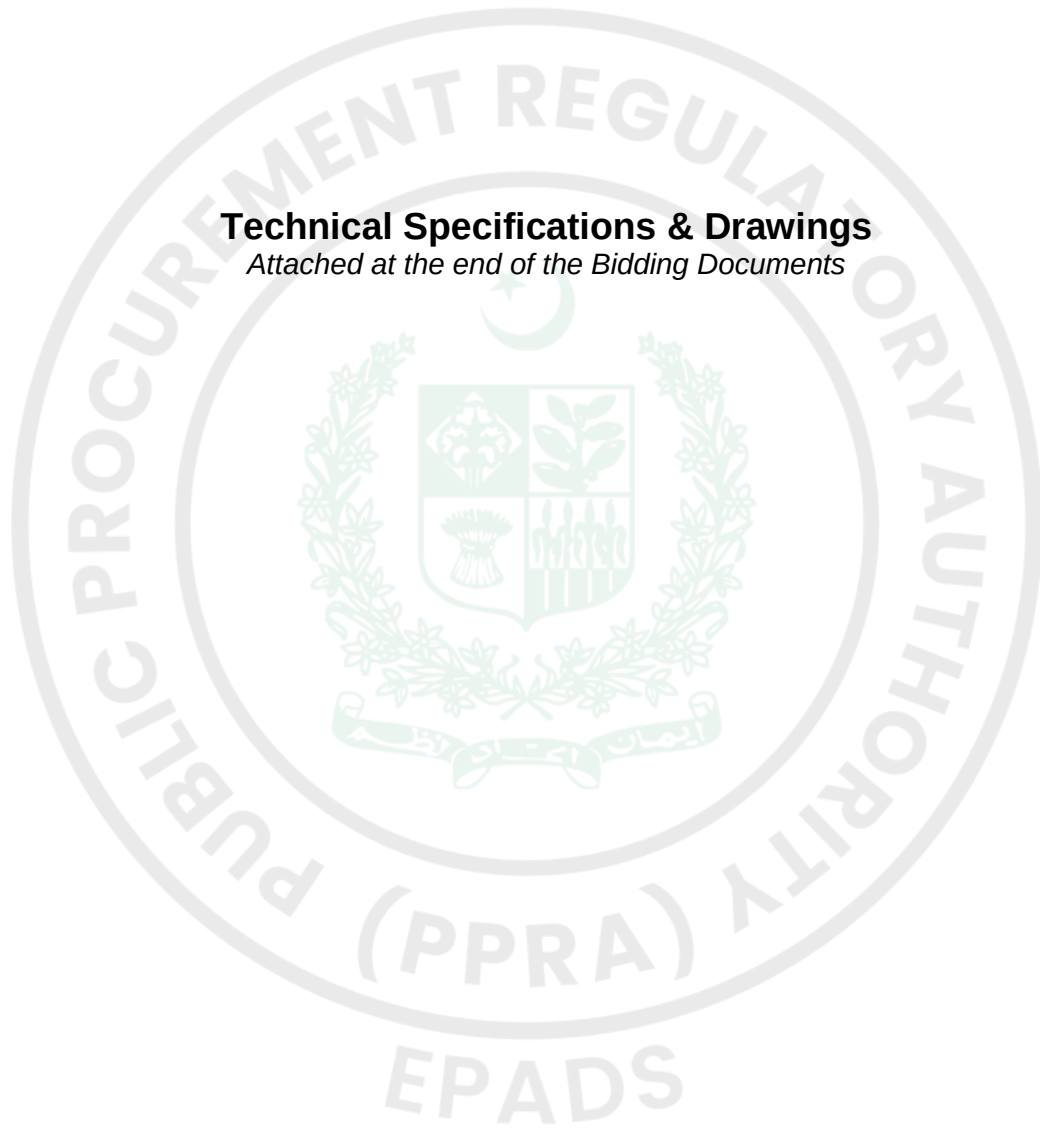
SECTION V: SCHEDULE OF REQUIREMENTS, TECHNICAL SPECIFICATION & DRAWINGS

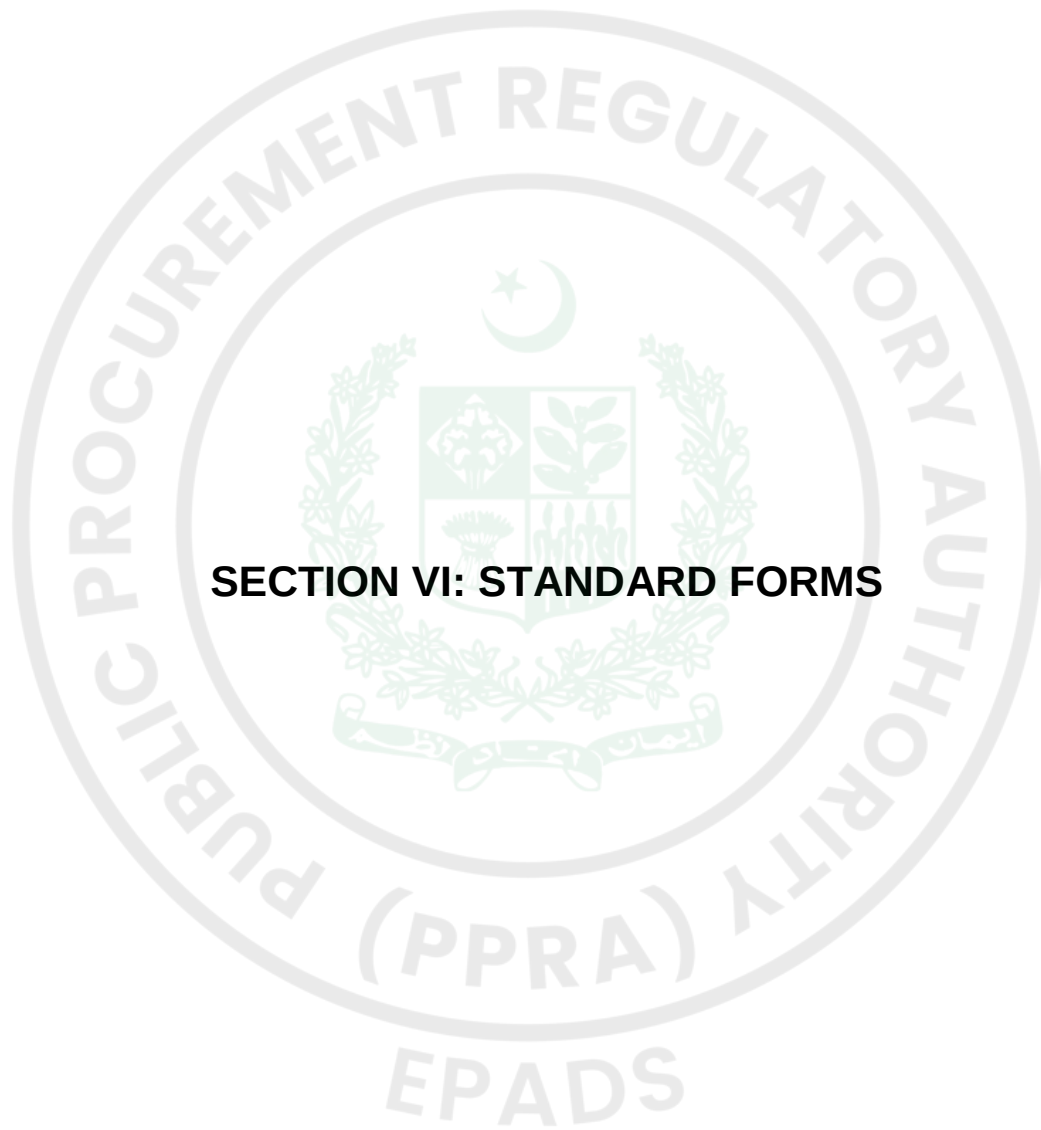
Schedule of Requirements

The successful Bidder shall be liable to supply the requisite Goods and provide Related Services as per the following schedule:

Item No.	Description	Location	Quantity (Nos.)	Delivery Schedule
1.	Supply of following Diesel Generator Sets to the Project Site:			
	150 kVA DG Set (For Small Digital Screen)	Gaddafi Stadium, Lahore	1	3.5 Months from Commencement Date
	250 kVA DG Set (For Big Digital Screen)		1	
	350 kVA DG Set (For Flood Lights on Poles)		6	
	750 kVA DG Set (For Far End Building)		1	
	1000 kVA DG Set (For Main & Pavilion Building)		1	
2.	Supply, Installation, Testing, Commissioning, Including Civil Works		-	04 Months from Commencement Date
3.	Operation & Maintenance Period		-	02 Years after successful testing, commissioning and acceptance of the Goods

Technical Specifications & Drawings
Attached at the end of the Bidding Documents





SECTION VI: STANDARD FORMS

Table of Forms

Letter of Bid – Technical Proposal

Letter of Bid - Financial Proposal

Bidder's Information Form

Bidder's JV Members Information Form

Price Schedule

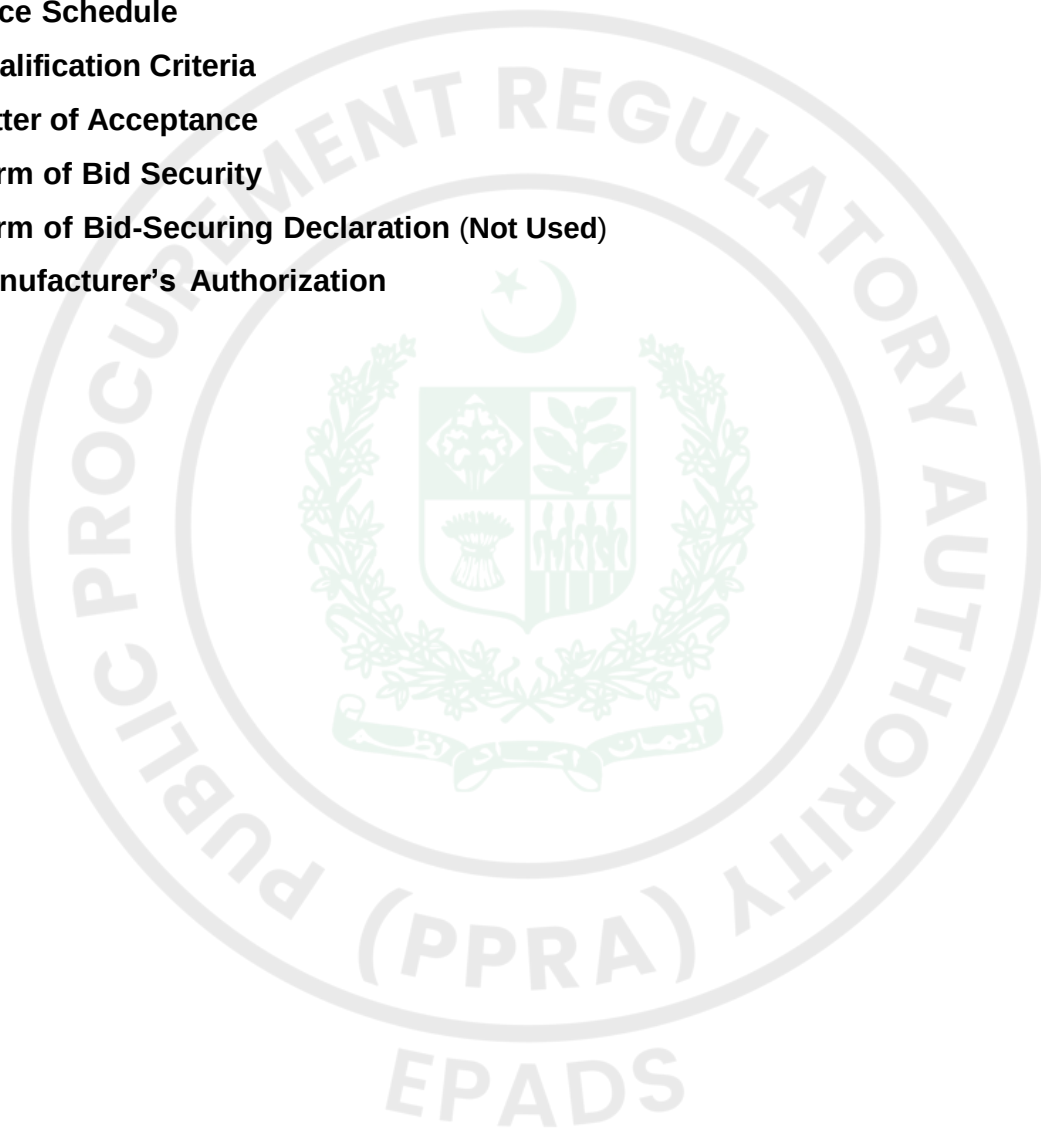
Qualification Criteria

Letter of Acceptance

Form of Bid Security

Form of Bid-Securing Declaration (Not Used)

Manufacturer's Authorization



Letter of Bid – Technical Proposal

INSTRUCTIONS TO BIDDERS: DELETE THIS BOX ONCE YOU HAVE COMPLETED THE DOCUMENT

Place this Letter of Bid in the first envelope "TECHNICAL PROPOSAL".

The Bidder must prepare the Letter of Bid on stationery with its letterhead clearly showing the Bidder's complete name and business address.

Note: All italicized text in black font is to help Bidders in preparing this form and Bidders shall delete it from the final document.

Date of this Bid submission:
RFB No.:

To:
Director, Infra & Real Estate
Pakistan Cricket Board

We, the undersigned Bidder, hereby submit our Bid, in two parts, namely:

- (a) the Technical Proposal, and
- (b) the Financial Proposal.

In submitting our Bid we make the following declarations:

- (a) **No reservations:** We have examined and have no reservations to the bidding document, including addenda issued in accordance with Instructions to Bidders (ITB 9);
- (b) **Eligibility:** We meet the eligibility requirements and have no conflict of interest in accordance with ITB 3;
- (c) **Bid/Proposal-Securing Declaration:** We have not been suspended nor declared ineligible by the Procuring Agency based on execution of a Bid Securing Declaration or Proposal Securing Declaration in the Procuring Agency's country in accordance with ITB 4;
- (d) **Conformity:** We offer to supply in conformity with the Bidding Document and in accordance with the Delivery Schedules specified in the Schedule of Requirements the following Goods: *[insert a brief description of the Goods and Related Services]*;
- (e) **Bid Validity Period:** Our Bid shall be valid for the period specified in BDS 17.1 (as amended, if applicable) from the date fixed for the Bid submission deadline specified in BDS 23.1 (as amended, if applicable), and it shall remain binding upon us, and may be accepted at any time before the expiration of that period;
- (f) **Performance Security:** If our Bid is accepted, we commit to obtain a performance

security in accordance with the bidding document;

- (g) **One Bid per Bidder:** We are not submitting any other Bid(s) as an individual Bidder, and we are not participating in any other bid(s) as a Joint Venture member or as a subcontractor, and meet the requirements, other than Alternative Bids submitted in accordance with ITB 19;
- (h) **Suspension and Debarment:** We, along with any of our subcontractors, suppliers, consultants, manufacturers, or service providers for any part of the contract, are not subject to, and not controlled by any entity or individual that is subject to, a temporary suspension or a debarment imposed by the Procuring Agency. Further, we are not ineligible under Pakistan laws;
- (i) **Binding Contract:** We understand that this Bid, together with your written acceptance thereof included in your Letter of Acceptance, shall constitute a binding contract between us, until a formal contract is prepared and executed;
- (j) **Not Bound to Accept:** We understand that you are not bound to accept the Most Advantageous Bid or any other Bid that you may receive; and
- (k) **Fraud and Corruption:** We hereby certify that we have taken steps to ensure that no person acting for us, or on our behalf, engages in any type of Fraud and Corruption.

Name of the Bidder: **[insert complete name of Bidder]*

Name of the person duly authorized to sign the Bid on behalf of the Bidder: **
[insert complete name of person duly authorized to sign the Bid]

Title of the person signing the Bid: *[insert complete title of the person signing the Bid]*

Signature of the person named above: *[insert signature of person whose name and capacity are shown above]*

Date signed *[insert date of signing]* **day of** *[insert month]*, *[insert year]*

*: In the case of the Bid submitted by a Joint Venture specify the name of the Joint Venture as Bidder.

**: Person signing the Bid shall have the power of attorney given by the Bidder. The power of attorney shall be attached with the Bid Schedules.

Letter of Bid - Financial Proposal

INSTRUCTIONS TO BIDDERS: DELETE THIS BOX ONCE YOU HAVE COMPLETED THE DOCUMENT

Place this Letter of Bid - Financial Proposal in the second envelope marked "FINANCIAL PROPOSAL".

The Bidder must prepare the Letter of Bid - Financial Proposal on stationery with its letterhead clearly showing the Bidder's complete name and business address.

Note: All italicized text is to help Bidders in preparing this form.

Date of this Bid submission:
RFB No.:

To:
Director, Infra & Real Estate
Pakistan Cricket Board

We, the undersigned Bidder, hereby submit the second part of our Bid, the Financial Proposal.

In submitting our Financial Proposal we make the following additional declarations:

- (a) **Bid Validity Period:** Our Bid shall be valid for the period specified in BDS 17.1 (as amended, if applicable) from the date fixed for the bid submission deadline specified in **BDS 23.1 (as amended, if applicable)**, and it shall remain binding upon us and may be accepted at any time before the expiration of that period;
- (b) **Total Price:** The total price of our Bid, excluding any discounts offered in item (c) below is: *[insert the total price of the bid in words and figures, indicating the various amounts and the respective currencies]*;
- (c) **Discounts:** The discounts offered and the methodology for their application are:
 - (i) The discounts offered are: *[Specify in detail each discount offered]*
 - (ii) The exact method of calculations to determine the net price after application of discounts is shown below: *[Specify in detail the method that shall be used to apply the discounts]*;
- (d) **Commissions, gratuities and fees:** We have paid, or will pay the following commissions, gratuities, or fees with respect to the bidding process or execution of the Contract: *[insert complete name of each Recipient, its full address, the reason for which each commission or gratuity was paid and the amount and currency of each such commission or gratuity]*.

Name of Recipient	Address	Reason	Amount
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(If none has been paid or is to be paid, indicate "none.")

- (e) **Binding Contract:** We understand that this Bid, together with your written acceptance thereof included in your Letter of Acceptance, shall constitute a binding contract between us, until a formal contract is prepared and executed.

Name of the Bidder: **[insert complete name of the Bidder]*

Name of the person duly authorized to sign the Bid on behalf of the Bidder: **
[insert complete name of person duly authorized to sign the Bid]

Title of the person signing the Bid: *[insert complete title of the person signing the Bid]*

Signature of the person named above: *[insert signature of person whose name and capacity are shown above]*

Date signed *[insert date of signing]* **day of** *[insert month]*, *[insert year]*

*: In the case of the Bid submitted by a Joint Venture specify the name of the Joint Venture as Bidder.

**: Person signing the Bid shall have the power of attorney given by the Bidder. The power of attorney shall be attached with the Bid Schedules.

Bidder's Information Form

[The Bidder shall fill in this Form in accordance with the instructions indicated below. No alterations to its format shall be permitted and no substitutions shall be accepted.]

Date: _____ *[insert date (as day, month and year) of Bid submission]*

1. Bidder's Name <i>[insert Bidder's legal name]</i>
2. In case of JV, legal name of each member : <i>[insert legal name of each member in JV]</i>
3. Bidder's actual or intended country of registration: <i>[insert actual or intended country of registration]</i>
4. Bidder's year of registration: <i>[insert Bidder's year of registration]</i>
5. Bidder's Address in country of registration: <i>[insert Bidder's legal address in country of registration]</i>
6. Bidder's Authorized Representative Information Name: <i>[insert Authorized Representative's name]</i> Address: <i>[insert Authorized Representative's Address]</i> Telephone/Fax numbers: <i>[insert Authorized Representative's telephone/fax numbers]</i> Email Address: <i>[insert Authorized Representative's email address]</i>
7. Attached are copies of original documents of <i>[check the box(es) of the attached original documents]</i> . ☐ Articles of Incorporation (or equivalent documents of constitution or association), and/or documents of registration of the legal entity named above. ☐ In case of JV, letter of intent to form JV or JV agreement, in accordance with ITB 3.4. ☐ 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

*[The Bidder shall fill in this Form in accordance with the instructions indicated below.
The following table shall be filled in for the Bidder and for each member of a Joint Venture].*

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

1. Bidder's Name: <i>[insert Bidder's legal name]</i>
2. Bidder's JV Member's name: <i>[insert JV's Member legal name]</i>
3. Bidder's JV Member's country of registration: <i>[insert JV's Member country of registration]</i>
4. Bidder's JV Member's year of registration: <i>[insert JV's Member year of registration]</i>
5. Bidder's JV Member's legal address in country of registration: <i>[insert JV's Member legal address in country of registration]</i>
6. Bidder's JV Member's authorized representative information Name: <i>[insert name of JV's Member authorized representative]</i> Address: <i>[insert address of JV's Member authorized representative]</i> Telephone/Fax numbers: <i>[insert telephone/fax numbers of JV's Member authorized representative]</i> Email Address: <i>[insert email address of JV's Member authorized representative]</i>
7. Attached are copies of original documents of <i>[check the box(es) of the attached original documents]</i> . ☐ 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.

Price Schedule

A. Preamble to Price Schedule

1. General

- 1.1 The Schedule of Prices shall be read in conjunction with the Terms and Conditions of Contract, Instruction to Bidders, Bidding Data together with the Technical Specifications and tables, (if any).
- 1.2 Bids must be for the complete Scope of Work.

2. Description

- 2.1 The general directions and descriptions of works and materials are not necessarily repeated nor summarized in the Schedule of Prices. References to the relevant sections of the Bidding Documents shall be made before entering prices against each item in the Schedule of Prices.

3. Units & Abbreviations

- 3.1 Units of measurement, symbols and abbreviations expressed in the Bidding Documents shall comply with the System International Unites (SI Units).

4. Rates and Prices

- 4.1 Except as otherwise expressly provided under the Term and Conditions of Contract, the rates and amounts entered in the Schedule of Prices shall be the rates at which the Bidder shall be paid and shall be the full inclusive value of the works set forth or implied in the Contract.
- 4.2 Unless otherwise stipulated in the Bidding Documents, the rates and prices entered by the bidder shall not be subject to adjustment during the performance of the Contract.
- 4.3 All duties, taxes and other levies and taxes payable by the Supplier/vendor shall be included in the rates and prices.
- 4.4 The whole cost of complying with the provisions of the Contract shall be included in the items provided in the Schedule of Prices, and where no items are provided, the cost shall be deemed to be distributed among the rates and prices entered for the related items of the Works and no separate payment will be made for those items.

The rates, prices and amounts shall be entered against each item in the Schedule of Prices. Any item against which no rate or price is entered by the bidder will not be paid for by the Procuring Agency when executed and shall be deemed covered by the rates and prices for other items in the Schedule of Prices.

- 4.5 (a) The Bidder shall be deemed to have obtained all information as to and all requirements related thereto which may affect the Bid Price.
- (b) The Supplier shall be responsible to make complete arrangements for the transportation to the Procuring Agency's designated place in Pakistan.

- 4.6 The Bidder shall provide for all parts of the works to be completed in every respect. Notwithstanding that any details, accessories, etc., required for the complete installation, testing, commissioning and satisfactory operation of the items, are not specifically mentioned in the Specifications, such details shall be considered as included in the Contract Price.

5. Bid Prices

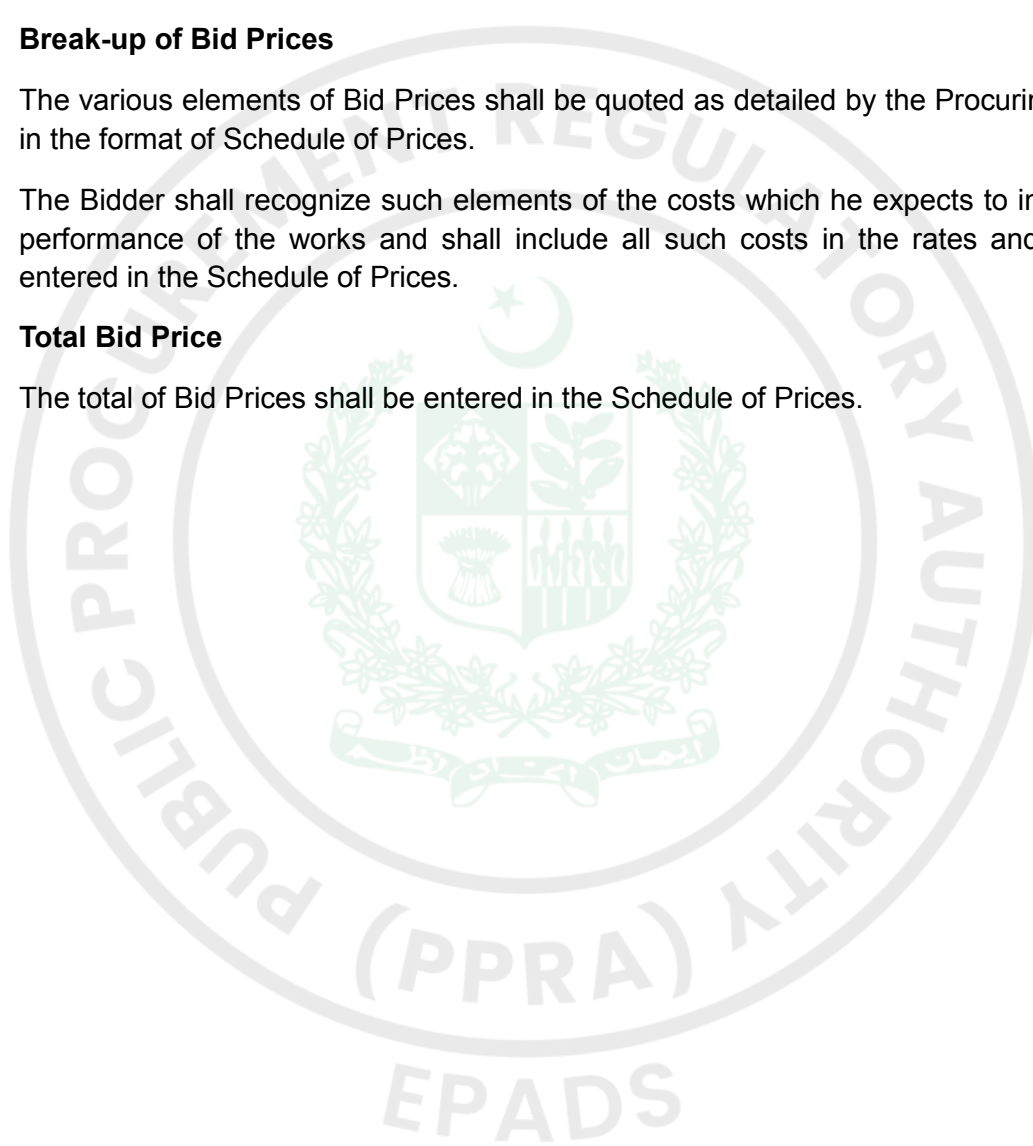
5.1 Break-up of Bid Prices

The various elements of Bid Prices shall be quoted as detailed by the Procuring Agency in the format of Schedule of Prices.

The Bidder shall recognize such elements of the costs which he expects to incur in the performance of the works and shall include all such costs in the rates and amounts entered in the Schedule of Prices.

5.2 Total Bid Price

The total of Bid Prices shall be entered in the Schedule of Prices.



B. Schedule of Prices

Attached at the end of Bidding Documents



Qualification Criteria

A. Experience in Contracts of Similar Size and Nature

- (i). The proposed manufacturer must have at least Thirty (30) years' experience in the manufacturing of Diesel Engine and Alternator provided in the DG Set and the Bidder must provide the documentary proof of above said experience.
- (ii). In case the Bidder is not the manufacturer, the bidder must have at least ten (10) years' experience in supply & installation of the DG Sets and the Bidder must provide the documentary proof of above said experience. The bidder shall provide documentary evidence of the same.
- (iii). In case the Bidder is not the manufacturer, Bidder shall submit documentary evidence on Generator manufacturer's letter head that the bidder is the authorized agent of the manufacturer for Sales, Service and After Sales Backup Support.
- (iv). The Bidder must provide signed purchase orders/performance/completion certificates of 5 + similar projects (of equal/higher capacity, i.e., 150kVA, 250kVA, 350kVA, 750kVA and 1000kVA) in past 05 Years.
- (v). The Bidder must have successful experience of at least Ten (10) years for the operation and maintenance of the DG Sets having capacity equal to or greater than the specified DG Sets.
- (vi). The Bidder or its proposed manufacturer must have supplied offered DG Sets (as a complete factory-assembled and coupled unit) internationally. The Bidder shall furnish documentary evidence along with the project name, client/end-user, country, manufacturer, model, rated capacity and date of supply.
- (vii). The Bidder must provide Type Test Reports of applicable standards from the specified independent authorized institution/laboratory for the offered model/make of the Diesel Generator Sets as stipulated in the Specifications.

B. Financial Soundness

- i. The Bidder shall have minimum average annual turnover in the last three (03) years not less than PKR 350 Million, calculated as total certified payments received for contracts in progress or completed, within the last three (03) years.
- ii. The Bidder's net worth, calculated as the difference between total assets and total liabilities, in the last three (03) years should be positive.
- iii. The bidder shall demonstrate that it has access to, or has available, liquid assets, unencumbered real assets, lines of credit, and other financial means (independent of any contractual advance payment) sufficient to meet the construction cash flow requirements PKR 200 Million for the subject contract(s) net of the Bidders other commitments.

The Bidder should provide audited balance sheets (containing UDIN) and income statements for the last three (3) years to demonstrate the financial position/soundness of its company, meeting the above requirements.

Note:

1. Bidder shall submit documentary evidence to substantiate compliance with the above requirements.
2. In case of a joint venture, all partners shall collectively meet the qualification parameters delineated above.

Letter of Acceptance

[Letter head of the Procuring Agency]

[date]

To: [name and address of the Supplier]

This is to notify you that your Bid dated [date] for execution of the [name of the Contract and identification number, as given in the Special Conditions of Contract] for the Contract Price of the equivalent of [amount in numbers and words] [name of currency], as corrected and modified in accordance with the Instructions to Bidders is hereby accepted by us.

We hereby confirm [insert the name of the Appointing Authority], to be the Appointing Authority, to appoint the Arbitrator in case of any arisen disputes in accordance with ITB 45.1.

You are hereby informed that after you have read and return the attached draft Contract the parties to the Contract shall sign the vetted Contract within three (03) working days.

You are hereby required to furnish the Performance Guarantee/Security in the form and the amount stipulated in the Special Conditions of the Contract within a period of three (03) days after the receipt of Letter of Acceptance.

Authorized Signature: _____

Name and Title of Signatory: _____

Name of Agency: _____

Attachment:

Copy: Appointing Authority and Supplier

Form of Bid Security (Bank Guarantee)

[The bank shall fill in this Bank Guarantee Form in accordance with the instructions indicated.]

[Guarantor letterhead or SWIFT identifier code]

Beneficiary: [Procuring Agency to insert its name and address]

No.: [Procuring Agency to insert reference number for the Request for Bids]

Alternative No.: [Insert identification No if this is a Bid for an alternative]

Date: [Insert date of issue]

Bid Guarantee No.: [Insert guarantee reference number]

Guarantor: [Insert name and address of place of issue, unless indicated in the letterhead]

We have been informed that _____ [insert name of the Bidder, which in the case of a joint venture shall be the name of the joint venture (whether legally constituted or prospective) or the names of all members thereof] (hereinafter called "the Applicant") has submitted or will submit to the Beneficiary its Bid (hereinafter called "the Bid") for the execution of _____ under Request for Bids No. _____ ("the RFB").

Furthermore, we understand that, according to the Beneficiary's conditions, Bids must be supported by a Bid guarantee.

At the request of the Applicant, we, as Guarantor, hereby irrevocably undertake to pay the Beneficiary any sum or sums not exceeding in total an amount of _____ (_____) upon receipt by us of the Beneficiary's complying demand, supported by the Beneficiary's statement, whether in the demand itself or a separate signed document accompanying or identifying the demand, stating that either the Applicant:

- a) has withdrawn its Bid during the period of Bid validity set forth in the Applicant's Letter of Bid ("the Bid Validity Period"), or any extension thereto provided by the Applicant; or
- b) having been notified of the acceptance of its Bid by the Beneficiary during the Bid Validity Period or any extension thereto provided by the Applicant, (i) has failed to sign the contract agreement, or (ii) has failed to furnish the performance security, in accordance with the Instructions to Bidders ("ITB") of the Beneficiary's bidding document.

This guarantee will expire: (a) if the Applicant is the successful Bidder, upon our receipt of copies of the Contract agreement signed by the Applicant and the performance security issued to the Beneficiary in relation to such Contract agreement; or (b) if the Applicant is not the successful Bidder, upon the earlier of (i) our receipt of a copy of the Beneficiary's notification to the Applicant of the results of the Bidding process; or (ii) twenty-eight days after the end of the Bid Validity Period.

Consequently, any demand for payment under this guarantee must be received by us at the office indicated above on or before that date.

[Signature(s)]

Note: *All italicized text is for use in preparing this form and shall be deleted from the final product.*



Bid Securing Declaration

Not Used



Manufacturer's Authorization

*[The Bidder shall require the Manufacturer to fill in this Form in accordance with the instructions indicated. This letter of authorization should be on the letterhead of the Manufacturer and should be signed by a person with the proper authority to sign documents that are binding on the Manufacturer. The Bidder shall include it in its Bid, if so indicated in the **BDS**.]*

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

No.: *[insert number of Bidding process]*

Alternative No.: *[insert identification No if this is a Bid for an alternative]*

To: *[insert complete name of Procuring Agency]*

WHEREAS

We *[insert complete name of Manufacturer]*, who are official manufacturers of *[insert type of goods manufactured]*, having factories at *[insert full address of Manufacturer's factories]*, do hereby authorize *[insert complete name of Bidder]* to submit a Bid the purpose of which is to provide the following Goods, manufactured by us *[insert name and or brief description of the Goods]*, and to subsequently negotiate and sign the Contract.

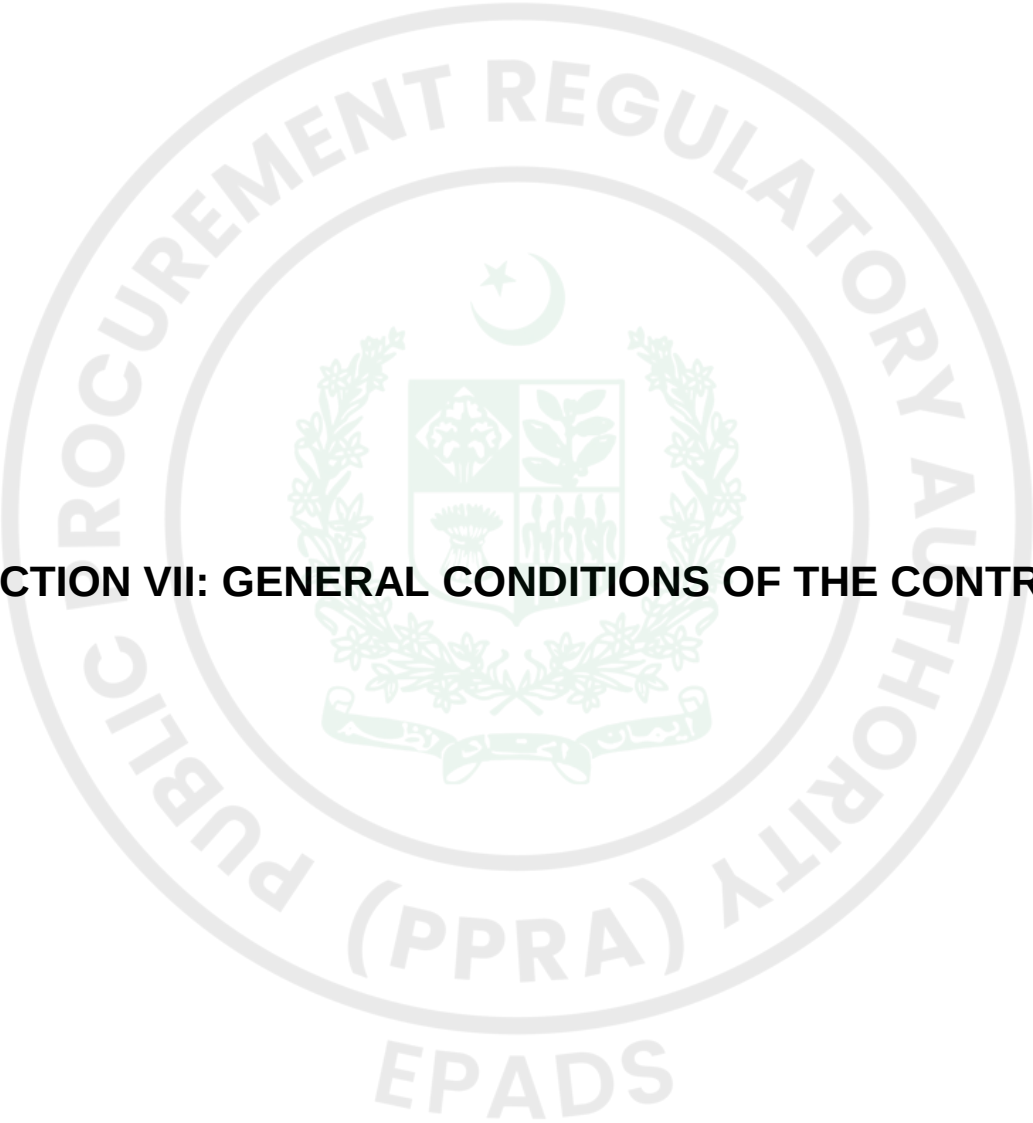
We hereby extend our full guarantee and warranty in accordance with Clause 28 of the General Conditions of Contract, with respect to the Goods offered by the above firm.

Signed: *[insert signature(s) of authorized representative(s) of the Manufacturer]*

Name: *[insert complete name(s) of authorized representative(s) of the Manufacturer]*

Title: *[insert title]*

Dated on ____day of,____*[insert date of signing]*



SECTION VII: GENERAL CONDITIONS OF THE CONTRACT

GENERAL CONDITIONS OF THE CONTRACT (GCC)

1. Definitions	1.1. The following words and expressions shall have the meanings hereby assigned to them: a) “Authority” means Public Procurement Regulatory Authority. b) The “Arbitrator” is the person appointed with mutual consent of both the parties, to resolve contractual disputes as provided for in the General Conditions of the Contract GCC Clause 31 hereunder. c) The “Contract” means the agreement entered into between the Procuring Agency and the Supplier, as recorded in the Contract Form signed by the parties, including all attachments and appendices thereto and all documents incorporated by reference therein. d) The “Commencement Date” is the date when the Supplier shall commence execution of the Contract as specified in the SCC. e) “Completion” means the fulfillment of the related services by the Supplier in accordance with the terms and conditions set forth in the Contract. f) “Country of Origin” means the countries and territories eligible under the PPRA Rules 2004 and its corresponding Regulations as further elaborated in the SCC. g) The “Contract Price” is the price stated in the Letter of Acceptance and thereafter as adjusted in accordance with the provisions of the Contract. h) “Defective Goods” are those goods which are below standards, requirements or specifications stated by the Contract. i) “Delivery” means the transfer of the goods from the supplier equipment, machinery, and /or other materials which the Supplier is required to supply to the Procuring Agency under Contract. j) “Effective Contract Date” is the date shown in the Certificate of Contract Commencement issued by the Procuring Agency upon fulfillment of the conditions precedent stipulated in GCC Clause 3. k) “Procuring Agency” means the person named as Procuring Agency in the SCC and the legal successors in title to this person, procuring the Goods and related service, as named in SCC. l) “Related Services” means those services ancillary to the delivery of the Goods, such as transportation and insurance, and any other incidental services, such as installation, commissioning, provision of technical assistance, training, initial maintenance and other such obligations of the Supplier covered under the Contract. m) “GCC” means the General Conditions of Contract contained
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	in this section. n) "Intended Delivery Date" is the date on which it is intended that the Supplier shall effect delivery as specified in the SCC. o) "SCC" means the Special Conditions of Contract. p) "Supplier" means the individual, private or government entity or a combination of the above whose Bid to perform the contract has been accepted by the Procuring Agency and is named as such in the Contract Agreement, and includes the legal successors or permitted assigns of the supplier and shall be named in the SCC. q) "Project Name" means the name of the project stated in SCC. r) "Day" means calendar day. s) "Eligible Country" means the countries and territories eligible for participation in accordance with the policies of the Federal Government. t) "End User" means the organization(s) where the goods will be used, as named in the SCC. u) "Origin" means the place where the Goods were mined, grown, or produced or from which the Services are supplied. Goods are produced when, through manufacturing, processing, or substantial and major assembly of components, a commercially recognized new produce results that is substantially different in basic characteristics or in purpose or utility from its components. v) "Force Majeure" means an unforeseeable event which is beyond reasonable control of either Party and which makes a Party's performance of its obligations under the Contract impossible or so impractical as to be considered impossible under the circumstances. For the purposes of this Contract, "Force Majeure" means an event which is beyond the reasonable control of a Party, is not foreseeable, is unavoidable, and its origin is not due to negligence or lack of care on the part of a Party, and which makes a Party's performance of its obligations hereunder impossible or so impractical as reasonably to be considered impossible in the circumstances. and includes, but is not limited to, war, riots, civil disorder, earthquake, fire, explosion, storm, flood, epidemics, or other adverse weather conditions, strikes, lockouts or other industrial action (except where such strikes, lockouts or other industrial action are within the power of the Party invoking Force Majeure to prevent), confiscation or any other action by Government agencies. w) "Specification" means the Specification of the Goods and performance of incidental services in accordance with the relevant standards included in the Contract and any modification or addition made or approved by the Procuring Agency. x) The Supplier's Bid is the completed Bid document submitted
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	by the Supplier to the Procuring Agency.
2. Application and Interpretation	2.1. These General Conditions shall apply to the extent that they are not superseded by provisions of other parts of the Contract. 2.2. In interpreting these Conditions of Contract headings and marginal notes are used for convenience only and shall not affect their interpretations unless specifically stated; references to singular include the plural and vice versa; and masculine include the feminine. Words have their ordinary meaning under the language of the Contract unless specifically defined. 2.3. The documents forming the Contract shall be interpreted in the following order of priority: 1) this Contract; 2) the Procuring Agency's Letter of Acceptance; 3) Minutes of Meeting dated November 27, 2023; 4) the Schedule of Requirements; 5) the Technical Specifications; 6) the Special Conditions of Contract; 7) the General Conditions of the Contract; 8) the Form of Bid and the Price Schedule submitted by the Bidder; and 9) Certificate of Contract Commencement.
3. Conditions Precedent	3.1. Having signed the Contract, it shall come into effect on the date on which the following conditions have been satisfied: a) Submission of performance Security (or guarantee) in the form specified in the SCC; b) Furnishing of Advance Payment Unconditional Guarantee. 3.2. If the Condition precedent stipulated on GCC Clause 3.1 is not met by the date specified in the SCC this Contract shall not come into effect; 3.3. If the Procuring Agency is satisfied that each of the conditions precedent in this Contract has been satisfied (except to the extent waved by him, but subject to such conditions as he shall impose in respect of such waiver) he shall promptly issue to the Supplier a certificate of Contract commencement, which shall confirm the start date.
4. Governing Language	4.1. The Contract as all correspondence and documents relating to the contract exchanged by the Supplier and the Procuring Agency shall be written in the language specified in SCC. Subject to GCC Clause 3.1, the version of the Contract written in the specified language shall govern its interpretation.
5. Applicable Law	5.1. The contract shall be governed and interpreted in accordance with the laws of Pakistan, unless otherwise specified in SCC.

6. Country of Origin	6.1. The origin of Goods and Services may be distinct from the nationality of the Supplier.
7. Standards	7.1. The Goods supplied under this Contract shall conform to the standards mentioned in the Technical Specifications, and, when no applicable standard is mentioned, the American Standards (such as ACI, IEEE, ASME, etc.) or the Pakistani standards such as PSQCA Such standards shall be the latest issued by the concerned institution.
8. Use of Contract Documents and Information; Inspection and Audit by the Government of Pakistan	8.1. The Supplier shall not, without the Procuring Agency's prior written consent, disclose the Contract, or any provision thereof, or any specification, plan, drawing, pattern, sample, or information furnished by or on behalf of the Procuring Agency in connection therewith, to any person other than a person employed by the Supplier in the performance of the Contract. Disclosure to any such employed person shall be made in confidence and shall extend only as far as may be necessary for purposes of such performance. 8.2. The Supplier shall not, without the Procuring Agency's prior written consent, make use of any document or information enumerated in GCC Clause 7.1 except for purposes of performing the Contract. 8.3. Any document, other than the Contract itself, enumerated in GCC Clause 7.1 shall remain the property of the Procuring Agency and shall be returned (all copies) to the Procuring Agency on completion of the Supplier's performance under the Contract if so required by the Procuring Agency. 8.4. The Supplier shall permit the Government of Pakistan or / and donor agencies involved in financing the project to inspect the Supplier's accounts and records relating to the performance of the Supplier and to have them audited by auditors appointed by the Government of Pakistan or / and the appropriate donor agencies, if so required by the Government of Pakistan or / and the appropriate donor agencies.
9. Patent and Copy Rights	9.1. The Supplier shall indemnify the Procuring Agency against all third-party claims of infringement of patent, trademark, or industrial design rights arising from use of the Goods or any part thereof in Pakistan. 9.2. The patent right in all drawings, documents, and other materials containing data and information furnished to the Procuring Agency by the Supplier herein shall remain vested in the supplier, or, if they are furnished to the Procuring Agency directly, or through the Supplier by any third party, including suppliers of materials, the patent right in such materials shall remain vested in such third party.

10. Performance Security (or Guarantee)	10.1. The Performance Security (or Guarantee) shall be provided to the Procuring Agency no later than the date specified in the Letter of Acceptance and shall be issued in an amount and form and by a bank or surety acceptable to the Procuring Agency, and denominated in the types and proportions of the currencies in which the Contract Price is payable as specified in the SCC. 10.2. The proceeds of the Performance Security (or 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. 10.3. The Performance Security (or Guarantee) shall be in one of the following forms: a) A bank guarantee, an irrevocable letter of credit issued by a reputable bank, or in the form provided in the Bidding Documents or another form acceptable to the Procuring Agency; or b) A cashier's or certified check. 10.4. The performance security (or 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.
11. Inspections and Test	11.1. The Procuring Agency or its representative shall have the right to inspect and /or to test the Goods to confirm their conformity to the Contract specifications at no extra cost to the Procuring Agency. SCC and the Technical Specifications shall specify what inspections and tests the Procuring Agency shall notify the Supplier in writing or in electronic forms that provide record of the content of communication, in a timely manner, of the identity of any representatives retained for these purposes. 11.2. The inspections and tests may be conducted on the premises of the Supplier or its subcontractor(s), at point of delivery, and/or at the Goods' final destination. If conducted on the premises of the Supplier or its subcontractor(s), all reasonable facilities and assistance, including access to drawings and production data, shall be furnished to the inspectors at no charge to the Procuring Agency. 11.3. Should any inspected or tested Goods fail to conform to the Specifications, the Procuring Agency may reject the Goods, and the Supplier shall replace the rejected Goods to meet specification requirements free of cost to the Procuring Agency. 11.4. The Procuring Agency's right to inspect, test and, where

	necessary, reject Goods after the Goods' arrival in the Procuring Agency's country shall in no way be limited or eared by reason of the Goods having previously been inspected, tested, and passed by the Procuring Agency or its representative prior to the Goods' shipment from the country of origin. 11.5. Nothing in GCC Clause 10 shall in any way release the Supplier from any warranty or other obligations under this Contract.
12. Packing	12.1. The supplier shall provide such packing of the Goods as is required to prevent their damage or deterioration during transit to their final destination, as indicated in the Contract. The packing shall be sufficient to withstand, without limitation, rough handling during transit and exposure to extreme temperatures, salt and precipitation during transit, and open storage. Packing case size and weights shall take into consideration, where appropriate, the remoteness of the Goods final destination and the absence of heavy handling facilities at all points in transit. 12.2. The packing, marking, and documentation within and outside the packages shall comply strictly with such special requirements as shall be expressly provided for in the Contract, including additional requirements, if any, specified in SCC, and in any subsequent instructions ordered by the Procuring Agency.
13. Delivery and Documents	13.1. Delivery of the Goods shall be made by the Supplier in accordance with the terms specified in the Schedule of Requirements. The details of shipping and or other documents to be furnished by the Supplier as specified in SCC. 13.2. For purposes of the Contract, "EXW", "FOB", "FCA", "CIF", "CIP," and other trade terms used to describe the obligations of the parties shall have the meanings assigned to them by the current edition of INCOTERMS published by the International Chamber of Commerce, Paris. 13.3. Documents to be submitted by the Supplier are specified in SCC.
14. Insurance	14.1. The Goods supplied under the Contract shall be fully insured in a freely convertible currency against loss or damage incidental to manufacture or acquisition, transportation, storage, and delivery in the manner specified in the SCC.
15. Transportation	15.1. Where the Supplier is required under Contract to deliver the Goods FOB, transport of the Goods, up to and including the point of putting the Goods on board the vessel at the specified port of loading, shall be arranged and paid for by the Supplier, and the cost thereof shall be included in the Contract Price. Where the Supplier is required under the Contract to deliver

	the Goods FCA, transport of the Goods and delivery into the custody of the carrier at the place named by the Procuring Agency or other agreed point shall be arranged and paid for by the Supplier, and the cost thereof shall be included in the Contract Price. 15.2. Where the Supplier is required under Contract to deliver the Goods CIF or CIP, transport of the Goods to the port of destination or such other named place of destination in Pakistan, as shall be specified in the Contract, shall be arranged and paid for by the Supplier, and the cost thereof shall be included in the Contract Price. 15.3. Where the Supplier is required under the Contract to transport the Goods to a specified place of destination within Pakistan, defined as the Project Site, transport to such place of destination in Pakistan, including insurance and storage, as shall be specified in the Contract, shall be arranged by the Supplier, and related costs shall be included in the Contract Price.
16. Related Services	16.1. The Supplier may be required to provide any or all of the following services, including additional services, if any, specified in SCC: a) Performance or supervision of on-site assembly, Installation Commissioning and/or start-up of the supplied Goods; b) Furnishing of tools required for assembly and/or maintenance of the supplied Goods; c) Furnishing of a detailed operations and maintenance manual for each appropriate unit of the supplied Goods; d) Performance or supervision or maintenance and/or repair of the supplied Goods, for a period of time agreed by the parties, provided that this service shall not relieve the Supplier of any warranty obligations under this Contract; and e) Training of the Procuring Agency's personnel, at the Supplier's plant and/or on-site, in assembly, start-up, operation, maintenance, and/or repair of the supplied Goods. 16.2. Prices charged by the Supplier for related services, if not included in the Contract Price for the Goods, shall be agreed upon in advance by the parties and shall not exceed the prevailing rates charged to other parties by the Supplier for similar services.
17. Spare Parts	17.1. As specified in SCC, the Supplier may be required to provide any or all of the following materials, notifications, and information pertaining to spare parts manufactured or distributed by the Supplier: a) Such spare parts as the Procuring Agency may elect to purchase from the Supplier, provided that this election shall not relieve the Supplier of any warranty obligations under

	the Contract; and b) In the event of termination of production of the spare parts: i) advance notification to the Procuring Agency of the pending termination, in sufficient time to permit the Procuring Agency to procure needed requirements; and ii) following such termination, furnishing at no cost to the Procuring Agency, the blueprints, drawings, and specifications of the spare parts, if requested.
18. Warranty/ Defect Liability Period	18.1. The Supplier warrants that the Goods supplied under the Contract are new, unused, of the most recent or current models and that they incorporate all recent improvements in design and materials unless provided otherwise in the Contract. The Supplier further warrants that all Goods supplied under this Contract shall have no defect, arising from design, materials, or workmanship (except when the design and/or material is required by the Procuring Agency, specifications) or from any act or omission of the Supplier, that may develop under normal use of the supplied Goods in the conditions prevailing in Pakistan. 18.2. This warranty shall remain valid for a period specified in the SCC after the Goods, or any portion thereof as the case may be, have been delivered to and accepted at the final destination indicated in the Contract, or for a period specified in the SCC after the date of shipment from the port or place of loading in the source country, whichever period concludes earlier, unless specified otherwise in SCC. 18.3. The Procuring Agency shall promptly notify the Supplier in writing or in electronic forms that provide record of the content of communication of any claims arising under this warranty. 18.4. Upon receipt of such notice, the Supplier shall, within the period specified in SCC and with all reasonable speed, repair or replace the defective Goods or parts thereof, without costs to the Procuring Agency other than, where applicable, the cost of inland delivery of the repaired or replaced Goods or parts from EXW or the port or place of entry to entry to the final destination. 18.5. If the Supplier, having been notified, fails to remedy the defect(s) within the period specified in SCC, the Procuring Agency may proceed to take such remedial action as may be necessary, at the Supplier's risk and expense and without prejudice to any other rights which the Procuring Agency may have against the Supplier under the Contract.
19. Payment	19.1. The method and conditions of payment to be made to the Supplier under this Contract shall be specified in SCC. 19.2. The Supplier's request(s) for payment shall be made to the Procuring Agency in writing or in electronic forms that provide

	record of the content of communication, accompanied by an invoice describing, as appropriate, the Goods delivered and Services performed, and by documents submitted pursuant to GCC Clause 13, and upon fulfillment of other obligations stipulated in the Contract. 19.3. Payments shall be made promptly by the Procuring Agency, within sixty (60) days after submission of an invoice or claim by the Supplier. If the Procuring Agency makes a late payment, the Supplier shall be paid interest on the late payment. Interest shall be calculated from the date by which the payment should have been made up to the date when the late payment is made at the rate as specified in the SCC. 19.4. The currency or currencies in which payment is made to the Supplier under this Contract shall be specified in SCC subject to the following general principle: payment will be made in the currency or currencies in which the payment has been requested in the Supplier's Bid. 19.5. All payments shall be made in the currency or currencies specified in the SCC pursuant to GCC Clause 19.4
20. Prices	20.1. The Contract Price shall be as specified in the Contract Agreement subject to any additions and adjustments thereto or deductions there from, as may be made pursuant to the Contract. 20.2. Prices charged by the Supplier for Goods delivered and Services performed under the Contract shall not vary from the prices quoted by the Supplier in its Bid, with the exception of any price adjustments authorized in SCC or in the Procuring Agency's request for Bid Validity extension, as the case may be.
21. Change Orders	21.1. The Procuring Agency may at any time, by a written order given to the Supplier pursuant to GCC Clause 22, make changes within the general scope of the Contract in any one or more of the following: a) Drawings, designs, or specifications, where Goods to be furnished under the Contract are to be specifically manufactured for the Procuring Agency; b) The method of shipment or packing; c) The place of delivery; and/or d) The Services to be provided by the Supplier. 21.2. If any such change causes an increase or decrease in the cost of, or the time required for, the Supplier's performance of any provisions under the Contract an equitable adjustment shall be made in the Contract Price or delivery schedule, or both, and the Contract shall accordingly be amended. Any claims by the

	Supplier for adjustment under this clause must be asserted within thirty (30) days from the date of the Supplier's receipt of the Procuring Agency change order. 21.3. Prices to be charged by the supplier for any related services that might be needed but which were not included in the Contract shall be agreed upon in advance by the Parties and shall not exceed the prevailing rates charged to other parties by the Supplier for similar services.
22. Contract Amendments	22.1. Subject to GCC Clause 20, no variation in or modification of the terms of the Contract shall be made except by written amendment signed by the parties.
23. Assignment	23.1. Neither the Procuring Agency nor the Supplier shall assign, in whole or in part, obligations under this Contract, except with the prior written consent of the other party.
24. Sub-contracts	24.1. The Supplier shall consult the Procuring Agency in the event of subcontracting under this contract if not already specified in the Bid. Subcontracting shall not alter the Supplier's obligations. 24.2. Subcontracts must comply with the provision of GCC Clause 5.
25. Delays in the Supplier's Performance	25.1. Delivery of the Goods and performance of Services shall be made by the Supplier in accordance with the time schedule prescribed by the Procuring Agency in the Schedule of Requirements. 25.2. If at any time during performance of the Contract, the Supplier or its subcontractor(s) should encounter conditions impeding timely delivery of the Goods and performance of Services, the Supplier shall promptly notify the Procuring Agency in writing or in electronic forms that provide record of the content of communication of the fact of the delay, its likely duration and its cause(s). As soon as practicable after receipt of the Supplier's notice, the Procuring Agency shall evaluate the situation and may at its discretion extend the Supplier's time for performance, with or without liquidated damages, in which case the extension shall be ratified by the parties by amendment of Contract. 25.3. Except as provided under GCC Clause 28, a delay by the Supplier in the performance of its delivery obligations shall render the Supplier liable to the imposition of liquidated damages pursuant to GCC Clause 26, unless an extension of time is agreed upon pursuant to GCC Clause 25.2 without the application of liquidated damages.
26. Liquidated Damages	26.1. Subject to GCC Clause 28, if the Supplier fails to deliver any or all of the Goods or to perform the Services within the period(s) specified in the Contract, the Procuring Agency shall, without prejudice to its other remedies under the Contract, deduct from the Contract Price, as liquidated damages, a sum equivalent to the percentage specified in SCC of the delivered price of the

	delayed Goods or unperformed Services for each week or part thereof of delay until actual delivery or performance, up to a maximum deduction of the performance security (or guarantee) specified in SCC. Once the said maximum is reached, the Procuring Agency may consider termination of the Contract pursuant to GCC Clause 26.
27. Termination for Default	27.1. The Procuring Agency or the Supplier, without prejudice to any other remedy for breach of Contract, by written notice of default sent to the concerned party may terminate the Contract if the other party causes a fundamental breach of the Contract. 27.2. Fundamental breaches of Contract shall include, but shall not be limited to the following: a) the Supplier fails to deliver any or all of the Goods within the period(s) specified in the Contract, or within any extension thereof granted by the Procuring Agency pursuant to GCC Clause 24; or b) the Supplier fails to perform any other obligation(s) under the Contract; c) Supplier's failure to submit performance security (or guarantee) within the time stipulated in the SCC; d) the supplier has abandoned or repudiated the contract. e) the Procuring Agency or the Supplier is declared bankrupt or goes into liquidation other than for a reconstruction or amalgamation; f) a payment is not paid by the Procuring Agency to the Supplier after 84 days from the due date for payment; g) the Procuring Agency gives Notice that goods delivered with a defect is a fundamental breach of Contract and the Supplier fails to correct it within a reasonable period of time determined by the Procuring Agency; and h) if the Procuring Agency determines, based on the reasonable evidence, that the Supplier has engaged in corrupt, coercive, collusive, obstructive or fraudulent practices, in competing for or in executing the Contract. For the purpose of this clause: "Corrupt and Fraudulent Practice" means the practices as described in Rule-2 (1) (f) of Public Procurement Rules-2004. 27.3. In the event the Procuring Agency terminates the Contract in whole or in part, pursuant to GCC Clause 26.1, the Procuring Agency may procure, upon such terms and in such manner as it deems appropriate, Goods or Services similar to those undelivered, and the Supplier shall be liable to the Procuring Agency for any excess costs for such similar Goods or Services. However, the Supplier shall continue performance of the Contract to the extent not terminated.

28. Termination For Force Majeure	28.1. Notwithstanding the provisions of GCC Clauses 25, 26, and 27, neither Party shall have any liability or be deemed to be in breach of the Contract for any delay nor is other failure in performance of its obligations under the Contract, if such delay or failure is a result of an event of Force Majeure. For purpose of this clause, "Force Majeure" means an event which is beyond the reasonable control of a Party, is not foreseeable, is unavoidable, and its origin is not due to negligence or lack of care on the part of a Party, and which makes a Party's performance of its obligations hereunder impossible or so impractical as reasonably to be considered impossible in the circumstances, and includes, but is not limited to, war, riots, civil disorder, earthquake, fire, explosion, storm, flood, epidemics, or other adverse weather conditions, strikes, lockouts or other industrial action (except where such strikes, lockouts or other industrial action are within the power of the Party invoking Force Majeure to prevent. 28.2. If a Party (hereinafter referred to as "the Affected Party") is or will be prevented from performing its substantial obligation under the contract by Force Majeure, it shall give a Notice to the other Party giving full particulars of the event and circumstance of Force Majeure in writing or in electronic forms that provide record of the content of communication of such condition and the cause thereof. Unless otherwise directed by the Procuring Agency in writing or in electronic forms that provide record of the content of communication, the Supplier shall continue to perform its obligations under the Contract as far as is reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event.
29. Termination for Insolvency	29.1. The Procuring Agency may at any time terminate the Contract by giving written notice to the Supplier if the Supplier becomes bankrupt or otherwise insolvent. In this event, termination will be without compensation to the Supplier, provided that such termination will not prejudice or affect any right of action or remedy which has accrued or will accrue thereafter to the Procuring Agency.
30. Termination for Convenience	30.1. The Procuring Agency, by written notice sent to the Supplier, may terminate the contract, in whole or in part, at any time for its convenience. The notice of termination shall specify that termination is for the Procuring Agency's convenience, the Contract is terminated, and the date upon which such termination becomes effective. 30.2. The Goods that are complete and ready for shipment within thirty (30) days after the Supplier's receipt of notice of termination shall be accepted by the Procuring Agency at the

	Contract terms and price. For the remaining Goods, the Procuring Agency may elect: a) To have any portion completed and delivered at the Contract terms and prices; and / or b) To cancel the remainder and pay to the Supplier an agreed amount for partially completed Goods and Services and for materials and parts previously procured by the Supplier.
31. Disputes Resolution	31.1. In the event of any dispute arising out of this contract, either party shall issue a notice of dispute to settle the dispute amicably. The parties hereto shall, within twenty-eight (28) days from the notice date, use their best efforts to settle the dispute amicably through mutual consultations and negotiation. Any unsolved dispute may be referred by either party to an arbitrator that shall be appointed by mutual consent of the both parties. 31.2. After the dispute has been referred to the arbitrator, within 30 days, or within such other period as may be proposed by the Parties, the Arbitrator shall give its decision. The rendered decision shall be binding to the Parties.
32. Procedure for Disputes Resolution	32.1. The arbitration shall be conducted in accordance with the arbitration procedure published by the Institution named and in the place shown in the SCC. 32.2. The rate of the Arbitrator's fee and administrative costs of arbitration shall be borne equally by the Parties. The rates and costs shall be in accordance with the rules of the Appointing Authority. In conducting arbitration to its finality each party shall bear its incurred costs and expenses. 32.3. The arbitration shall be conducted in accordance with the arbitration procedure published by the institution named and in the place shown in the SCC.
33. Replacement of Arbitrator	33.1. Should the Arbitrator resign or die, or should the Procuring Agency and the Supplier agree that the Arbitrator is not functioning in accordance with the provisions of the contract, a new Arbitrator shall be appointed by mutual consent of the both parties.
34. Limitation of Liability	34.1. Except in cases of criminal negligence or willful conduct, and in the case of infringement pursuant to GCC Clause 8, a) The supplier shall not be liable to the Procuring Agency, whether in contract, tort, or otherwise, for any indirect or consequential loss or damage, loss of use, loss of production, or loss of profits or interest costs, provided that this exclusion shall not apply to any obligation of the Supplier to pay liquidated damages to the Procuring Agency; and b) The aggregate liability of the Supplier to the Procuring

	Agency, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price, provided that this limitation shall not apply to the cost of repairing or replacing defective equipment or to any obligation of the Supplier to indemnify the Procuring Agency with respect to patent infringement.
35. Notices	35.1. Any notice given by one party to the other pursuant to this Contract shall be sent to the other party in writing or in electronic forms that provide record of the content of communication and confirmed in writing or in electronic forms that provide record of the content of communication to the other party's address specified in SCC. 35.2. A notice shall be effective when delivered or on the notice's effective date, whichever is later.
36. Taxes and Duties	36.1. A foreign Supplier shall be entirely responsible for all taxes, stamp duties, license fees, and other such levies imposed outside Pakistan. 36.2. If any tax exemptions, reductions, allowances or privileges may be available to the Supplier in Pakistan the Procuring Agency shall use its best efforts to enable the Supplier to benefit from any such tax savings to the maximum allowable extent. 36.3. A local Supplier shall be entirely responsible for all taxes, duties, license fees, etc., incurred until delivery of the contracted Goods to the Procuring Agency.



**SECTION VIII: SPECIAL CONDITIONS OF THE
CONTRACT (SCC)**

Special Conditions of Contract (SCC)

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

SCC Clause Number	GCC Clause Number	Amendments of, and Supplements to, Clauses in the GCC
Definitions (GCC 1)		
1.	1.1 (d)	The Commencement Date shall be same as Effective Contract Date.
2.	1.1 (j)	The Effective Contract Date shall be as stated in SCC Clause 3.
3.	1.1 (k)	The Procuring Agency is: Pakistan Cricket Board (PCB)
4.	1.1(p)	The Supplier is:
5.	1.1(q)	The title of the subject procurement is: Supply, Installation, Testing, Commissioning, Including Civil Works, Operation & Maintenance of Diesel Generator Sets at Gaddafi Stadium, Lahore
Conditions Precedent (GCC 3)		
6.	3.1	The Sub-Clause 3.1 is substituted with the following: “The Contract shall come into effect on the date on signing of the Contract.”
7.	3.2 & 3.3	The Sub-Clauses 3.2 & 3.3 are deleted.
Governing Language (GCC 4)		
8.	4.1	The Governing Language shall be: English
Applicable Law (GCC 5)		
9.	5.1	The Applicable Law shall be: Laws of the Islamic Republic of Pakistan.
Country of Origin (GCC 6)		
10.	6.1	Country of Origin of all Goods to be supplied under the Contract shall have their origin in Eligible Countries.
Performance Security (or guarantee) (GCC 10)		
11.	10.1	The amount of Performance Security as a percentage of the Contract Price shall be: ten (10) percent of the Contract Price stated in the Letter of Acceptance.
12.	10.3	The Sub-Clause 10.1 is substituted with the following: The Performance Security (or Guarantee) shall be in the form of a bank guarantee issued by a Scheduled bank in Pakistan on the format provided in the Bidding Documents.
Inspections and Tests (GCC 11)		
13.	11.1	Inspection and tests prior to delivery of Goods and at final acceptance are as follows:

		Quality and quantity inspection shall be carried out in accordance with terms and conditions specified in the Technical Specifications.
	Packing (GCC Clause 12)	
14.	12.2	The following SCC shall supplement GCC Clause 12.2: The Goods shall be packed properly in accordance with standard export packing specified by the Procuring Agency in the Technical Specifications.
	Delivery and Documents (GCC Clause 13)	
15.	13.1&13.3	The Supplier shall submit the following documents to the Procuring Agency: i) copy of the Supplier's invoice showing Goods' description, quantity, unit price, and total amount; ii) copy of the Delivery Note; iii) copy of the packing list identifying contents of each package; iv) copy of Insurance Certificate; v) copy of Manufacturer's Warranty certificate; vi) copy of Inspection certificate, issued by the Procuring Agency or its designated representative, and the manufacturer's factory inspection report; vii) copy of Certificate of country of origin; and viii) any other document as necessary due to statutory requirements.
	Insurance (GCC Clause 14)	
16.	14.1	The Insurance shall be in an amount equal to 110 percent of the applicable Contract value of the Goods from "warehouse" to "warehouse" on "All Risks" basis, including War Risks and Strikes. The Goods supplied under the Contract shall also be fully insured in a freely convertible currency against loss or damage incidental to installation, testing and commissioning.
	Related Services (GCC Clause 16)	
17.	16.1	Related services to be provided are: The Supplier shall transport, deliver, install, test and commission the supplied Goods, including all associated civil and allied works, at the Project Site to the satisfaction of the Procuring Agency, and shall provide all other Related Services specified in the Technical Specifications. Besides the Related Services, the Supplier shall also provide Operation & Maintenance (O&M) Services for a period of two (02) years

		commencing from the date of successful testing, commissioning and acceptance of the Goods as specified in the Technical Specifications.
	Spare Parts (GCC Clause 17)	
18.	17.1	Additional spare parts requirements are: Supplier shall carry sufficient inventories to assure ex-stock supply of consumable spares for the Goods. The spare parts and components shall be supplied as promptly as possible, but in any case, within six (6) months of placing the order by the Procuring Agency.
	Warranty (GCC Clause 18)	
19.	18.2	The warranty period shall be one (01) year from the date of successful testing, commissioning and acceptance of the Goods at the final destination (Project Site).
20.	18.4 & 18.5	The period for correction of defects in the warranty period is: 30 days
	Payment (GCC Clause 19)	
21.	19.1	The method and conditions of payment to be Supplier under this Contract shall be as follows: The total Contract Price shall be broken down into the following components: i) Cost for Supply of Goods ii) Cost for Installation, Testing and Commissioning including Civil Works iii) Cost of Operation and Maintenance Unless otherwise agreed, the Contractor shall be paid in the following manner. I) Cost for Supply of Goods (a) 10% percent of the Contract Value (Supply of Goods) as non-recoverable advance shall be paid to the Supplier upon (i) receipt of an acceptable Performance Security by the Procuring Agency; (ii) signing of Contract Agreement by the Parties; (iii) receipt of an acceptable bank guarantee by the Procuring Agency for the equivalent amount on the form acceptable to the Procuring Agency; and (iv) receipt of Supplier's invoice for advance payment by the Procuring Agency. (b) 70% percent of the Contract Value (Supply of Goods) shall be paid on delivery of the Goods at Project Site and upon submission of the documents specified in SCC Clause 13 upon issuance of inspection certificate by the Procuring Agency and after receipt of invoice by the Procuring Agency. (c) 15% of the Contract Value (Supply of Goods) shall be paid to the Supplier upon completion of all Related Services specified in the

		Contract up to the satisfaction of the Procuring Agency and after receipt of invoice by the Procuring Agency. (d) 05% of the Contract Value (Supply of Goods) shall be paid upon expiry of the Warranty/Defect Liability Period, subject to satisfactory fulfilment by the Supplier of all obligations under the Contract and rectification of all defects, if any, to the satisfaction of the Procuring Agency; and submission of invoice for the same amount. II) Cost for Installation, Testing & Commissioning including Civil Works 100% of the Contract Value (Installation, Testing & Commissioning including Civil Works) against fortnightly progress of work for the respective period accompanied by statement of work duly verified by the Procuring Agency. III) Cost for Operation & Maintenance 100% of cost of operation and maintenance shall be paid on the basis of monthly invoices as verified by the Procuring Agency. The guarantee required to secure advance payment under paragraph I(a) above, shall remain valid for the full amount of the advance and shall expire on the completion of all Related Services in accordance with the terms and conditions set forth in the Contract. All payments under the Contract shall be made to the Supplier after deduction of all applicable taxes in accordance with the applicable laws.
22.	19.3	Rate to be used for paying the Supplier's interest on the late payment made by Procuring Agency shall be: None
23.	19.5	All payments shall be made in Pak. Rupees.
	Prices (GCC Clause 20)	
24.	20.1 & 20.2	No price adjustment shall be made for this Contract.
	Assignment (GCC 23)	
25.	23.1	Sub-Clause is deleted in its entirety.
	Liquidated Damages (GCC Clause 26)	
26.	26.1	The liquidated damages shall be 0.25% of the Price of the delayed Goods and/or unperformed services for each day of delay. The total [maximum] amount of liquidated damages shall be 10% of the Contract Price.
	Procedure for Dispute Resolution (GCC Clause 32)	
27.	32.3	Dispute Resolution 1. If any dispute of any kind whatsoever shall arise between the

		Procuring Agency and the Supplier 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 7 (seven) 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 Lahore 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 delivery of goods. 6. 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 Procuring Agency shall pay the Supplier any monies due to the Supplier. 7. The interpretation, construction and effect of this Contract (including any non-contractual obligations arising from or connected with this Contract) shall be governed by and construed in accordance with the laws of Pakistan and the courts at Lahore shall have exclusive jurisdiction.
	Notices (GCC Clause 35)	
24.	35.1	— Procuring Agency's address for notice purposes: Director, Infra & Real Estate Pakistan Cricket Board Gaddafi Stadium Ferozepur Road, Lahore —Supplier's address for notice purposes:

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SECTION IX: CONTRACT FORMS

Form of Contract

THIS AGREEMENT made the _____ day of _____ 20____ between [name and address of Procuring Agency] of Pakistan (hereinafter called "the Procuring Agency") of the one part and [name of Supplier] of [city and country of Supplier] (hereinafter called "the Supplier") of the other part:

WHEREAS the Procuring Agency invited Bids for certain goods and related services, viz., [brief description of goods and services] and has accepted a Bid by the Supplier for the supply of those goods and related services 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:-
 - (a) This form of Contract;
 - (b) the Letters of Bid and the Price Schedule submitted by the Bidder;
 - (c) the Schedule of Requirements;
 - (d) the Technical Specifications;
 - (e) the Special Conditions of Contract;
 - (f) the General Conditions of the Contract;
 - (g) the Procuring Agency's Letter of Acceptance; and
 - (h) [add here: any other documents]
3. In consideration of the payments to be made by the Procuring Agency to the Supplier as hereinafter mentioned, the Supplier hereby covenants with the Procuring Agency to provide the goods and 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 Supplier in consideration of the provision of the goods and related services 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.

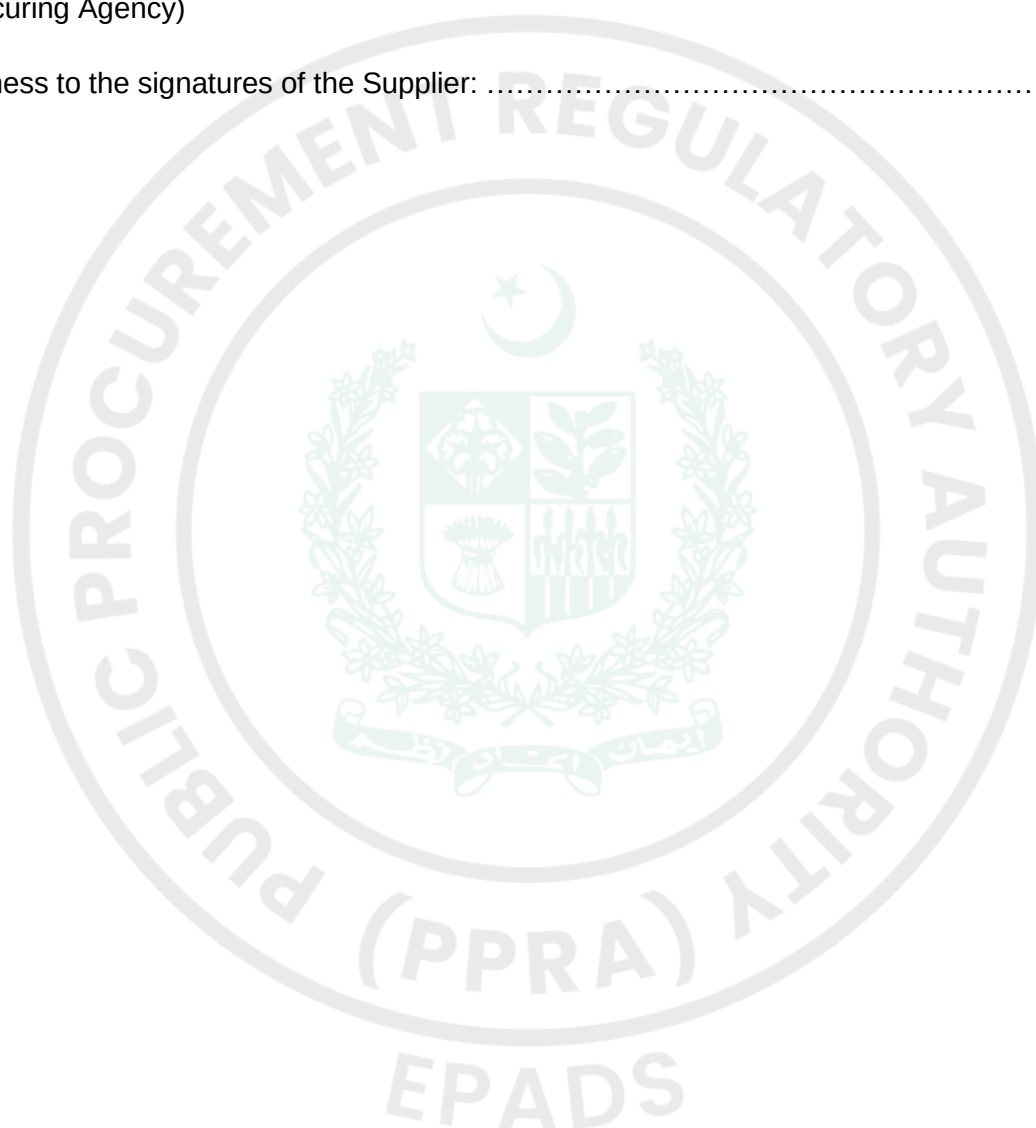
Signed, sealed, delivered by _____ the _____ (for the Procuring Agency)

Witness to the signatures of the Procuring Agency:

.....

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

Witness to the signatures of the Supplier:



Performance Security (or Guarantee) Form

To: [name of Procuring Agency]

WHEREAS [name of Supplier] (hereinafter called "the Supplier") has undertaken, in pursuance of Contract No. [reference number of the contract] dated [insert date] to delivery [description of goods and services] (hereinafter called "the Contract").

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

AND WHEREAS we have agreed to give the Supplier a guarantee:

THEREFORE, WE hereby affirm that we are Guarantors and responsible to you, on behalf of the Supplier, 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 Supplier 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]

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: _____ Dated: _____

Contract Value: As Stated in Letter of Bid - Financial Proposal

Contract Title: _____

[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.

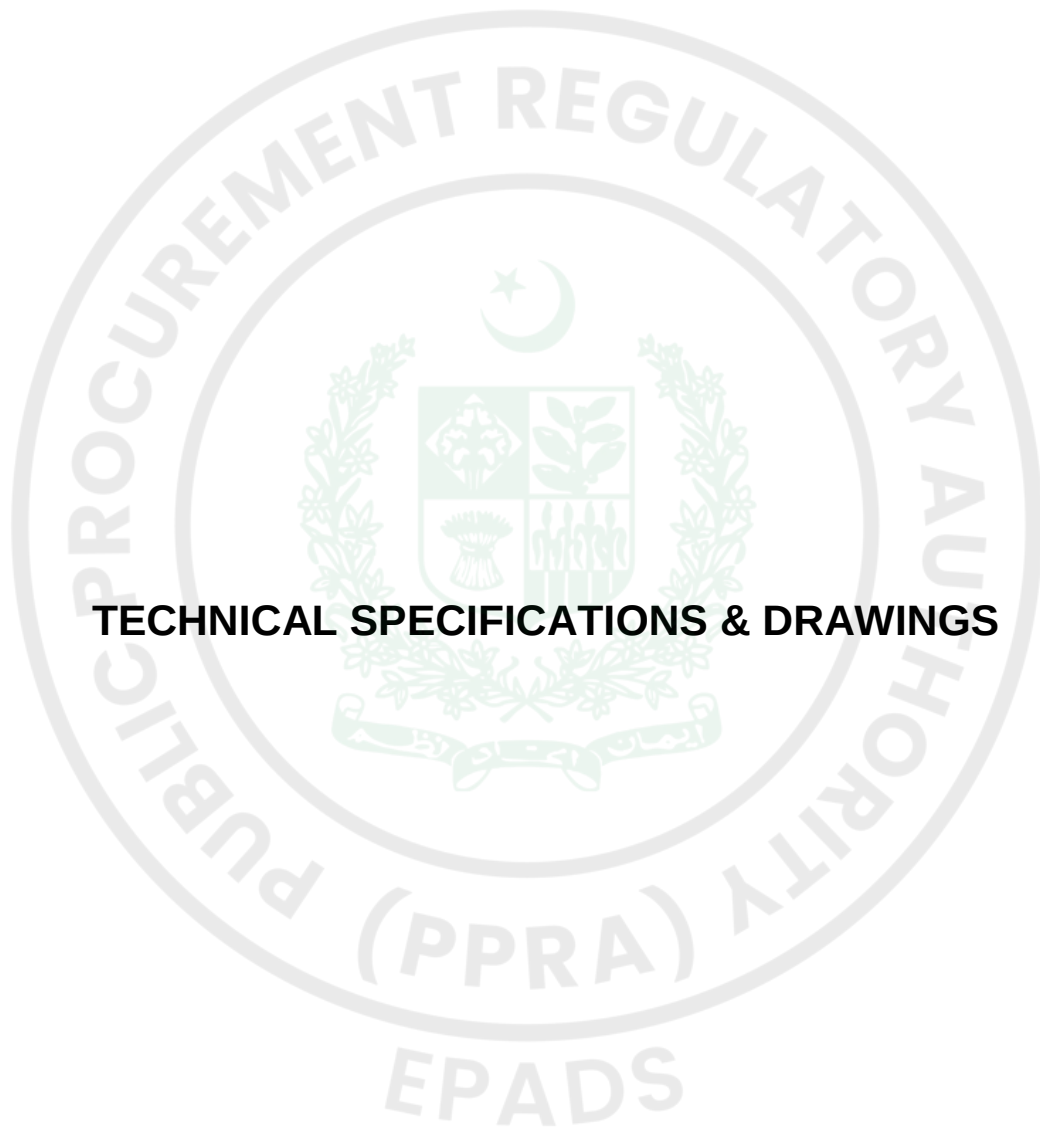
[Name of Supplier] certifies that it has made and will make full disclosure of all agreements and arrangements with all persons in respect of or related to the transaction with GoP and has not taken any action or will not take any action to circumvent the above declaration, representative or warranty.

[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.

[The Procuring Agency]

[The Supplier]



A-GENERAL SPECIFICATIONS FOR ELECTRICAL SYSTEMS

1.0 SCOPE OF WORK

The scope of this contract covers all operation and activities required for proper and complete construction of electrification works for Design and Construction.

The works related to the Electrical systems that are included in the scope of this Contract are stated in the Bill of Quantities and explained in these Specifications. All the equipment & allied accessories and their installation shall also comply with General Specifications described here-under, with other relevant provisions of Tender Documents and WAPDA/other utilities' latest Specifications/Standards. Electrical & Communication systems shall broadly include but not limited to the following:

- Design, fabrication, manufacturing, supply, installation, testing and commissioning of the 415 Volt 50Hz Diesel Generator sets.
- Design, fabrication, manufacturing, supply, installation, testing and commissioning of the Low Voltage 415 Volt three phase and 250 Volt single phase switchgears.
- Supply, installation, testing and commissioning of the Low Voltage Single / Multi core PVC/PVC & PVC/SWA/PVC Copper conductor cables in Cable trenches, underground pipes, on cable trays.
- Supply, installation, testing and commissioning of the Earthing of Electrical system.

The scope shall include the continuing of the contractor to remain responsible for removal of defects detected in the works and for achieving satisfactory operation/functioning/service of the works during defect liability period.

The contract shall include furnishing of all construction equipment, tools, labour, supervisory staff, plants, transport, power, testing apparatus/arrangements and all construction materials as shall be required for satisfactory completion of works strictly in accordance with the Technical Specifications and Bill of Quantities forming part of these Tender Documents and as per levels and dimensions as shown on the drawings supplied with these tender documents and in drawings which may be supplied by the Procuring Agency's nominated representative from time to time under approved variation orders.

The Contractor shall also be responsible to supply any other equipment not specifically mentioned in these Documents but which is necessary for proper operation of the works/ system included in the scope of this Contract. The Contractor shall solely be responsible for ensuring proper functional requirements of various equipment. He shall also be responsible for furnishing any additional piece of equipment and for making modification

in the equipment as desired and/or approved by the Procuring Agency's nominated representative to achieve proper co-ordination with various other equipment's offered in the bid and also with those installed by others.

2.0 RULES & REGULATIONS

The entire Electrical & Communication systems installation/work shall be carried out by licensed Contractor, authorized to undertake such work under the provisions of the Electricity Act 1910 and The Electricity Rules 1937 as adopted and modified upto date by the Government of Pakistan.

All works shall be carried out in accordance with the latest edition of the Regulations of the Electrical Equipment of Buildings issued by the Institute of Electrical Engineers-London, 16th edition, NEC 1999, the Contract Documents, the Electricity Rules 1937 and bye-laws that are in force from time to time.

Any discrepancy between these specifications and the standards/ regulations shall be brought to the notice of Procuring Agency's nominated representative for his instructions and decision of the Procuring Agency's nominated representative shall be final and conclusive.

The Contractor shall be responsible for completing all formalities and submitting the test certificates as per prevailing rules and regulations, and shall have the installation passed by the Government Electric Inspector of that region. All requirements of the Electric Inspector and the utility company WAPDA shall be complied with.

3.0 AMBIENT CONDITIONS

All material and equipment supplied and installed shall be designed, manufactured and tested to meet the following ambient conditions unless specifically stated otherwise for any material/equipment.

Minimum indoor ambient temperature:	Zero Degree Celsius
Maximum indoor ambient temperature:	+ 35 Degree Celsius
Minimum outdoor ambient temperature:	Zero Degree Celsius
Maximum outdoor ambient temperature:	+ 45 Degree Celsius
Maximum Relative Humidity:	70 Percent
Minimum Relative Humidity:	40 Percent

The atmospheric conditions are tropical and arid.

4.0 MARKINGS

The Contractor shall provide "Danger Boards" and "Shock Charts", wherever required, to comply with the requirements of local Electricity Rules and according to normal practice.

5.0 SYSTEM DATA

Unless otherwise specified elsewhere, all equipment and material shall be designed to operate satisfactorily with the following minimum requirements with the specified tolerance without any derating

- | | | | |
|----|-----------------------------|----------------------|------------|
| a. | Voltage rating of equipment | MV15000V Three phase | $\pm 10\%$ |
| b. | Voltage rating of equipment | 400V Three phase | $\pm 10\%$ |
| | LT & DG Sets | 230V Single phase | $\pm 10\%$ |
| c. | DC voltages | 24V DC | $\pm 10\%$ |
| | | 12V DC | |
| | | Others | |
| d. | Frequency | 50 HZ | ± 2 HZ |

6.0 STANDARDS

The latest standards and codes of reputable organizations shall be applicable for the material and equipment specified herein and for installation work. Such organizations shall be British Standard Institution (BSS), International Electro technical Commission (IEC), IEEE and NEC. In case the Specifications laid down herein differ from those given in the standards, then the better specifications shall govern. Wherever applicable, the equipment shall also conform to the requirements of Pakistan Standards Institute (PSI) and Pakistan Telecom Authority (PTA).

7.0 MATERIALS & WORKMANSHIP

All materials, equipment, accessories and fittings, under the scope of this Contract, shall be brand new and in accordance with the Tender Specifications and the specifications of the British Standards Institute and Pakistan Standards Institute. Samples and detailed manufacturers shop drawings (including dimensional plans, elevation, sections, line and wiring diagrams, foundation details, component characteristics and data etc.), shall be approved by the Procuring Agency's nominated representative before purchase or fabrication. The Procuring Agency's nominated representative shall witness routine tests at the manufacturer's work sites and a test certificate shall be provided to him. Three copies of the test certificates at the manufacturer's works shall be supplied. All workmanship shall be first class and undertaken by workman skilled in the particular type of craft.

8.0 DEVIATIONS

The entire design of the Electrical systems of the project has been carried out to fulfill the Users requirements. The design is based on International standards/norms and practices. Special considerations have been made for ease in operation and maintenance of electrical systems of the project. Deviation may be allowed for the works covered under present scope of work, with the approval of Procuring Agency's nominated representative.

9.0 EQUIPMENT AND MATERIALS

The equipment/materials of the Electrical systems of the tender have been designed using the latest editions of International Standards/Codes such as BS, ICE, NFPA, CP as mentioned in article 6.0 above. In these Specifications certain types/makes of equipment/materials have been specified for the purpose of general reference and guidance of the Bidder.

10.0 DRAWINGS, AND DATA TO BE FURNISHED BY THE CONTRACTOR

Submittal

The contractor, after the award of work, shall submit for approval of the Procuring Agency's nominated representative all drawings and cuts of equipment, appliances, fixtures and accessories that are to be furnished under the contract. After final approval, a sufficient number of copies as desired shall be furnished for distribution. Manuals, cuts, catalogues and drawings shall be clearly marked to indicate, the items furnished. Cuts of all fixtures, and not a few, shall be submitted.

Approval of Drawings and Data

The Contractor shall provide detailed electrical drawings, wiring diagrams, foundation details etc. for all electrical and other systems etc. for the Procuring Agency's nominated representative review and approval.

The manufacturing of electrical equipment shall be started only after the above mentioned drawings and data are approved.

The time required for review and approval shall be considered included in the total time of completion of job.

Three sets of drawings and data for each equipment shall be furnished by the Contractor for the Procuring Agency's nominated representative approval before commencement of fabrication and manufacturing. The drawings to be supplied by the Contractor shall be as follows:

- Arrangements
- Dimensional plans, elevations and front view
- Foundation plan, anchors and configuration

- Incoming and outgoing cable termination positions
- Earthing arrangement
- Electrical Drawings showing:
 - Single-Line diagram
 - Detailed wiring diagram
 - All interconnections
 - Other electrical devices including meters, instruments and their wiring diagram.
 - Signal and alarm circuit

Shop Drawings

All the detailed planning for electrical and communication systems including conduit routes etc. shall be carried out well in advance of the actual execution of work, by the Contractor to the satisfaction of the Procuring Agency's nominated representative. For this purpose the Contractor shall prepare shop drawings and obtain prior approval of the Procuring Agency's nominated representative. Three prints of each shop drawings shall be submitted for obtaining approval. No piece of work shall be allowed to be executed at site without the availability of these approved shop drawings. These shop drawings shall clearly depict the load balancing chart of each distribution board. Time required for the preparation and approval of shop drawings shall be considered to have been included in the total time allowed for the completion of the work.

As-Built Drawings

Clearly annotated "As-Built" electrical drawings and diagrams shall be maintained upto date on site on completion of the Job. One reproducible and three prints of each drawing shall be submitted to the Procuring Agency's nominated representative alongwith a recommended maintenance schedule chart and manuals/operating instructions for equipment supplied.

11.0 PRODUCT DELIVERY, STORAGE AND HANDLING

All equipment shall be boxed, crated or otherwise enclosed and protected during shipment, handling, storage and after installation until final acceptance of the equipment. Electrical materials shall be delivered in manufacturer's original cartons or containers with seals intact, as applicable. Large multi-component assemblies shall be delivered in sections that facilitate field handling and installation.

Unless designed for outdoor use, all equipment shall be kept dry, off the ground and covered from exposure to weather. Electrical equipment and equipment having anti-friction or sleeve bearings shall be stored in weather tight storage facilities. Heaters in equipment shall be connected and operated until the equipment is placed in operation. The Contractor shall prevent corrosion, contamination or deterioration of stored equipment.

Equipment and materials shall be handled in accordance with manufacturer's recommendations. Large or heavy items shall only be lifted from the designated points. Padded slings and hooks shall be used for lifting to prevent damage.

All equipment shall be protected until final acceptance and all factory surfaces must be protected from impact, abrasion, discolouration and other damage. All damaged equipment must be repaired or replaced before final acceptance.

12.0 MANUFACTURER'S INSTRUCTIONS

The Contractor shall supply to the Procuring Agency's nominated representative Three (3) copies of manufacturer's instruction manuals in properly bound form for installation, testing, commissioning, operation and maintenance of the specified equipment including manuals of spare parts and tools of the equipment. One copy of the documents shall be submitted in original. The installation instructions shall be submitted four (4) weeks prior to commencement of installation of each equipment and operation & maintenance instructions at least two (2) weeks before the time of commissioning. If the contractor fails to provide the documents, the Procuring Agency's nominated representative shall withhold issuance of requisite certificates and deduct suitable amount from the payments to the Contractor.

13.0 GUARANTEE

In addition to the Contractor's guarantee and liabilities for satisfactory operation of the works, wherever advised by Procuring Agency's nominated representative, the Contractor shall also furnish written guarantee of the manufacturer or supplier with respect to satisfactory performance of each equipment. Guarantee shall be given for replacement and repair of part or whole of the equipment that may be found defective in material or workmanship. The guarantee shall as a minimum cover the duration of Maintenance Period as defined in the Conditions of Contract. This guarantee shall not relieve the Contractor of his obligations and he will be fully responsible for the repair or replacement of any defective material in time, so as not to cause any undue delay in carrying out the repairs and/or replacements.

14.0 INSTALLATION INSTRUCTIONS

The Contractor shall furnish all labor, materials, tools and equipment required to install, connect, test and commission all electrical equipment specified herein, whether or not such equipment is furnished by him or by others.

For all equipment to be installed by the Contractor, the Contractor shall supply and install all erection materials such as foundation bolts, washers, nuts etc. as required and without any additional costs.

The Contractor shall set out the works himself as per Specifications and Drawings and shall properly position the equipment on specified foundation/location. In general, the manufacturer's instructions for installation shall be followed.

Any defect or faulty operation of equipment due to the Contractor not following the manufacturer's instructions shall be corrected and repaired by the Contractor at his own cost as per these specification and to the satisfaction of Procuring Agency's nominated representative.

For any deviation from the working drawings that are deemed necessary by the Contractor due to site conditions, he shall submit the details and obtain the Procuring Agency's nominated representative approval before starting such works.

15.0 PRESHIPMENT INSPECTION AND TESTING

15.1 General

Equipment and materials covered in the scope of this contract are subject to pre-shipment inspection & testing at the manufacturer's factory/works. The Contractor, in coordination with the manufacturers of relevant materials shall arrange for the pre-shipment inspection & testing by the Procuring Agency or his authorized Representative at the manufacturer's factory/works. The Contractor shall make all necessary arrangements and cater for all expenses in this regard for the traveling, boarding and lodging of the Procuring Agency's nominated representative or his authorized Representative plus daily allowance @ Rs. 2,000 per day per person within Pakistan and US \$ 200 per day per person outside Pakistan for the pre-shipment inspection and to witness the tests at the manufacturer's factory/works.

15.2 Pre-shipment Factory Tests

15.2.1 Generators, Canopy, Fuel Tank, ATS Panel and Cables

All type and routine tests on all equipment, materials and switchgear shall be performed at the manufacturer's works in the presence of the Procuring Agency or his Representative. Type tests may be waived off if desired by the Procuring Agency's nominated representative in case test certificates, certified by an approved standard laboratory of international repute, approved by the Procuring Agency's nominated representative, are submitted. But merely producing the type test certificates shall not relieve the Contractor and the manufacturer to carry out the required tests.

The Contractor shall obtain from the manufacturer and submit to the Procuring Agency's nominated representative for approval, the complete details of tests to be performed describing the procedures, test observations and expected results.

The Contractor shall ensure availability of all tools, instruments, test equipment, materials, etc., and all qualified personnel required for the testing, setting and adjustment of all equipment and materials including putting the same into operation.

All tests shall be made with proper regard for the protection of the personnel and equipment and the Contractor shall be responsible for adequate protection of all personnel and equipment during such tests. The cost of any damages or rectification work due to any accident during the tests shall be the sole responsibility of Contractor.

The Contractor shall record all test values of the tests made by him on all equipment. Four (4) copies of all test data and results certified by the Procuring Agency's nominated representative shall be given to the Procuring Agency's nominated representative for record purposes. These shall also include details of testing method, testing equipment, diagrams etc.

The Contractor shall inform the Procuring Agency's nominated representative about the place, date and time of test of each equipment at least, two (2) weeks in advance. The witnessing of test by the Procuring Agency or his representative shall not absolve the Contractor from his responsibility for the proper functioning of the equipment, and for furnishing the guarantees referred to in Clause 8.0. All test results shall be supplied in quadruplicate.

15.2.2 Insulation Resistance Test

Insulation resistance test shall be made on all electrical equipment by using a meggar of 500 volts for circuits upto 250 volts and meggar of 1000 volt for circuits between 250 and 500 volts. The Procuring Agency's nominated representative shall advise the exact testing voltages. The insulation resistance values of cables, switchgear etc. shall be as per BSS, IEC, ICEA and Pakistan Electricity Rules.

15.2.3 Independent Third-Party Inspection

The Procuring Agency may, at its discretion, require inspection and testing of the DG Sets at the manufacturer's factory/works by an

independent third-party inspection agency of international repute, acceptable to the Procuring Agency.

The independent third-party inspection agency shall carry out the inspection and testing in accordance with the relevant requirements of the Bidding Documents, applicable standards and approved test procedures, as applicable, and shall issue a detailed inspection and testing report.

The Contractor shall coordinate with the DG Set manufacturer and the independent third-party inspection agency and shall provide all necessary facilities, access, equipment, documents and assistance required for carrying out the inspection and testing.

The inspection and testing report issued by the independent third-party inspection agency shall be submitted to the Procuring Agency for review and record. The inspection, testing and issuance of the third-party report shall not relieve the Contractor of any of its contractual obligations, warranties or responsibilities under the Contract.

15.3 Field Tests

15.3.1 General

Upon completion of the installation, the Contractor shall perform field tests on all equipment, materials and systems. All tests shall be conducted in the presence of the Procuring Agency's nominated representative for the purpose of demonstrating equipment and system's compliance with Specifications. The Contractor shall submit for Procuring Agency's nominated representative approval complete details of tests to be performed describing the procedure test observations and expected results.

The Contractor shall furnish all tools, instruments, test equipment, materials etc. and all qualified personnel required for the testing, setting and adjustment of all electrical equipment and material including putting the same into operation.

All tests shall be made with proper regard for the protection of the personnel and equipment and the Contractor shall be responsible for adequate protection of all personnel and equipment during such tests. The cost of any damages or rectification work due to any

accident during the tests shall be the sole responsibility of the Contractor.

The Contractor shall record all test values of the tests made by him on all equipment. Four (4) copies of all test data and results certified by the Procuring Agency's nominated representative shall be given to the Procuring Agency's nominated representative for record purposes. These shall also include details of testing method, testing equipment diagrams etc.

The witnessing of any tests by the Procuring Agency's nominated representative does not relieve the Contractor of his guarantees for materials, equipment and workmanship or as any other obligations of contract.

15.3.2 Insulation Resistance Test

Before making connections at the ends of each cable run or joint between cables, the insulation resistance test of each cable section shall be made. Each conductor of a multicore cable shall be tested individually with each of the other conductor of the group and also with earth. If insulation resistance test readings are found to be less than the specified minimum in any conductor, the entire cable shall be replaced and tests repeated on new cable. If cable joint is provided, then each cable section shall be tested and joint made only after the tests have been made satisfactorily. Finally the completed cable length including the joints shall be tested.

All switchgear shall be given an insulation resistance test after installation, but before any wiring is connected. Insulation tests shall be made between open contacts of circuit breakers, switches and between each phase and earth.

If the insulation resistance of the circuit under test is less than the specified value, the cause of the low reading shall be determined and removed. Corrective measures shall include dry out procedure by means of heaters, if equipment is found to contain moisture. Where corrective measures are carried out, the insulation resistance readings shall be taken after the correction has been made and repeated twice at 12 hours interval. The maximum range for each reading in the three successive tests shall not exceed 20% of the average value. After all tests have been made, the equipment shall be reconnected as required.

15.3.3 Earth Resistance Test

The Contractor shall make Earth resistance tests on the earthing system, separating and reconnecting each earth connection.

If it is indicated that soil treatment or other corrective measures are required to lower the ground resistance values, the Procuring Agency's nominated representative will determine the extent of such corrective measures.

The electrical resistance of the ECC together with the resistance of the earthing leads measured from the connection with earth electrode to any other position in the complete installation shall not exceed one ohm.

Earth resistance test shall be performed as per Electrical Inspector's requirements. Where more than one earth electrodes are installed, the earth resistance test of each electrode shall be measured.

The complete lightning protection system shall be tested for continuity and earth resistance. The combined earth resistance at any point in the lightning protection system shall not exceed ten (10) ohms.

15.4 Completed Tests

After any equipment has been tested, checked for operation, etc., and is accepted by the Procuring Agency's nominated representative, the Contractor shall be responsible for the proper protection of that equipment so that subsequent testing of other equipment does not cause any damage to the already tested equipment.

16.0 ASSOCIATED CIVIL WORKS

The cost of all civil works which are associated with any BOQ item are deemed to have been included in the respective items of Bill of Quantities unless specifically stated otherwise. The civil works shall include excavation, backfilling of earth, complication of the earth, foundation pads, grouting, chiseling, making openings etc. Such works will also include repair of any damage to civil works caused by the Contractor during electrical installation.

17.0 EXPENSES TO BE BORNE BY THE CONTRACTOR

All expenses regarding travelling, boarding, lodging and witnessing of tests by the Procuring Agency or his representative and/or the owner or his representative including costs for carrying out the required tests shall be borne by the Contractor and are deemed to have been included in the Tender Bid.

18.0 TEST CERTIFICATES TO BE FURNISHED BY THE CONTRACTOR

After all field tests have been carried at site, the Contractor shall furnish test certificates for the equipment and materials as supplied and installed by the contractor.

19.0 PAYMENT

No separate payment shall be made for work involved within the scope of this section, unless specifically mentioned in the respective items of Bill of Quantities.

B LOW VOLTAGE DG SET, AUTO MAINS FAILURE/ STARTUP (AMF/ATS) PANEL, FUEL TANK & CANOPY

1.0 DESCRIPTION

The work under this section consists of supplying, installation, testing & commissioning of all material & accessories with one (01) year of warranty from the date of installation after successful testing & commissioning for the complete Diesel Generators of Prime rating, duly to be established by the manufacturers derating curves, losses and efficiencies of the engine, alternator and DG Set including but not limited to power cables, Automatic Mains Transfer Switch/Automatic Main Failure Switch Panel, fuel tanks, control panels, canopy, all accessories as specified here-in, and given in the Schedule of Prices.

The Diesel Generator (Prime rating) set shall be a standard design in accordance with the latest applicable International Standards of a reputed manufacturer, who shall have similar units in operations for similar applications and field conditions.

The DG set shall be of prime rated duty and suitable for indoor/ outdoor (as applicable) installation. It shall be capable for unbalanced loads up to 30% of actual load and for continuous part load operation. The set shall be capable of starting and operating at the rated output as per the climatic conditions (typical range given in the following table) and at an altitude of the site of installation (given level of the site of installation in meters above mean sea level). The power rating shown in the relevant section of Schedule of prices (bill of quantities) is the power rating required to be delivered to load by the diesel generator set after applying all de-rating factors relevant to the site.

The table below shows the ambient temperatures (see definition (1)) and the relative humidity rates to which the equipment can be submitted according to the category they belong; the later may be stated by the particular specifications.

Climatic Conditions

Category	I		II		III	
Rated operating range (2)	T1: +15°C	T2: +30°C	T1: -5°C	T2: +45°C	T1: -25°C	T2: +55°C
Maximum operating limits (3)	T3: +5°C	T4: +40°C	T3: -10°C	T4: +60°C	T1: -15°C	T2: +60°C
Maximum relative humidity	75% at +23°C		80% at +23°C		100% at +45°C	
Operating location example	Air conditioned room		Non air conditioned room		Outdoor	

1. Ambient temperature (IEC 60441-02-06)
Temperature determined within specified conditions of the air which surrounds the whole equipment.
2. Rated operating range:
Range of values at which equipment performs within specifications.
3. Maximum operating limits:
Range of values at which equipment can still work without deterioration or degradation of its operating qualities.

The DG set ratings must be substantiated with manufacturer's standard published data. The Diesel Generator set after reducing the power absorbed by the auxiliaries, shall deliver rated power output under the site conditions. All auxiliaries, accessories and connections between systems along with all necessary cables, fittings, hardware, etc., for complete installation of Diesel engine, Generator, control panel, including fuel & oil storage, exhaust system, etc., shall be furnished by the manufacturer.

The engine shall be directly coupled to the generator, and shall have a rated speed of 1500 rpm. The set shall be capable of sustaining without damage, 25% over speed under any abnormal operating condition.

The engine-generator set shall be mounted on suitable rigid steel base frame with vibration isolators. Heavy duty lifting eyes and/or jacking screws shall be provided on the skid. The foundation bolts and all other material/hardware for complete installation of the set, as required, shall be furnished with the set. Any excessive torsional vibration shall be avoided for both engine and alternator. The set shall be suitable for full load starting. When the generator is operating at no-load, the application of full load current, taking into account the surge due to starting of equipment, should be possible with maximum transient voltage drop of 15% of the rated voltage. The time taken to restore the generator voltage to 97% of rated value should not exceed 1.5 seconds. The set shall be capable for starting and accepting full load within 15 seconds after receipt of starting signal. The Manufacturer shall submit the equipment layout and other installation details along with the bid.

The details and technical data concerning Diesel Generator set shall be submitted with tender bid. Where required the documents from the manufacturer shall be furnished in support of the information furnished.

Make, Model, Serial number, Country of origin of the DG set shall be embossed on skid/base frame of the DG set.

The alternator and engine shall be as follows:

Alternator Make/Brand:

Siemens, Newage/Stamford/Cummins, Lorrey-Sommer, Cater Pillar/ Olympian or approved equivalent.

Diesel Engine Make/Brand:

Volvo, Perkins, Cummins, Mitsubishi, John Deere, Cater Pillar or approved equivalent.

Operating Console:

DeepSea, Power Wizard, APM, Intli Compact, DataCom or equivalent

Warranty

The DG Sets shall be supplied from the manufacturers/authorized agents or firms having strong local presence duly authorized by the manufacturer for sales, services and after sales back up support system and facilities along with suitable full time operation and maintenance experience with Pakistan.

The manufacturer/ authorized agent shall also have adequate maintenance facilities in the vicinity of Project with mechanically qualified and experienced personnel trained for operation and on-site maintenance of the equipment & materials offered by the Manufacturer in his bid.

To verify the capability of after sales service backup support locally in Pakistan, following shall be furnished by the contractor with duly verifiable documentary evidence from the supplier:

- 1) Complete company profile of the manufacturer/supplier, in house testing facilities, testing procedures, testing equipment/tools details.
- 2) Successfully completed project reference list of the DG sets clearly indicating the project names, rating of the DG sets & quantity supplied alongwith the satisfactory performance certificates from the customers/authorities.
- 3) List of projects for which the supplier already providing O&M services alongwith customer satisfactory operational certificates for O&M.
- 4) Complete details of the DG set manufacturer/coupler indicating the make/model number of the offered DG set.
- 5) De-rating curves/factors of the DG set w.r.t temperature, efficiency of Engine & Alternator and altitude.
- 6) Final output of the DG set (Prime rating) taking into account the alternator efficiency and mechanical losses.
- 7) The country of origin and years of manufacturing alongwith certifications for warranties/guarantees from the manufacturer for the engines and alternators on the

- Manufacturer's letter heads clearly indicating the make/model numbers of the Engines and Alternators.
- 8) Suitable online/ documentary evidence is to be provided for verification of the Engine, Alternator & DG set.
 - 9) Valid Nomination letter/dealership certificate from the DG set manufacturer/ Engineering Development Board Pakistan/ competent authorities certificate for the supplier.
 - 10) General Assembly Drawings of the DG set from the supplier clearly indicating each component of the DG set.
 - 11) Fuel Tank details
 - 12) Canopy Details

The projects for which certificates shall be provided must be comparable in terms of quantities of the DG sets maintained.

The DG sets supplier /authorized agent/assembler shall be responsible for providing one (01) year of standard warranty and during the warranty period the supplier /authorized agent/assembler of the DG sets shall be fully responsible for replacements of any/all defective components/parts against manufacturing defects with the genuine products/components through the manufacturer/authorized agents under the supervision of the contractor.

The involvement of the manufacturer/authorized agent for maintenance/replacement of components is considered important because the warranty of the manufacturer becomes void if genuine product/manufacturer recommended methodology/components installation is not followed. Undertaking in this regard shall be submitted by the contractor as well as manufacturer/authorized agent/assembler to the Procuring Agency's nominated representative.

The Bidder shall ensure that all Diesel Generator (DG) Sets comply with the applicable EPA requirements and prevailing environmental regulations/standards relating to smoke and gaseous emissions at the project location. The Bidder shall be responsible for obtaining and providing all required environmental approvals, certificates, test reports, and compliance documentation, as applicable.

2.0 APPLICABLE STANDARDS/CODES

The Diesel Engine and Generator set shall conform to the following standards as applicable.

- | | |
|---------------------|---|
| ISO3046 | - (Reciprocating internal combustion engines) |
| BS 4999 | - General Requirements for Rotating Electrical Machines. |
| DIN EN 12285-2;2005 | - Horizontal Steel Tanks for the Storage above Ground of Petroleum Products in Liquid Form. |

For other equipment and materials related to the Diesel Generator set, the Manufacturer shall follow relevant international standards.

3.0 MATERIAL REQUIREMENTS

3.1 **Diesel Engine**

3.1.1 **General**

The Diesel Engine shall be four strokes, compression ignition, suitable for Emergency supply duty. Starting shall be through motor operated electric starter. The engine shall be equipped with an alternator type automatic charging system to charge the batteries during running of engine. The engine shall be provided with required auxiliaries, guarantees of fuel consumption, acceptance tests, torsional vibration characteristics.

3.1.2 **Air Intake**

Air intake shall be through turbo charger and equipped with dry type filter. Suitable attenuators shall be installed to reduce noise at the air inlet. The filter assembly shall be constructed of non-corrosive materials.

3.1.3 **Engine Cooling**

Engine shall have a forced air draft, water cooled radiator supplied with a core guard. Cooling system shall have an engine driven centrifugal pump for cooling water circulation. Cooling shall be thermostatically controlled. An engine shut down timer shall be provided to keep the engine running on no-load after any operation of set, so that the engine is sufficiently cooled to start again instantly, if required, without rise in temperature above safe limits. The radiator shall be designed to cool the engine at specified output in ambient temperature upto maximum value. Radiator flexible ducting, flange and all necessary ductwork, flexible connections, fittings and supports shall be supplied to extend from the radiator to the exhausts louvers so that hot air from the radiator escapes freely to the outside of the building.

3.1.4 **Engine Lubrication**

A gear type positive pressure lubrication pump shall be provided with efficient filtration arrangement for the lubrication system. A 230Volt AC mains-operated heater with thermostat shall be provided in the crankcase. The heater shall be designed for automatic switching to ensure that temperature of oil is maintained for proper operation of the engine.

3.1.5 **Speed Governor**

The speed governor shall be electronic or digital complying with the requirements BS ISO 3046 or latest applicable international standard. Governor shall regulate engine speed so as to maintain the generator frequency within $\pm 2\%$ of the rated frequency. Stable engine speed shall be attained within 15 seconds after the engine has been started. Stable

engine speed shall be restored within 10 seconds of any sudden change in load, from no load to full load. During this change of load or surge, the speed shall not vary by more than $\pm 5\%$ of the rated speed. Means shall be provided on the engine to shut down the engine automatically in the event that the engine speed exceeds the "shutdown" speed.

3.1.6 Fuel System

Engine shall operate on Commercial High-Speed Diesel oil. A fuel oil strainer/filter shall be provided in the fuel line along with a water separator. Fuel system for Diesel engine shall not require any priming. The fuel system shall comprise;

- Fuel storage tank(s)
- Fuel transfer pumps
- Piping

The fuel tank shall have capacity to store fuel oil for twelve (12) hours of continuous operation @ 70% loading of the rated capacity of the DG set. The tank shall have level switch for monitoring low fuel level in the tank. The low-level switch shall provide an annunciation and prevent starting of set and to stop the set when the fuel in tank is at this level. The tank shall be provided with overflow, vent, supply and discharge valves, inspection cover, drain valve and glass sight gauge.

The fuel tank shall be designed, fabricated and finished in accordance with the requirements of DIN EN 12285-2;2005 - Horizontal Steel Tanks for the Above Ground Storage of Petroleum Products in Liquid Form. The fuel tank shall be incorporated in the steel base frame of the DG set. The structural steelwork shall be protected from corrosion.

The fuel piping to be furnished shall include fuel supply pipe from tank to the set, over flow pipe from the set to the tank, level indicator, fuel cap with breather, drain pipe from the tank.

Drain Line: The fuel tank drain shall be accessible and equipped with a shut off valve. Self supporting tank shall be arranged to allow drainage into a 305mm high bucket. The local fuel fill port on the tank shall be provided with a screw on cap.

3.1.7 Fuel monitoring System

DG set fuel monitoring system shall be comprising fuel flow meter with totalizer for measurement of hourly and cumulative diesel consumption, calibrated diesel tank level sensor for monitoring diesel quantity, filling and utilization in litres and compatible DG set control module/remote monitoring system for real-time monitoring and recording of fuel

consumption and tank level, complete with all accessories, cabling, calibration and integration. The fuel monitoring system shall generally include but not limited to hydrostatic sensor, PLC panel, solenoid valves, motor, pipe lines, ball valve, stainer, NRV, cabling/wiring etc. complete in all respect as approved by the Procuring Agency's nominated representative. The Contractor shall submit complete schematic diagram of fuel monitoring system, components details for review and approval of the Procuring Agency's nominated representative prior to procurement, fabrication and assembling/installation of the same.

3.1.8 Radiator Exhaust Duct

The radiator exhaust duct shall provided for exhaust of hot air through DG set radiator. The radiator exhaust shall be designed and routed in such a way so as to give minimum resistance to airflow.

3.1.9 Exhaust System

Exhaust system shall be equipped with a **HEAVY DUTY RESIDENTIAL** type silencer complete with muffler, exhaust manifold, flexible connector, exhaust elbow, exhaust pipe, rain cap, and associated fittings. This exhaust line shall be adequately covered with insulation material over its entire length i.e. from the engine to the termination point at rain cap. All supports for exhaust system shall be furnished. Hangs and supports shall be provided for the silencer such that essentially no load is transmitted to the engine.

3.1.10 Battery

Heavy-duty maintenance free lead acid batteries shall be provided with the set and mounted on the skid. The fully charged batteries shall be furnished with the set and connected with the help of heavy duty interconnecting cables.

The batteries shall be of adequate ampere-hour rating/capacity to satisfy the following requirements:-

- a. Crank the engine at firing speed for at least 15 seconds.
- b. If the engine does not start on the first attempt, crank the engine two more times for the above duration at an interval of 30 seconds between each cranking operation.

3.2 Alternator

3.2.1 General

The alternator shall be synchronous. The alternator shall be capable of carrying, continuously 10% over load of rated output with the field set for normal rated load excitation for 1 hour in every 12 hours operation.

The alternator shall be rated as follows:

Capacity	:	As stated in BoQ
Voltage	:	400/230 V
Phases	:	3Phase, 4 wire, grounded neutral
Frequency	:	50 Hz
Power Factor	:	0.8 lagging

3.2.2 Excitation

Excitation shall be from brushless rotating diodes mounted on the main shaft for 3-phase full wave rectification.

3.2.3 Windings

Alternator windings shall have Class H insulation and shall be impregnated for tropical use. The temperature rise of winding under normal operating conditions and at rated load shall not exceed the limits specified for Class-B insulation. Anti-condensate heaters shall be provided for windings. The heaters shall be thermostatically controlled for switching **ON** after the set has stopped. The thermostat range shall be adjustable and set to prevent overheating of windings. For protection of windings from damage due to overheating, thermistors shall be embedded to stop the set in case the temperature of winding rises above the safe value.

3.2.4 Deviation Factor

The deviation factor of the open-circuit line to line terminal voltage shall not exceed 0.10.

3.2.5 Voltage Regulation

Voltage regulator shall be solid state with provision for manual setting. Regulator shall be so designed to protect the exciter when the set is running at reduced speed during starting or idling of the prime mover. Voltage regulation shall be $\pm 2.5\%$ from no-load to full load. Transient voltage drop shall be less than 15% at full load and 0.8 power factor. Time required to restore to steady state conditions after transient voltage fluctuation shall not exceed 10sec.

3.2.6 Short Circuit Capability

Generator shall be capable of withstanding without injury, a 30 seconds three phase short circuit at its terminals when operating at rated output and power factor with fixed excitation.

3.2.7 Temperature Rise

Alternator temperature rises at continuous rating in an ambient of 52 degree C shall not exceed 70 degree C by resistance measurement on the field. The exciter temperature rise shall not exceed 52 degree C by resistance measurement on field or armature when the main generator is on continuous rating.

3.2.8 Vibration and Balance

The vibration level of the alternator when coupled to the engine shall not exceed the ISO Specifications or equivalent.

3.2.9 Bearings

The bearings shall preferably be grease lubricated and anti-friction type and shall be selected to provide for long trouble free service.

3.3 Indication/Metering Panels

3.3.1 General

The indication/metering panel shall be designed for front access, completely assembled, wired and tested. The control panels shall conform to the constructional requirements as per international standards and norms.

The panel shall incorporate protection and control equipment, measuring instruments, control and instrument transformers, voltage regulator, governor controls, battery charger, indicating lamps, etc. Engraved nameplates of stainless steel shall be provided on all panels for clearly identifying panels and devices mounted inside of panels. Standard nameplate with black lettering shall be provided.

Cables and capillary tubing shall be tagged with a neoprene disc or approved equivalent, stamped with the cable number or tube function for easy identification.

3.3.2 Moulded Case Circuit Breakers

The Four pole moulded circuit breaker shall be provided with the set. The circuit breaker shall have the Thermal over current and short circuit releases as below:

I _{th}	=	60 to 100% of Current rating
I _{sc}	=	50 kA (min)

The circuit breaker shall be mounted in a vibration isolated sheet steel box with adequate access for incoming and out going cables.

3.3.3 Magnetic Contactors

The contactors shall be four pole, 400 V AC duty cycle-3. The main contacts shall be silver tipped, but type with double break per pole. Each contactor shall be provided with 230V AC single phase operating coil, and minimum two normally open and two normally closed auxiliary contacts wired upto terminals. But if more number of working auxiliary contacts are required then, these shall be provided according to the system requirements.

3.3.4 Battery Charger

Multi stage intelligent (Digital Microprocessor based with a communication port RS 485) high efficiency battery charger with automatic charging stage selection, capable of charging of a wide range of batteries, when engine is not running. The charger shall be fully capable to recharge a completely discharge battery within four hours at boost/maximum charge. The charger shall be of constant voltage and constant current with maximum current been drawn during charge recovery phase. The charger should automatically return to float/trickle mode when charging is complete.

The charger should have following safety features:

- Input under voltage protection
- Input over voltage protection
- Battery charge over voltage protection
- Battery output over current protection
- Short Circuit protection
- Battery temperature compensation with over temperature protection
- Reverse Polarity protection
- Automatic power derating at high ambient temperatures

Applicable Standards for Battery Charger:

- BS EN 61000 (Electromagnetic compatibility)
- BS EN 60950 (Electrical safety)
- BS EN 60068 (Temperature, Vibration, Humidity and Shock)
- BS EN 60529 (degree of Protection)

3.3.5 Instruments and Controls

- i. Ammeter (measuring as required)
- ii. Ammeter Phase selector switch
- iii. Voltmeter (0-500 volt AC)
- iv. Voltmeter phase selector switch
- v. Frequency meter
- vi. Start / stop key switch
- vii. Battery condition voltmeter
- viii. DC Voltmeter for batteries
- viii. Tachometer for Engine speed in Revolutions Per Minute (RPM)
- ix. Lube oil pressure in PSI
- x Lube oil temperature in Degrees Celsius
- xi. Engine water temperature in Degrees Celsius
- xii. Engine operation/ running time in hours

3.4 Safety Devices

3.4.1 Following safety devices shall be provided. The audible alarm shall operate on any fault condition and shall be resetable manually and automatically through a timer after 15 minutes whichever is earlier:

A = Alarm		SD = Shutdown		TD = Adjustable Time Delay	
i)	Engine Over speed	A	SD		
ii)	Low lube oil pressure	A	SD		
iii)	High water temperature	A	SD		
iv)	Over voltage	A	SD	TD	(0-30 Sec.)
v)	Under voltage	A			
vi)	Short circuit and tripping of circuit breaker.	A	SD	TD	(0-1 min.)
vii)	Low level in fuel storage tank	A	SD	TD	(0-5 min.)
viii)	Winding temperature high	A	SD	TD	(0-2 min.)
ix)	Over crank	A	SD		

(After THREE
Successive cranks)

- | | | |
|-------|-----------------------------|----------|
| x) | Low crankcase oil level | A |
| xi) | High crankcase oil level | A |
| xii) | Charging alternator failure | A |
| xiii) | Charger failure | A |

For all shut down conditions, the set shall lockout and it shall not be possible to re-start it unless manually reset after the cause of fault has been removed.

3.4.2 Generator Electrical Protections:

Following electrical protections shall be provided in the generator:

1. High AC voltage shutdown	12. Reverse Power shutdown
2. Low AC voltage shutdown	13. Reverse VAR shutdown
3. Over frequency shutdown:	14. Under voltage shutdown:
4. Under frequency shutdown/warning	15. Over voltage shutdown:
5. Over Current warning/Shutdown:	16. Low and high battery voltage warning
6. Loss of sensing voltage shutdown	17. Weak battery warning
7. Field overload shutdown	18. Fail to start (over crank) shutdown
8. Over load (kW) warning	19. Reverse power protection
9. Short circuit protection:	20. Smart starting system
10. Digital Voltage Regulator	21. Battery monitoring system
11. PMG Excitation	

3.5 Generator Services & Maintenance

Note:

a) Contractor shall be responsible to provide all the consumables like lube oil, filter (oil, fuel and air) etc. during operation and maintenance period of two (02) years as per the specifications. The cost for the same is to be included in the quoted price.

b) Permanent operator(s) of the DG sets shall be available at site during matches as scheduled by PCB, for 150 kVA, 250kVA & 350kVA DG sets and permanent operator(s) of the DG sets shall be available at site during office working hours/matches (as required by the Procuring Agency), for 750kVA & 1000kVA DG sets.

c) Fuel shall be provided by the Employer.

3.5.1 Scope of Service

- a) Scope of work shall include but not limited to maintenance and support services to ensure smooth, uninterrupted and trouble free operation of

each of generators for ensuring round the clock availability of rated electric power supply and that the services shall therefore include all services (Routine Preventive Maintenance, Corrective Maintenance and Repairs. conformity of specifications & the satisfaction of Procuring Agency's nominated representative.

- b) The contractor shall allocate necessary resources and expertise to provide the said top quality services and undertake to provide services of highest industry standards, to the satisfaction of Procuring Agency's nominated representative.
- c) Scope includes inspection of installed DG sets by experts Procuring Agency's nominated representative and Technicians and replacement of spares on need basis. The expert team available to fix the problem within specified time related to DG sets around the clock on call basis. Expert team available for all types of technical consultation on maintenance, modification, upgrading of DG sets, selection and procurement of spare parts etc. on cost basis as agreed upon by the parties.
- e) Regardless of the time of the day /night when the matter is reported, Contractor shall ensure that our technicians and Procuring Agency's nominated representatives shall remain engaged in the rectification of the problem until the operation of the generator(s) is restored to the satisfaction of the Company.
- f) Contractor shall maintain an inventory of parts required for maintenance of the generators and to make replacements of all faulty parts, whether in case of an emergency or during routine visits, from its own stock at the earliest in accordance with frame agreement.
- g) Contractor shall ensure that new, unused, genuine and best quality spare parts shall be used while carrying out services including emergency services and preventive maintenance

Contractor shall ensure 'Routine Maintenance' and 'Emergency on Call' teams in Lahore for this particular project.

3.5.2 Criteria for Preventive Maintenance (PM):

3.5.2.1 Schedule of Preventive Maintenance is divided into 2 parts

- a) Monthly Schedule (Preventative Maintenance)
- b) As & when Required (Emergency Preventive Maintenance)

3.5.2.2 Guidelines for selection criteria for selecting Genset for preventive maintenance will be following (Contractor shall be responsible to provide all the consumables like lube oil, filter (oil, fuel and air) etc. during operation and maintenance period of two (02) years. The cost for the same is to be included in the quoted price) ;

- a) Gensets exceeding running hours nearing or at 300 hrs.
- b) Consumables replacement during PM will be initiated by Genset operator, in which requirement of consumables to be changed will be explicitly mentioned.

- c) Following guidelines & rational shall be used for initiating replacement of consumables:
 - i) Change of Lube oil. i.e. Complete oil will be drained & change with fresh oil.
 - ii) Change of Oil Filter.
 - iii) Change of Fuel Filter will be subjected to physical condition of fuel filter.
 - iv) Change of Air Filter will be subjected to the physical condition/ exceeding 600 running hours since last maintenance.

3.5.2.3 FSR (Field Service Record) Verification Procedures for Gensets PM & CM

- a) Contractor shall provide FSR (Field Service Record) to Procuring Agency's nominated representative within 48 hours of execution of an activity on site.
- b) Detail for all Preventive Maintenance work will mentioned on FSR against all PM site visits.

3.5.3 Preventive Maintenance Scope of Work for Generators

3.5.3.1 General

- Check tightness of all Exhaust connections.
- Check engine mountings.
- Lubricate all points with grease/oil.
- Remove all necessary items in the vicinity of the generator that may inhabit operation or represent cause of potential injury.
- Enquire if any operational difficulties are being experienced by the customer, correct or demonstrate as necessary.
- Starting and test run of generators.
- Fuel system, which includes gauges and fuel tanks etc.
- Inspection of exhaust system for leaks and audio pollution.
- Governing operations and adjustment as needed.
- Checking the coolant level.
- Checking the fuel supply and level of fuel.
- Checking the level and condition of the lubricating oil.
- Checking for water in pre-filters
- Cleaning the air cleaner if the engine is operating in very dusty conditions.
- Cleaning the air cleaner if the engine is operating in moderately dust conditions.
- Checking the serviceability of the battery.

- Checking battery chargers' functionality.
- Checking the condition and tension of the radiator or axial fan drive belt.
- Checking the alternator stator motor.
- Replacing the fuel filter element if the fuel is not perfectly clean.
- Replacing the air clean element every 600 hours.
- Checking the air induction system for leaks, damage and restrictions.
- Checking all external nuts, bolts and unions for tightness.
- Ensuring that all guards are firmly attached and not damaged.
- Checking the engine and speed controls for free movement.
- Cleaning the radiator fins and the axial fan drive belt irrespective of condition.
- Checking the lubricating oil pressure.
- Submitting 'Post Maintenance Visit' report on a template approved by.
- Checking that 'Hours meter', 'Volt Meter' and 'Amp Meter' are functional. Work scope also includes replacement of consumables like 'filter', 'lube oil', 'electrolyte or coolant', 'battery' and faulty ATS/AMF parts as required and mentioned in preventive maintenance work.

3.5.3.2 Engine, Fuel and Cooling System

- Check radiator coolant level.
- Check fan belt tension.
- Check Cooling Fins of radiator.
- Check Hose Pipes of Radiators.
- Check the fuel pump is working properly.
- Check the fuel filter pipes are cleaned and have no obstruction inside.
- Check the radiator condition should not be choked or blocked.
- Check the fuel pipe lines are cleaned and have no obstruction inside.
- Check the fuel gauge is functioning properly.
- Check the fuel & oil is not spilled on Genset & floor surroundings.

3.5.3.3 Electric System

- Check battery electrolyte level.
- Check the battery voltage level.
- Check tightness of all cable clips and wiring.
- Check function of all instruments and indication lights on ATS and Generator panel.
- Check the magnetic contactor functioning properly.
- Check all protection components such as timers, relays, breakers, switches are working properly.
- Ensure that all safety systems will function properly in the event of a fault.

3.6 CORRECTIVE MAINTENANCE SCOPE OF WORK FOR GENERATORS

Trouble-shooting and resolving all problems related to DG sets. Under this service, for properly and timely maintenance and prompt rectifications of problems.

1. Contractor shall ensure its teams' availability; 24hrs 7days a week and they should be reachable through telephone/designated line

Following procedure shall be adhered to and shall be responsible to attend to and rectify DG faults strictly in accordance with 'Severity Levels' explained below:

- i) on-call teams to reach the site as per following response time:
Within City – one-two Hours
- ii) on call team reaches the sites, attends the alarm keeping Procuring Agency's nominated representative On-call Procuring Agency's nominated representative abreast about the progress.
- iii. After fixing the issue, on-call team informs Procuring Agency's nominated representative on call Procuring Agency's nominated representative before leaving the site.
- iv. In case replacement of faulty part is required, on-call team shall seek assistance from their head office/regional offices and make their best efforts to restore DG's operation in minimum possible time.

The bidder shall use genuine spare parts from the diesel Engine manufacturer and Alternators, stock inventory shall always be available in adequate quantity of all spare parts including consumables. Only renowned brands of Diesel Engine lube Oils like Shell, Total & Caltex of API-CE standards shall be used.

3.7 MAINTENANCE SCHEDULE

- | | | | |
|---|-----------------------------|---|------------------------------|
| A | Daily or every 8 hours | D | Every 1000 hours or 12 month |
| B | Every 150 hours | E | Every 2000hours |
| C | Every 250 hours or 6 months | | |

A	B	C	D	E	Operation
•					Check the amount of coolant
•					Check the condition and the tension of the drive belt
•					Check for water in the pre-filter
		•			Renew the elements of the fuel filter(s)
				•	Ensure that the atomizers are checked
•					Check the amount of lubricating oil in the sump
•					Check the lubricating oil pressure at the gauge
		•			Renew the engine lubricating oil
		•			Renew the canisters of the lubricating oil filter
•			•		Clean or renew the air filter element
				•	Check The Air After cooler (If Available)
				•	Check water pump
				•	Ensure that the turbocharger impeller casing and (if Available)
					turbocharger compressor casing are cleaned

				•	Ensure the compressor is checked (if one fitted)
				•	Ensure that the valve tip clearances of the engine are checked and, if necessary adjusted
				•	Ensure that the alternator and the starter motor are checked

3.8 Auto-Mains Failure/Transfer (AMF/ATS) Panel

The AMF/ATS shall be floor mounted front access, completely assembled, wired and tested. The control panel shall conform to the constructional requirements as stated in these specifications for LV switch boards.

The AMF/ATS shall incorporate automatic changeover system, which will be designed for the following functions:

- a) To start the set immediately when the main supply fails
- b) To start the set within the 0 to 1 minutes (adjustable) whenever the main supply voltage drops to 360 volts or rise to 440 volts. The setting voltages shall be adjusted within -5 % and + 5% respectively for the lower & upper ranges.
- c) To transfer the load from Generator to main supply whenever the main system voltage returns between 90% to 110% of its rated value and persists for at least 3 minutes.
- d) To make two successive attempts, in case the set fails to start in the first and second attempt.
- e) The system shall provide for immediate transfer of load to the generator, after the rated speed and voltage have been achieved. The Generator should start immediately when the main supply fails
- f) The system shall be self resetting after each cycle of operation. To start the set immediately when the main supply fails
- g) Two normally open potentially free contacts shall be provided which shall close when the set is started with the operation mode selector switch in auto or manual position. The contacts shall be wired upto the terminals block in control panel.
- h) A four position selector switch shall be provided for selecting the operation mode i.e. Automatic-Manual-Test-stop/ Maintenance mode to facilitate the following operation:-
 - i) **Automatic**
As described in a to d.

ii) **Manual**

Manual starting of the set and load transfer from normal to standby and vice versa.

iii) **Test**

Testing the changeover operation when so desired and also for starting and running the set without interrupting the normal operation. In case of failure of main supply, the set shall automatically revert to automatic mode of operation.

iv) **Stop/Maintenance**

Provision shall be made to isolate the system for trouble shooting and maintenance without interruption of mains power supply. The set shall not be capable of starting in this condition.

3.9 **Terminal Blocks and Terminals**

Terminal blocks for control wiring shall be General Electric Type Eb stud terminal blocks or approved equivalent. Terminal studs and wires shall be numbered or otherwise marked in accordance with the applicable schematic and wiring diagrams.

Terminal blocks shall be arranged with sufficient room for each connection of incoming cables. Parallel rows of terminal blocks shall be spaced at least 150mm (6") apart.

Blocks shall be mounted in vertical columns along the sides of cubicles or on vertical panels specially provided for terminal blocks. 20% spare blocks distributed over the columns of terminal blocks shall be provided.

Terminals shall be suitable for screw terminals and shall be sized according to the wire being terminated.

Provisions shall be made to terminate and ground the overall copper shields of all incoming cables by a suitable method approved by the Procuring Agency's nominated representative.

3.10 **Component Wiring**

All internal wiring shall be in accordance with IEC or VDE Standards with annealed copper conductor, thermo-plastic insulated with an overall flame- retardant braid. Wire sizes for control wiring in no case shall be smaller than 2.5 mm². The wire ends shall be permanently fitted with compression type connectors before attaching to terminal studs.

Wiring between terminals of various devices shall be point to point. All internal wiring shall be neatly trunked in wiring troughs bound and anchored.

All groups of bundled conductors to hinged doors and panels shall use extra-flexible wire arranged so that a twisting rather than a bending motion is imparted to the moving conductor bundle. Each bundle shall be anchored to the fixed member at the opposite end of the hinge axis to the anchoring point on the moving member so that the moving bundle length is the maximum available without loops.

All wires shall be identified at both ends according to the schematic diagram.

Contractor to submit source of purchase of material/ components/ genuine product certificates at the time of factory inspection from the manufacturers of the components clearly indicating the project name, quantities, make/model and rating of all components (i.e. ACBs, MCBs, MCCBs, MCOs, modules, Push buttons, terminal blocks, voltmeter, ammeter, selector switches, current transformers, indication lights, relays etc.) with suitable documentary evidence duly verifiable from the manufacturer/authorized agent alongwith warranty certificates.

4.0 SPECIFICATIONS OF WEATHER PROOF, SOUND ATTENUATED CANOPY AND FOUNDATION PAD

4.1 Weather Proof and Sound Attenuated Canopy

Sound and weather proof canopy suitable for the Diesel Generating sets. The canopy shall attenuate the sound level to below 85dB at a distance of 1 meter or less than 75dB at a distance of 3 meters from it. Textured insulation materials, Comprising of fire retardant resin, organic glass/rock fiber to ensure uniform long lasting absorption of sound. The canopy shall be constructed with weather proof corrosion resistant material and shall be modular in design. All sheet components pre-treated with cold fast prior to powder coating. All gas kits/joints be of Edpm (**ethylene propylene diene monomer** (M-class) rubber). The canopy shall be suitable for tropical climates.

- a) The enclosure shall allow easy access to the engine, alternator, and radiator filler cap, lube oil filling, filter replacement and control cubicle for easy maintenance purposes.
- b) Hinged and lockable doors all around canopy for easy access to D.G. set for routine maintenance and major over hauling.
- c) At least 1 foot clearance between the DG Set and Canopy shall be maintained from sites/directions.
- d) The enclosure shall be designed to be water and weather- proof.
- e) The intake area for air must be 1.8 times the size of radiator.

- f) The enclosure base frame should be designed with supports for easy transferred using forklift and crane.
- g) Canopy shall be capable of anti-corrosion to withstand high humidity.
- h) Proper grouting of both generator and canopy.
- i) The thickness of sheet for canopy body must be 4mm (minimum) whereas thickness of and door sheet 2mm (minimum).
- j) Glass wool will be of pure fiber.
- k) The canvas is to be place between radiator and the canopy that can be easily removed during troubleshooting.
- l) GENSET control panel should be visible from outside the canopy by means of plan glass.
- m) 4 Nos. Canopy lifting eyes arrangement from top of canopy.
- n) Sufficient air intake through Acoustic Louvers from both side & control panel side.
- o) Duly painted with good quality water proof and weather proof paint. Painted with 2 coats of zinc oxide primer and finishing with 2 coats of Syntactic Enamel (Burger/ICI) paint.

4.2 Foundation Pad for DG Set

- a) Fabrication of RCC Foundation suitable for genset operating weight complete in all respects, foundation to be made according to generator size and should have all required sleeves for piping, conduiting etc. as per specifications.
- b) The pad should be at least 12 inches (300mm) height from and extend at least 6 inches (150 mm) beyond the skid on all sides.
- c) The weigh (W) of the foundation should be at least 2 times (and up to 5-10 times) the weight of the set itself to resist dynamic loading. (The weight of fuel in a sub-base fuel tank should not be considered to be contributing to the weight required of a vibration isolating foundation even through the isolators are between the tank and the generator set).
- d) The foundation should extend at least 6 inches (150mm) beyond the skid on all sides. This determines the length (l) and width (w) of the foundation.
- e) The foundation should be reinforced concrete with a 28-days compressive strength of at least 3000 psi

4.3 Tests:

4.3.1 General

The set furnished by the Contractor under this Contract shall be subject to tests in the shop and at site in the presence of the Procuring Agency's nominated representative for conformity to requirements of the Specifications.

4.3.2 Diesel Engine

All mechanical parts shall be run under simulated operating conditions at the Manufacturer's works.

All tests shall be conducted in accordance with the appropriate codes for testing. The tests to be carried out shall include, but not be limited to, the following:

- i) Dynamic balancing together with over speed tests of the generator exciter and rectifiers.
- ii) Bench testing of all accessories.
- iii) Zero load operation of the diesel engine assemblies to test the following:
 - Vibration.
 - Lubricating system.
 - Fuel system.
 - Governor system.
 - Temperature control system.
 - Over speed trip.
 - Individual accessories.

The diesel engine and AC generator shall be test-run continuously for 12 hours to ensure smooth running and satisfactory operation of the machines and accessories. The above tests will be witnessed by the Procuring Agency's nominated representative.

The contractor shall state in his proposal the performance and reliability tests to be carried out in the Works.

Tests on the unit shall not be less than the minimum requirements of ISO standard Practices for equipment.

4.4 Generator

4.4.1 General

The set furnished by the Contractor under this Contract shall be subject to tests in the shop and at site in the presence of the Procuring Agency's nominated representative for conformity to requirements of the Specifications.

4.4.2 Routine Tests

Routine tests on the generator shall be performed at the manufacturing works/workshop of the DG Set manufacturer/Supplier. Routine tests shall include:

- a) Resistance of armature and field windings
- b) Polarity of field coils
- c) Check of mechanical balance
- d) Check of no-load field current or exciter field current
- e) Voltage balance
- f) Phase sequence
- g) No-load saturation curve
- h) Insulation and high potential tests
- i) Over speed test at 125% speed for 1 minute
- j) Load Tests (12 hours)
 - 1. Continuous fifteen minutes heat run at 25 percent load rating
 - 2. Continuous one hour & thirty minutes heat run at 50 percent load rating
 - 3. Continuous four hour heat run at 75 percent load rating
 - 4. Continuous six hour heat run at 100 percent load rating
 - 5. Continuous fifteen minutes heat run at 110 percent load rating

Fuel, water and electric power required for "Performance Tests" shall be provided by the Contractor

Where the generator is not completely assembled in the factory, tests (d) to (i) above inclusive may be carried out with the generator coupled to Engine Test (a) to (d) shall also apply to the exciter.

4.4.3 Type Tests

The generator shall have the following tests performed, if required:

- a) Short circuit saturation curve.
- b) Temperature test.
- c) Segregated losses.
- d) Voltage deviation factor.
- e) Three phase line to line short circuit test at any convenient voltage in the 0.4 to 0.5 p.u. volts.

4.4.4 Characteristics Test Curves

Following completion of type tests, Manufacturer shall provide characteristics curves of the brushless excitation system. These curves shall show:

- a) Exciter field amps and volts versus generator line current at 0.80 Pf. and maximum and minimum temperature rises.
- b) Exciter field amps and volts versus generator line current at 1.0 Pf and maximum and minimum temperature rises.
- c) As for (a) above, but with one diode failed.

The above six curves shall be plotted from no-load to maximum rated load at rated generator voltage. Following approval of curves by the Procuring Agency's nominated representative, they shall be incorporated by the Manufacturer into the Emergency Diesel Generating Set Maintenance Manual.

4.4.5 Performance Tests

At the conclusion of installation of the Emergency Diesel Generating Set at site, commissioning tests shall be carried out by the Contractor/Manufacturer to demonstrate the satisfactory operation of the equipment and to verify the guaranteed performance figures of the diesel unit. The tests shall comprises:

1. Preliminary tests on individual components.
2. Continuous fifteen minutes heat run at 50 percent load rating in parallel with the system.
3. Continuous fifteen minutes heat run at 75 percent load rating in parallel with the system.
4. Continuous thirty minutes heat run at 100 percent load rating in parallel with the system.
5. Part load heat runs to demonstrate satisfactory operation and establish fuel consumption at the respective loads.
6. The tests shall also include:
 - a) Performance of Governing characteristics and protective systems.
 - b) Starting characteristics of the units. The units shall start at least five (5) times in six (6) consecutive starting attempts.
 - c) Starting power requirements to demonstrate the ability of the machine to start the specified number of times without need to recharge the batteries.

The instrumentation supplied as standard with the equipment will be used during the commissioning tests for measurement of voltage, frequency, temperatures, pressures, etc. normally recorded during commercial operation. Additional instruments required for the measurement of electrical output, fuel flow, vibrations, etc. shall, at no extra charge, be provided by the Contractor.

Tests to be carried out manufacturer's work and at the site shall be to the satisfaction of the Procuring Agency's nominated representative. Seven copies of test certificates shall be forwarded to the Procuring Agency's nominated representative immediately following each test. The site test report shall include a list of final settings and adjustments carried out during commissioning.

If the tests show that the set does not reasonably comply with Bid, the Contractor/Manufacturer shall, at his own expense, make all necessary corrections to the unit. Additional tests shall then be made to demonstrate the effectiveness of these corrections. Until the necessary corrections have been made, the conditions of the contract shall not be considered fulfilled.

Fuel, water and electric power required for "Performance Tests" shall be provided by the Contractor.

Seven (7) copies of the Final Performance Test Report shall be submitted to the Procuring Agency's nominated representative not later than one (1) month after completion of the performance tests.

4.5 Diesel Generator Set

4.5.1 Measurement

Measurement shall be made for one No. of diesel generator set (as per rating mentioned in BOQ), alongwith all its allied accessories acceptably supplied and installed by the Contractor as a complete job.

4.5.2 Payment

Payment shall be made for one No. of DG Set alongwith all its allied accessories, as provided above, at the Contract unit price each for design, fabricating, supplying, installing, testing, and commissioning of the of diesel generator set (as per rating mentioned in BOQ), including fixing arrangement and accessories for complete installation.

SCHEDULE OF TECHNICAL DATA TO BE FILLED IN FOR EVERY TYPE/RATING OF DG SETS AND SEALED/STAMPED BY THE MANUFACTURER- (MANDATORY)

Sr. No	Data Required	Data To Be Submitted (By Bidder)
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1	ENGINE	
	Manufacturer's Name/ Country of Origin	
	Model	
	Maximum Engine Rating -(BHP)	
	Continuous Output Rating -(BHP)	
	Derating Factor:	
	(i) For Altitude of 1250 meters above MSL	
	(ii) For inlet Air Temperature of	
	(iii) Others if any	
	Engine Rating at Site-(BHP)	
	Period of maximum Engine Rating in Hours	
	Operating speed-RPM	
	Piston Speed (m/s)	
	Bore & Stroke-Inches	
	No. of cylinders	
	Arrangement of Cylinders (in line/v)	
	Engine Capacity-Cu.in./cc	
	Compression Ratio	
	Coupling Type	
	Mounting Arrangement	

Sr. No	Data Required	Data To Be Submitted (By Bidder)
	Cooling System	
	Ignition System	

	Overload Capability	
	Governor Type And Make	
	Efficiency at 0.85 pf % At 25% of rated load At 50% of rated load At 75% of rated load At 100% of rated load	— — — —
	Lube oil consumption (Liters/hr) At 0% of rated load At 25% of rated load At 50% of rated load At 75% of rated load At 100% of rated load	— — — — —
	Specific Fuel consumption (Liters/hr) At 0% of rated load At 25% of rated load At 50% of rated load At 75% of rated load At 100% of rated load	— — — — —
	Lubrication system nominal oil pressure (kg/cm ²)	
	Lubrication system minimum oil pressure (kg/cm ²)	
	Lubricating oil Sump capacity (ltr.)	
	Radiator capacity (ltr.)	
	Compusion air intake at 50 Hz (cm ³)	
	Engine heat radiation (K cal/min.)	
	Exhaust gas temperature at manifold, deg C.	
	Exhaust gas rate (ltr/sec.)	
	Starting system voltage (v)	
	Specific Feature if any	

Sr. No	Data Required	Data To Be Submitted (By Bidder)
2	GENERATOR	

	Manufacturer's Name/ Country of Origin	
	Model	
	Design Rating -(KVA)	
	Continuous Output Rating -(KVA)	
	Net electrical Output at site -(KVA)	
	Rated Voltage-volts	
	Power Factor	
	Speed-(RPM)	
	Frequency-Hz	
	Type designation	
	Time delay	
	(i) Manufacturer	
	(ii) Type designation	
	Timing	
	(i) Manufacturer	
	(ii) Type designation	
	Tripping	
	Insulation class	
	Stator	
	Rotor	
	Exciter	
	Overload Capability %	
	Harmonic Content %	
	Temperature Rise °C	
	Voltage Regulation	

Sr. No	Data Required	Data To Be Submitted (By Bidder)
	Type	
	Regulator	
	Regulation %	
	Voltage Dip %	
	Response Time (Sec)	
	Frequency Regulation -%	
	Deviation Factor %	
	Efficiency at 0.85 pf % At 25% of rated load At 50% of rated load At 75% of rated load At 100% of rated load	
	Exciter	
	Type	
	Rated Voltage-Volts	
	Full load current -Amps.	
	Radio Frequency Interference	
	Telephone interference factor	
	Charge Capacity	
	Batteries Type Rating-AH	
	Noise output level of Set (dB) At 0 % of rated load At 25% of rated load At 50% of rated load At 75% of rated load	

	At 100% of rated load	
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Sr. No	Data Required	Data To Be Submitted (By Bidder)
	De-rating Factor	
	For Altitude of given height in meters above MSL of the site of installation	
	For ambient temperature of	
	others ,if any	
	Special features, if any	
3	ACCESSORIES	
	(Contractor to state if any of the following accessories will be supplied - give details) Crankcase Heater Automatic water Makeup System Ducting for radiator Exhaust System Silencer Fuel Tank Fuel Piping System Fuel pump	
	Meters/Gauges to indicate: Engine speed in rpm Lube oil Pressure in Bars Lube oil temperature in $^{\circ}\text{C}$ Engine running hours in hrs. Battery Charging current in Amps.	
	Alarm/Indicating lamps for Engine Overspeed	

	Low lube oil pressure High engine water temperature Over voltage Under voltage Short-circuit/tripping of main circuit breaker low fuel level	
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Sr. No	Data Required	Data To Be Submitted (By Bidder)
	High fuel level Winding temperature high Over cranking Low oil level High oil level Charging alternator failure	
	Safety devices for instantaneous shut down due to Engine over speed Low lube oil pressure High water temperature shut down	
	Safety devices for adjustable delayed shut down, through shut down timer, due to: Over voltage Short circuit/tripping of main circuit breaker Low fuel oil in tank Winding temperature high	

Note: To be filled for each rating of DG Set from the Manufacturer.

C LOW VOLTAGE (LV) DISTRIBUTION BOARDS

1.0 GENERAL

The work under this section consists of design, manufacturing, fabricating, supplying, installing, connecting, testing and commissioning of all material and services of the complete Low Voltage Distribution Boards as specified herein, shown on the Tender Drawings and stated in the Bill of Quantities.

The Contractor shall discuss the electrical layout with the Procuring Agency's nominated representative and co-ordinate at site with other services for exact position of the electrical lines and equipment.

The Low Voltage Distribution Boards shall also comply with the General specifications for Electrical and with other relevant provisions of the Tender Documents.

The Low Voltage Distribution Boards shall be sheet steel fabricated. These shall be suitable for surface mounting, semi-recessed or recessed in wall mounting. The Low Voltage Distribution Boards shall be totally enclosed, dust and damp proof. The Low Voltage Distribution Boards shall be complete in all respects with material and accessories, factory assembled, tested and finished according to the Specifications and to the normal requirements.

All components shall be installed on a common mounting plate inside the enclosure and protected from the front with screwed sheet steel front plate. The enclosure shall be provided with rubber gasketing and a lockable hinged door with cam fastener.

The distribution board shall be supplied complete with all installation materials as recommended by the manufacturer. The incoming and outgoing cable connections shall be according to the wiring requirements. If required, an adapter box for accommodating the cables and conduits may be provided. The box shall be of the same material and finish as the distribution board.

The cabling inside the distribution board shall be suitably harnessed by means of straps or cords. An earth bar or terminal strips shall be provided for connection of incoming and outgoing earth conductors. The earth bar or terminals shall be permanently connected to the body of distribution board at two points.

The LV Distribution Boards, in general, shall;

- be suitable for indoor installation & operation
- be suitable for operation and maintenance from front side
 - be suitable for both 415 Volt AC, three phase 4 wire and 230 Volt AC, single phase 2 wire, 50 Hz system
 - have all components rated for insulation class of 500V minimum for three phase and 250 Volt for single phase system
- be designed for flush mounting of all instruments on the front
 - be provided with adequate clearance from live parts so that flash overs can not be caused by switching, vermins, pests etc.
 - have incoming/outgoing cable termination arrangements. The power cables shall be directly connected to the terminals of TP 500V MCCBs of current ratings of 100 Amps and above. The SP/TP MCBs and/or MCCBs of current ratings upto and including 100 Amps shall be connected to DIN rail mounted wiring terminals of appropriate ratings, numbers and sizes for the outgoing wiring cables
- be provided with name plate on the front side of door
 - be provided with pocket inside of door for safe keeping of the detailed as-built wiring/shop diagrams of the switch board
 - have provisions for incoming and outgoing cables entry, connections and termination arrangements from top and/ or bottom plates as per site requirements
- have all openable doors grounded with the use of flexible copper cable/strip of at least 10 mm² cross-sectional area

2.0 APPLICABLE STANDARDS/CODES

The latest editions of the following standards and codes shall be applicable for the materials specified within the scope of this Section :

- | | |
|-------------|--|
| BS 4752-1 | - Triple Moulded Case Circuit Breaker |
| IEC 60947 | - Single and Triple Miniature Circuit Breaker |
| IEC 60947 | - Low Voltage Switch gear and Control gear |
| IEC 60439 | - Factory Built Assemblies of LV Switch gear |
| IEC 60475-2 | - Switch gear and control gear for Voltages upto & including |

1kV

- BS 88 - HRC Fuses
- IEC 60073 - Colors for indicator lights and push buttons
- IEC 60446 - Identification of insulated/bare conductors

3.0 MATERIAL

3.01 Sheet Metal Work

The surface mounting Low Voltage Distribution Board shall be fabricated with 14 SWG sheet steel and the semi-recessed or recessed mounting type shall be fabricated with 16 SWG sheet steel.

The complete sheet steel metal work of the Low Voltage Distribution Board shall be:

- cleaned down to bare shining metal
- de-rusted and de-greased
- painted with two base coats of anti-corrosive RED oxide paint
- Two coats of weather proof powder paint in approved colour

3.02 Components

The Low Voltage Distribution Board shall be provided with components as specified in the Specifications, mentioned in the Bill of Quantities and as shown on the Tender Drawings, required for the satisfactory operation of the distribution board and of the electrical system.

Typical component specifications are given below:

3.02.1 Bus Bars

The bus bars shall be made of high conductivity electrolytic copper and shall be completely isolated and mechanically braced for the specified fault level. The phase identification of bus bars shall be by colours applied on bus bars and these shall be red, yellow and blue for phase and white for neutral. The earth bus bar shall be green.

The bus bars shall be triple pole and neutral and shall be of appropriate size to meet the electrical and mechanical requirements of the system.

The temperature rise shall not exceed 45 degrees centigrade at rated current.

3.02.2 Moulded Case Circuit Breaker (MCCB)

The MCCB shall be moulded case, triple pole, rated for 500 Volt AC. The Operating current ratings and Rupturing capacities shall be as mentioned in the relevant items of the Bill of Quantities and as shown on the drawings. The MCCB's shall have fixed Magnetic Short circuit and fixed Thermal Overload protections. However, the short circuit breaking capacities of triple pole moulded case circuit breaks shall be more than or at least, 25kA as per IEC 60157-2, unless specified elsewhere. All incoming Triple pole circuit breakers shall be Moulded Case Circuit Breakers. The Icu of all MCCBs shall be equal to 100% of Ics. All MCCBs should be suitable for operation (rated current) at 50 °C. Icm should be at least 2.2 times of Icu.

The Moulded Case Circuit Breakers shall be installed in the LV switchboards such that the switching lever of the Main Incoming MCCB shall be accessible from the front of the panel with the front door in closed position and the switching levers of all outgoing MCCB's and MCB's are accessible through the front plate inside the switchboards for operations. Circuit Numbers and Designation on all circuits shall be clearly marked to facilitate connection and maintenance.

3.02.3 Miniature Circuit Breaker (MCB)

The MCB's shall be Single pole 250 Volt of current ratings as shown on the drawings. These shall have fixed magnetic short circuit and fixed thermal overload protections. The Single pole miniature circuit breakers shall have a 6 kA short circuit breaking capacity as per International standard IEC 60898 and rated for operation at 50 °C.

The Miniature Circuit Breakers shall be installed such that their switching levers are accessible through the front plate inside the Switch Boards for operations. Circuit Numbers and Designation on all circuits shall be clearly marked to facilitate connection and maintenance. These Circuit Breakers shall be suitable for working on lighting and power circuits.

3.02.4 Push Buttons

Push buttons shall be momentary make break contact type (normally open/normally close). These shall be suitable for flush mounting on Distribution board, plastic face plate etc. Push buttons shall have round/square head.

3.02.5 AC Voltmeters

AC Voltmeters shall be Digital type and shall be suitable for flush mounting on front door of the Distribution Boards. The front dimensions shall be 96 mm Wide and 48 mm high. The voltmeters shall have 3-1/2 digit, 0.55 inch display.

3.02.6 Ammeters

AC Ampere meters shall be Digital type and shall be suitable for flush mounting on front door of the Distribution Boards. The front dimensions shall be 96 mm wide and 48 mm high. The Ampere meters shall have 3-1/2 digit, 0.55 inch display.

3.02.7 Voltmeter Selector Switch

The voltmeter selector switch shall be complete with front plate, grip handle, and RY-YB-BR-OFF-RN positions.

3.02.8 Current Transformers

Air cooled, ring type current transformers shall be provided having transformation ratio as indicated on the drawings. The current transformers shall be of suitable burden having accuracy class 1.0 and have 5 amps secondary.

3.02.9 Air Break Magnetic Contactors

The contactors shall be air break, triple pole, 415 Volt suitable for the type of duty to be performed. The main contacts shall be silver tipped, butt type with double break per pole. Each contactor shall be provided with 230 Volt AC single phase operating coil, and minimum two normally open (NO) and two normally closed (NC) auxiliary contacts wired up to terminals. The number of working auxiliary contacts shall be provided according to the system requirements.

3.02.10 Indicating Lamps

Indicating lamps shall be suitable for flush mounting, complete with base, either 230 Volt neon or 12 Volt incandescent lamp through auxiliary transformer and shall have rosettes of suitable colour.

3.02.11 Line up Terminals

Line up terminals wherever provided for control of lighting, power and control circuits shall be suitable for voltage and size of conductors as indicated on drawings and as mentioned in the respective BOQ items.

The line-up terminals shall be suitable for channel mounting. All necessary accessories such as end-plates, fixing clips, transparent label holder caps and label sheets with marking shall be provided.

4.0 INSTALLATION

The location of distribution boards are shown diagrammatically on the drawings. The actual location shall be determined at site, keeping in view the site conditions and in coordination with other equipment.

Low Voltage distribution board for recessed mounting in wall shall be installed such that the door shall finish flush with the surface of wall. The recess mounted distribution board shall be installed before the plastering of walls. The DB shall be protected to avoid any damage due to the civil work.

All loose parts despatched separately with the DB shall be installed as per manufacturer's instructions and all adjustments or setting shall be made, as required. All screws, nuts and bolts used for fixing the distribution board shall be galvanized. The distribution boards installation shall include connecting all incoming and outgoing cables. The cable entry in the boards shall be provided from top or bottom as required.

The distribution board body shall be connected to earth as per instructions given in section "Earthing" of these Specifications. The switchboard shall be tested and commissioned in the presence of the Procuring Agency's nominated representative. The LV distribution boards shall be tested before energizing as per instructions contained in the article "Testing" of General Specifications for Electrical Works, Section-8001 of these Specifications.

5.0 MEASUREMENT AND PAYMENT

5.01 General

The Contractor's bid amount against each item of Bill of Quantities as given below shall include design, fabrication, supply, installation, testing, commissioning and completion for all works specified herein and/or as shown on the Tender Drawing related to the item.

5.02 LV Distribution Board

5.02.1 Measurement

Measurement shall be made for the number of each type/designation of LV distribution boards acceptably supplied and installed by the Contractor as a complete job.

5.02.2 Payment

Payment shall be made for the number of each type/designation of jobs measured, as provided above, at the Contract unit price each for design, fabricating, supplying, installing, testing, and commissioning of the LV distribution boards, including fixing arrangement and accessories for complete installation.

D LOW VOLTAGE CABLE

1. GENERAL

The work under this section consists of supplying, installing, testing and commissioning of all material and services of Low Voltage cables and the accessories as specified herein or as shown on the Tender Drawings and in the Bill of Quantities.

The Contractor shall discuss the electrical layout with the Procuring Agency's nominated representative and coordinate at site with other services for exact route, location and position of the electrical lines.

The LV cables with accessories shall also comply with the General Specifications for Electrical Works Section-1 and with other relevant provisions of the Tender Document and latest WAPDA specifications.

All single core PVC insulated cables shall be of 600/1000 volt grade copper conductor cables;

All multicore armoured/unarmoured power cables shall be copper conductor and of 600/1000 volt grade.

2. APPLICABLE STANDARDS/CODES

The latest editions of the following standards and codes shall be applicable for the materials within the scope of this section:

BS 6004	-	PVC insulated cables (non-armoured) for electric power & lighting
BS 6346	-	PVC insulated cables for electricity supply
BS 6746	-	PVC insulation and sheath of electric cables
BS 6360	-	Conductors for insulated cables
IEC 60228	-	Conductors for insulated cables
BS 6500	-	Insulated flexible cords

3. MATERIAL

3.01 General

The power and control cables shall be furnished and installed in accordance with specifications. The general guide lines and criteria for reference is given below:

3.01.1 Phase Identification

All cables shall have phase identification colors on insulation of each core. The colour code for three phase circuits shall be;

- Red, Yellow and Blue for phase conductors
- Black for neutral conductor
- Green for earth conductor where PVC insulated cable is installed.

Single phase circuits shall have insulation of;

- Red colour for phase/line
- Black colour for neutral
- Green colour for earth conductor.

All DC circuits shall have insulation of;

- Red colour for positive conductor
- Black colour for negative conductor
- Green colour for earth conductor.

3.01.2 Cable Accessories

All accessories shall be provided for the complete cabling and wiring systems. These shall include but not limited to items such as saddles, clamps, fixing channels, connectors, cable joints (where necessary and as approved by the Procuring Agency's nominated representative), clips, lugs, tapes, solder, identification tags, bushes, glands etc.

4. INSTALLATION

4.01 Conduit Wiring

The wiring through conduit shall be started only after the conduit system is completely installed and all outlet boxes, junction boxes etc., are fixed in position.

The wires shall be pulled in conduit with care, preferably without the use of any lubricant. Where necessary and after approval of Procuring Agency's nominated representative, the cable manufacturer's recommended lubricant shall be used. Use of any kind of oil or soap will not be permitted. Where several wires are to be installed in the same conduit, they shall be pulled together along with the earth conductor. All wires of same circuit shall be run in one conduit.

The wires shall not be bent to a radius less than ten times the overall diameter of the wire, or more if otherwise recommended by the manufacturer.

The wiring shall be continuous between terminations and looping-in system shall be followed throughout. Any joint in wires shall not be allowed. The use of connectors shall only be allowed at locations where looping-in is rendered difficult. The consent of the Procuring Agency's nominated representative shall be required for using connectors. The connector shall be of suitable rating having porcelain body, sunk-in screw terminals. The connector shall be wrapped with PVC insulation tape after its installation. A minimum of 150 mm extra length of cable/wire shall be provided at each termination to facilitate repairs in future.

4.02 Cables on Surface

All cables for installation on surface of wall, column, ceiling etc., shall be fixed to the surface by means of galvanized steel clips secured to a steel channel by means of suitable stud plate, nuts and washer. The distance between each cable clip shall be such, so as to support the entire weight of the cable and that distance between the cable and surface and also the vertical clearance between two adjacent cables at any point is 50 mm minimum. Common mounting channels are to be furnished for cable along the same route. The Procuring Agency's nominated representative before commencement of installation shall approve alternate cable fixing arrangement, which the Contractor can offer.

4.03 Cables in Flexible/Rigid Conduits on Surface

All cables for 'on surface conduits' shall be installed through the conduits without the use of lubricants. The flexible/rigid conduits shall be fixed to wall/ceiling surface by means of cable clamps using rawl plugs and galvanized screws.

4.04 Underground Cable

The cables to be installed directly underground shall be laid in trench in single tiers. The depth of cable under ground, shall be three feet minimum, measured from the top of the largest cable to the general ground level. The burial depth may be increased as required due to site conditions or when crossing other service pipes and roads. Burial depth less than three feet and more than five feet shall require Procuring Agency's nominated representative's approval.

When cables cross road, paved area, other services or other cables they shall be laid in protective pipes of required size. Cables entering the buildings shall also

be laid in protective pipes. The protective pipe ends, after installation of cables shall be plugged water tight by means of bituminised resin or equivalent method as approved by the Procuring Agency's nominated representative. A minimum clearance of ten inches vertically and 20 inches horizontally shall be maintained between cables and other services.

Cable identification tags of corrosion resistant material shall be tied to cables with bronze wire at a maximum of 65 feet interval along the cable length for identification of cable and circuit. Above ground cable markers of 8 SWG (4 mm) sheet steel and 200 mm² shall be erected at 100 feet intervals along the straight trench, and at each bend and joint box for indication of presence of underground cable. For more than three feet wide trenches, cable markers shall be provided at both edges of the trench. The cable marker shall be finished in gray heavy enamel paint over two base coats of anti-rust red oxide paint, with the necessary instructions indicated in approved colours.

The Contractor shall furnish samples of cable marker for approval of Procuring Agency's nominated representative before installation. The marker shall be welded to an angle iron fixed to the ground on a cement concrete base or as directed by the Procuring Agency's nominated representative. The earth continuity conductor shall be laid in the trench with the cables. The Contractor shall submit to the Procuring Agency's nominated representative for approval, schedule of cable markers showing location of marker and instructions on each.

The cable trench shall be excavated as per route and location shown on the Drawing. Before laying of cables in the trench, the bed of the trench shall be leveled and filled with a four inch thick layer of fine sand (1/32 inch diameter maximum particles size). The sand layer shall be leveled and the cables placed thereon, the cables shall be covered with a layer of fine sand four inch thick measured above the top of the largest cable.

The cable protective bricks placed above the top of sand cover shall be of Class - C cement concrete, minimum two inch thick and 12 inches x 12 inches square or as approved by the Procuring Agency's nominated representative. The bricks shall be placed over the sand layer end to end to cover the entire length and breadth of the cable trench. After the concrete bricks are placed, the remainder of the trench shall be backfilled with earth in layer 16 inches thick. Each layer shall be thoroughly tamped and compacted.

Sufficient slack shall be left in cables for which purpose the cut lengths of cables shall be about 3% more in the measured lengths between terminations. At underground joint box, ample slack shall be left to prevent straining of cable joints due to settlement of the cable trench.

The cut lengths of cables wherever stated are only as a guide. The Contractor shall measure actual lengths between terminations of each circuit and if the discrepancy between measured lengths at site and where given on the Drawing

differ by more than $\pm 10\%$, the Contactor shall report to Procuring Agency's nominated representative and act as directed. Cables, whether installed underground or in cement concrete trenches shall not be bent to a radius less than that recommended by the cable manufacturers.

Following documents shall be furnished at the time of factory acceptance tests at manufacturing works of supplier/manufacturer:

1. In-process testing and tests after manufacturing (each size/type) to be supplied, as per national and international standards (as applicable) specified particularly for the project for which the cable will be ordered, including but not limited to:
 - a. Single / Multi-core Cable Manufacturing as per applicable BS or IEC standards schedule of testing.
 - b. Tests on completed cables in accordance with BS standard 6004 & BS 6346 or equivalent IEC standard / codes.
2. In advance availability of sources / supporting documents with regard to material sources vis-à-vis imported Copper/ Aluminium (in accordance with the mandatory requirements of imported Copper/ Aluminium laid down in the market input rates of material, Finance Department, Government of the Punjab), PVC used in the manufacturing of the cables ordered for a particular project including sales tax invoices from the respective material source and reconciliation quantity of the material procured with the manufactured cables are to be provided. The import documents of material should consist of the following:
 - Bill of exchange.
 - Commercial invoice.
 - Packing list.
 - Beneficiary certificate.
 - Test report of Material (Copper/ Aluminium Rod).
 - Shipment advice.
 - Bill of landing.
 - The vendor from which imported Copper/ Aluminium is purchased should be approved registered with LME
3. The external marking on overall/outer sheath of the cable to be shown is given as below:
 - a. Cable ID/Manufacturer Name
 - b. BS or IEC applicable standard/code
 - c. Voltage designation/grade
 - d. No. of cores, types and nominal area of conductor
 - e. Manufacturing Year
4. Cable inspection test protocol/schedule shall be furnished.

Further, pre - delivery inspection and testing shall be carried out at supplier/manufacturer manufacturing works. All the expenditures of travelling, etc. for the Procuring Agency's nominated representative & Consultant Procuring Agency's nominated representatives shall be undertaken by the Contractor.

The sample from cable drums supplied at site shall be taken and collected by the Contractor in presence of Procuring Agency's nominated representative's representative for inspection/testing from UET Lahore as per applicable standards. The test report of same shall be submitted accordingly.

5. MEASUREMENT AND PAYMENT

5.01 General

The Contractor's bid amount against each Bill of Quantities item as given below shall include supply, installation, testing, commissioning and completion for all work specified herein and/or as shown on the Tender Drawing related to the item.

5.02 LV Cables

5.02.1 Measurement

Measurement shall be made for the number of running metre for each size and type of LV cable acceptably supplied and installed by the Contractor.

5.02.2 Payment

Payment shall be made for the number of running metre of each size of cable measured, as provided above, at the Contract unit price each and shall constitute full compensation for supplying, installing, connecting, testing and commissioning of the LV cables including all accessories.

6.01 Excavation of Cable Trench

6.01.1 Measurement

Measurement shall be made for the number of cubic metre for excavation of each size of cable trench acceptably carried out by the Contractor.

6.01.2 Payment

Payment shall be made for the number of cubic metre of excavation for each size of cable trench measured, as provided above, at the Contract unit price each and shall constitute full compensation for excavation of the LV cable trench in ordinary soil and slightly rocky site.

7.01 Backfilling of Cable Trench

7.01.1 Measurement

Measurement shall be made for the number of cubic metre of backfilling for each size of cable trench acceptably carried out by the Contractor.

7.01.2 Payment

Payment shall be made for the numbers of cubic meter of backfilling for each size of cable trench measured, as provided above, at the Contract unit price each. The payment shall constitute full compensation for four-inch thick sand bed, four inch thick sand cover, cable protective tiles/bricks, backfilling of already excavated earth, watering, compaction, consolidating etc. complete to the satisfaction of the Procuring Agency's nominated representative.

E CONDUITS AND PIPES

1.0 GENERAL

The work under this section consists of supplying, installing, and commissioning of all material and services of the complete conduits and pipes as specified herein, shown on the Tender Drawings and stated in the Bill of Quantities.

The Contractor shall discuss the layout with the Procuring Agency's nominated representative and co-ordinate at Site with other services for exact route, location and position of the conduits and pipes for electrical lines.

The conduits and pipes with accessories shall also comply with the General Specifications for Electrical Works Section-1 and with other relevant provisions of the Tender Document.

The extent of work shown on the Drawings does not indicate the exact position of conduits and pipes. The Contractor shall ensure exact location and route of conduit and pipes in coordination with other services Drawings, as per site requirements and as directed by the Procuring Agency's nominated representative.

2.0 APPLICABLE STANDARD/CODES

Latest editions of the following standards/codes shall be applicable for the materials in scope of this Section:

BS 6099	-	PVC conduits and accessories
BS 3595	-	PVC pipes & accessories
BS 4346	-	Cement Solvent for jointing

3.0 MATERIAL

3.01 PVC Conduits and Accessories

The heavy gauge PVC conduits and accessories conforming to BS6099 shall be generally used. The PVC conduits and accessories of light gauge may be used on the project with the concurrence of the Procuring Agency's nominated representative.

The PVC bends, sockets, elbows, couplings etc. shall conform to the same specifications as for the conduits. The PVC bends shall have enlarged ends to receive conduit without any reduction in the internal diameter at joint. Manufactured smooth bends shall be used where conduit changes direction. Bending of conduits by heating or otherwise will not be allowed in any situation. The use of sharp 90-degree bends and tees will not be allowed for concealed wiring.

The round PVC junction boxes for ceiling light or fan points shall have minimum dimensions of 63-mm diameter and depth. The junction boxes for wall light points shall have minimum dimensions of 63-mm diameter and 38 mm deep. Round junction boxes shall be provided with one piece PVC cover plate fixed to the box by means of brass screws.

3.02 PVC Pipe and Accessories

The PVC pipe shall be rigid. All pipes shall be minimum Class D (Working pressure - 12 bar), unless otherwise stated on drawings or bill of quantities. The buried PVC pipe should be able to withstand the external load acting upon it by continuous movement of heavy duty vehicles such as trucks, cranes, forklift, etc. Where pipe changes direction, manufactured smooth bends shall be used. Bending of pipes by heating or otherwise will be allowed in special cases only. Bending of pipes by heating shall be carried out by first filling the pipe with sand inside and then immediately removing the sand. The use of sharp 90-degree bends and tees will not be allowed. The bends shall conform to same specifications as given for PVC conduits. For joining of pipe all precautions and procedures recommended by manufacturer shall be followed.

4.0 INSTALLATION

4.01 Concealed Conduits

Where concealed conduit system is to be installed as stated on drawings, the conduit shall be installed concealed in roof, wall, column, etc. Conduits shall be laid underfloor only where specifically stated.

When concealed, the conduit shall have a minimum of 32-mm cover of concrete measured from the top of conduit to finished surface. In the reinforced cement concrete (RCC) work the conduit shall be laid before pouring of concrete. Under no circumstances shall chases be made in the RCC structure for concealing conduit and Accessories after pouring of concrete. The conduit shall be supported on top of bottom reinforcement of slab. All outlet boxes shall be firmly supported and installed such that they finish flush with the soffit of slab or beam.

Where conduits have to be concealed in cement concrete (CC) work after concreting or in block masonry work, chase shall be made with appropriate tools and shall not be made deeper than required. The conduit shall then be fixed firmly in the recess and covered with cement concrete mixture. The work of cutting in the cement concrete work or block masonry work shall be coordinated with the civil work. The Contractor shall obtain approval from the Procuring Agency's nominated representative before starting chasing and cutting.

The termination of conduits shall be at or near the equipment switchboard as shown diagrammatically on the Drawings. The exact locations of the termination shall be coordinated with the equipment/switchboard to be installed. Any extension of conduit to suit the site condition shall be made without any extra cost. Conduit ends pointing upwards or downwards shall be properly plugged in order to prevent the entry of foreign materials. All openings through which concrete may leak shall be carefully plugged and boxes shall be suitably protected against falling concrete. At all terminations of conduit, sharp edges of conduit ends shall be prevented to avoid the cutting or damaging of wire or cables during pulling through the conduits.

Underfloor conduit shall be installed at a minimum depth of 2 inches from the finished floor level or as shown on the Drawings. The conduits shall be installed empty before finishing of floor or in RCC work with a 18 SWG steel wire drawn through the conduit for pulling cable. No conduits shall be laid under floor in bathroom.

The entire conduit system shall be installed and checked before wiring as carried out. Any obstruction found shall be cleared before the installation of cable. Pull boxes and adaptable boxes shall be provided in conduit runs wherever required to facilitate pulling operation. The drawings are diagrammatic and do not indicate the position and spacing of pull boxes or adaptable boxes. However, these shall meet the following requirements.

- Pull boxes

For straight runs the spacing shall not be more than 180 feet

For runs with one 90 degree bend the spacing shall not be more than 90 feet

For runs with two 90 degree bends the spacing shall not be more than 40 feet

- Adaptable boxes

For conduit upto 1-inch dia. the boxes shall be 2 inch in depth

For conduit upto 1-1/2 inch dia. the boxes shall be 2-1/2 inch in depth

For conduit upto 2-inch dia. the boxes shall be 3-1/2 inch in depth

The rectangular inspection boxes or pull boxes shall be 18 SWG heavy gauge sheet steel of suitable design to receive conduits. The box shall be painted inside and outside with black enamel paint over a base coat of red oxide primer paint. The minimum length of inspection box shall not be less than four times the cable manufacturer's recommended bending radius of the cable. All concealed type pull boxes shall have a white plastic sheet of appropriate size fixed to the box by means of galvanized screws.

Adaptable boxes shall be 18 SWG sheet steel and painted and finished to the same quality as the Lighting distribution boards.

Wherever the conduit lengths cross the expansion joint either along the columns or slab, suitable arrangement shall be provided so that when the conduit lengths in the expansion joint are stressed the conduit shall not crack or break.

4.02 **PVC Pipe**

Rigid PVC pipes shall be installed under roads and paved areas, at crossing with other services and at cable entering building as shown on the Drawings. The depth of the pipe shall vary according to the conditions at site, and approval of Procuring Agency's nominated representative shall be obtained prior to installation. In general the pipes shall be installed underground at the following depths measured from the top of the pipe:

- | | | |
|----|--|---|
| a) | Under roads and paved surface | 800 mm below the finished surface |
| b) | When crossing other services for the crossing length | 250-mm vertical clearance
500 mm horizontal clearance with CC protective cover |

The trench of required dimensions shall be excavated and the bottom of trench cleaned and leveled. A four-inch thick bed of fine sand shall be provided over which the PVC pipes installed after proper alignment. Where two or more pipes are installed in the same trench the clearance between pipes shall not be less than two inches. After laying of pipe the trench shall be backfilled with clean-screened earth in layer of four inches. Each layer shall be properly compacted.

Where underground cables enter connection terminal boxes the PVC pipe shall be installed on surface by means of PVC clamps at a maximum interval of eighteen inches.

After installation, the ends of the pipe shall be plugged with material impervious to water and chemicals. All joints shall be sealed adequately to prevent entry of foreign elements.

The installation of pipes shall be completed in all respects including its fixing at terminations, before cabling work is started. All sharp edges and burrs shall be removed by using reamer or any approved device. The pipe shall be thoroughly cleaned of dirt and dust from inside. The pipes shall be installed in proper co-ordination with other works.

5.0 MEASUREMENT AND PAYMENT

5.01 General

The Contractor's bid amount against each Bill of Quantities item as given below shall include supplying, installation and completion for all work specified herein and as shown on the Tender Drawing related to the item.

5.02 PVC Conduits

5.02.1 Measurement

Measurement shall be made for the number of running metres of conduits acceptably supplied and installed by the Contractor as a complete unit.

5.02.2 Payment

Payment shall be made for the total numbers of units measured, as provided above, at the Contract unit price each. The payment shall constitute full compensation for supplying, installing and completion of the laying of the conduits including jointing materials and accessories. The complete work wherever applicable shall include cutting/chasing of civil work for concealed conduit system, excavation and backfilling of ground for underground pipes, painting, plugging, bitumen coating, etc. as applicable for each type of work.

5.03 PVC Pipes

5.02.1 Measurement

Measurement shall be made for the number of running metres of pipes acceptably supplied and installed by the Contractor as a complete unit.

5.02.2 Payment

Payment shall be made for the total numbers of units measured, as provided above, at the Contract unit price each. The payment shall constitute full compensation for supplying, installing and completion of the laying of the PVC pipes including jointing materials and accessories.

F EARTHING**1. GENERAL**

The work under this section consists of supplying, installing, testing and commissioning of all material and accessories of the complete earthing system as specified herein, as shown on the Tender Drawings and given in the Bill of Quantities.

The Contractor shall discuss the electrical layout with the Procuring Agency's nominated representative and Co-ordinate at Site with other services for exact route, location and position of the electrical lines and equipment.

The earthing system shall also comply with the General Specifications for Electrical Works and with other relevant provisions of the Tender Documents and latest WAPDA Specifications.

The earthing system consists of earth electrodes, earthing leads, earth connecting points, earth continuity conductors and all accessories necessary for the satisfactory operation of the associated electrical system.

2. APPLICABLE STANDARDS/CODES

The latest editions of following standards/codes shall be applicable for the materials in scope of this section:-

BS 951 - Earthing Clamps

CP 1013 - Earthing

BS 2874 - Nuts, bolts, washers, screws & rivets fixing for use on Copper

BS 1433 - Hard drawn bare copper conductor for earthing

BS 6346 - PVC insulated cables

3. MATERIAL**3.01 Earth Electrode (Plate Type)**

The earth electrode shall comprise a two feet x two feet and 1/8 inch thick electrolytic copper plate. The surface of the plate shall be tinned for protection. The plate shall have four terminals for connecting of the earthing leads. Nuts, bolts and washers, shall be either of brass or tinned copper.

3.02 Earth Electrode (Rod Type)

The earth electrode shall comprise ten feet long, 5/16 inch dia. copper deposited steel rod having flat head at drive end and pointed conical tip at the driven end. The tip shall be hardened to facilitate driving. At the top of the pipe, a clamp for

bolted connections shall be provided suitable for connection to the down conductor.

3.03 Earthing Lead

The earthing lead shall connect the earth electrode to earth connecting point on the high mast. It shall be round hard drawn bare electrolytic copper of size shown on the Drawings.

3.04 Earth Continuity Conductor

Earth continuity conductor (ECC) shall be hard drawn bare copper wire or single core PVC insulated copper conductor cable of sizes indicated on the Drawings.

The specifications for single core PVC insulated or PVC/PVC cables used as ECC shall be same as those in relevant sections of Technical Specifications.

3.05 Earth Connecting Point

Earth connecting points shall comprise tinned copper bar, rectangular in shape, having dimensions of 350 x 50 x 6 mm. Atleast, six terminals for connection shall be arranged on the bar, which can be increased or decreased as required by the Procuring Agency's nominated representative.

The terminals shall have brass or tinned copper bolts, nuts and washers for protection against corrosion. Two holes shall be provided off centre of the copper bar for fixing to the wall by means of 10 mm dia. nut and bolt and shall be insulated by means of rubber gaskets/washers.

4. INSTALLATION

4.01 General

Complete earthing systems as shown on the Drawing shall be installed by the Contractor. The earthing system shall have earth resistance, including the resistance of soil, earth leads and ECC of less than **One** ohm.

At all connections of earth continuity conductor to high mast or any other metallic body, proper size copper or brass sockets, thimbles or lugs shall be used to which the copper wire shall be connected by copper brazing. The soldering of copper wire at joints or terminations shall not be allowed. All tee-off connections shall be by copper brazing using suitable socket and clamps. After brazing, the jointed surface shall be protected by oxide inhibiting compound of low electrical resistance. For connections to metallic body, the surface shall be thoroughly cleaned before bolting the lug or socket.

The earth continuity conductor shall in general run in cable trench or in conduits/pipes as shown on the Drawings. For under floor runs, these shall be

installed in pipe/conduit of appropriate sizes. Where laid along underground cables, these shall be laid directly underground in unpaved areas and in pipes under paved areas.

4.02 Earth Electrode (Plate Type)

The electrode plate shall be installed at a minimum depth of 15 feet from finished ground level or 3 feet below permanent water level whichever is less. The minimum horizontal distance between earth electrodes shall be 12 feet. Proper mixture of lime and charcoal shall be made and buried along with the copper plate in the ground to increase the soil conductivity. The earthing leads shall be installed in proper size G.I. pipes. The electrode shall be installed as per details shown on the Drawings.

4.03 Earth Electrode (Rod Type)

In case the soil conditions at site permit, the earth electrodes may be installed by hammering the electrode in soil, until the top of the rod is about 12 inches below the proposed ground level. If hammering down is not possible due to site conditions, a pit shall be first excavated in bare ground up to the required depth and electrode shall be installed upright in the pit. The excavated pit shall be backfilled in layers of 20 inches, each layer tamped and compacted. At the ground level an inspection chamber of cement concrete shall be constructed having dimensions as shown on the Drawings. The inspection chamber shall have a cover supported on angle iron frame. The cover shall be approved by the Procuring Agency's nominated representative and shall finish flush with the ground level.

4.04 Earth Continuity Conductor

The earth continuity conductor of sizes shown on the drawing shall be installed all along the cable runs and connected to the earthing bar/terminals provided in equipment. The body of all switchboards shall also be connected to earth by specified size of ECC. All other metal work shall also be connected to earth by specified size of ECC.

At any joint or terminations, the ECC shall be connected using proper accessories. No connection shall be made by twisting of earth conductors.

4.05 Earth Connecting Point

The earth connecting point shall be installed at locations shown on the drawings. It shall be fixed on wall surface by means of brass screws.

5. MEASUREMENT AND PAYMENT

5.01 General

The Contractor's bid amount against each Bill of Quantities item as given below shall include supplying, installation, testing and commissioning of all work specified herein, as shown on the Tender Drawing related to the item.

5.02 Earth Electrode

5.02.1 Measurement

Measurement shall be made for each type of earth electrode acceptably supplied and installed by the Contractor as a complete unit.

5.02.2 Payment

Payment shall be made for the total number of units measured, as provided above, at the Contract unit price each, and shall constitute full compensation for supplying, installing, testing, commissioning and completion of earth electrodes including earthing leads, excavation, backfilling, inspection chamber with cover, G.I. pipes for earthing leads, nuts, bolts, washers, lugs, brazing and all related civil works.

5.03 Earth Continuity Conductor

5.03.1 Measurement:

Measurement shall be made for the number of running metre for each size of earth continuity conductor (ECC) acceptably supplied, installed and tested by the Contractor.

5.03.2 Payment

Payment shall be made for the total number of running metres of each size of ECC measured, as provided above, at the Contract unit price each and shall include full compensation for supplying, installing, connecting, testing and completing of ECC including all accessories, such as sockets, thimbles, lugs, bolts, nuts, brazing etc.

5.04 Earth Connecting Point

5.04.1 Measurement

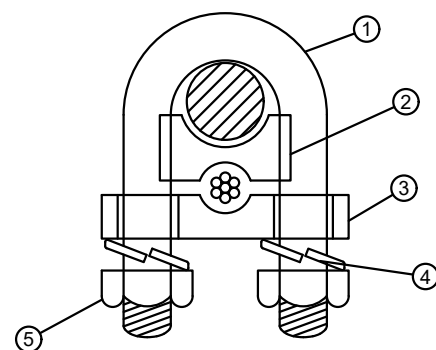
Measurement shall be made for each earth connecting point acceptably supplied and installed by the Contractor as a complete unit.

5.04.2 **Payment**

Payment shall be made for the total number of units measured, as provided above, at the contract unit price each and shall constitute full compensation for supplying, installing and completion of earth connecting point and all other associated accessories such as nuts, bolts, washers, lugs etc.

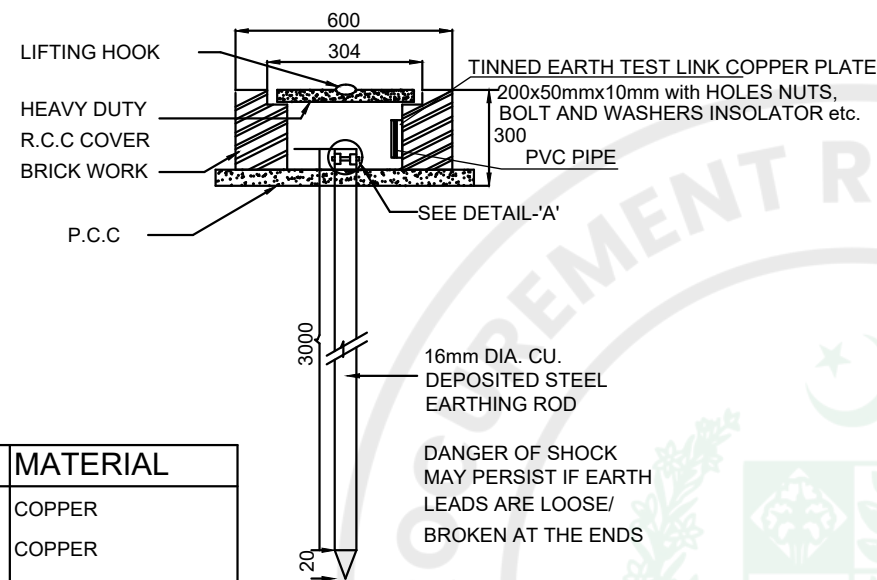


ROD TYPE EARTH POINT DETAIL FOR DB,S



DETAIL -'A'

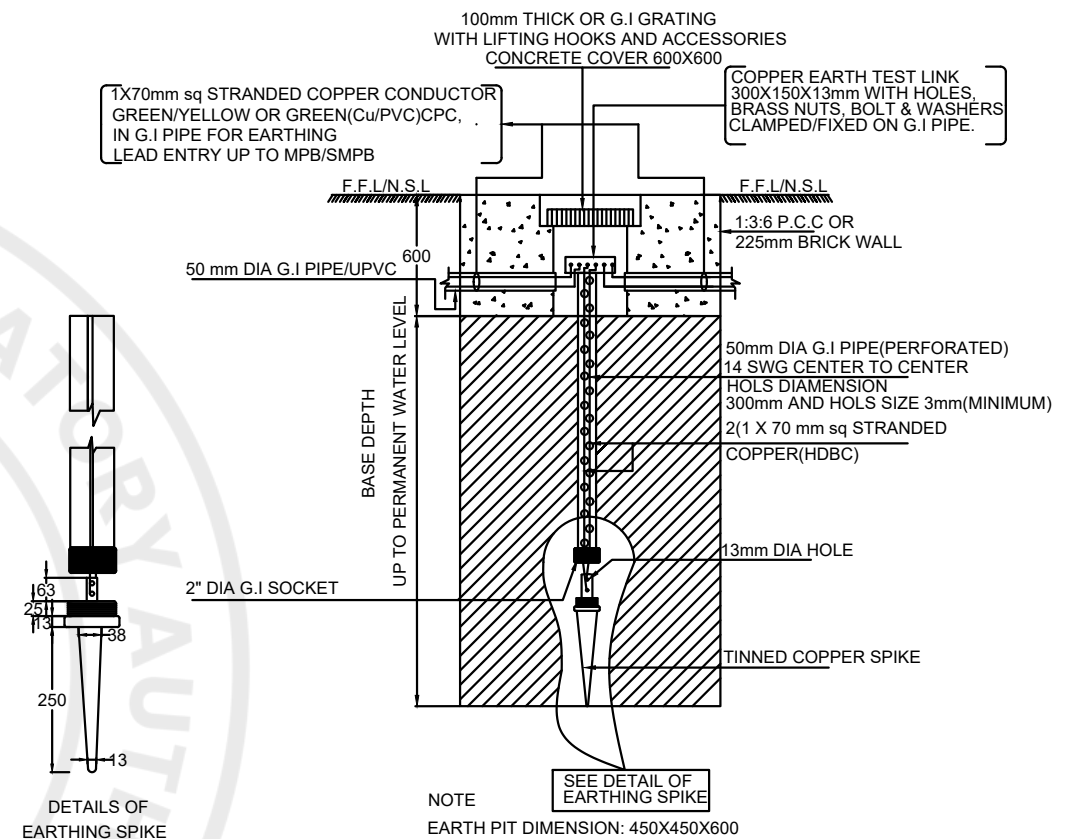
ITEM NO.	ITEM NAME	MATERIAL
1	U-BOLT	COPPER
2	SPACER	COPPER
3	BASE	COPPER
4	SPRING WASHER	COPPER
5	NUT	COPPER



NOTE:-

EARTH PIT DIMENSION: 450X450X300

BORE TYPE EARTHING DETAIL



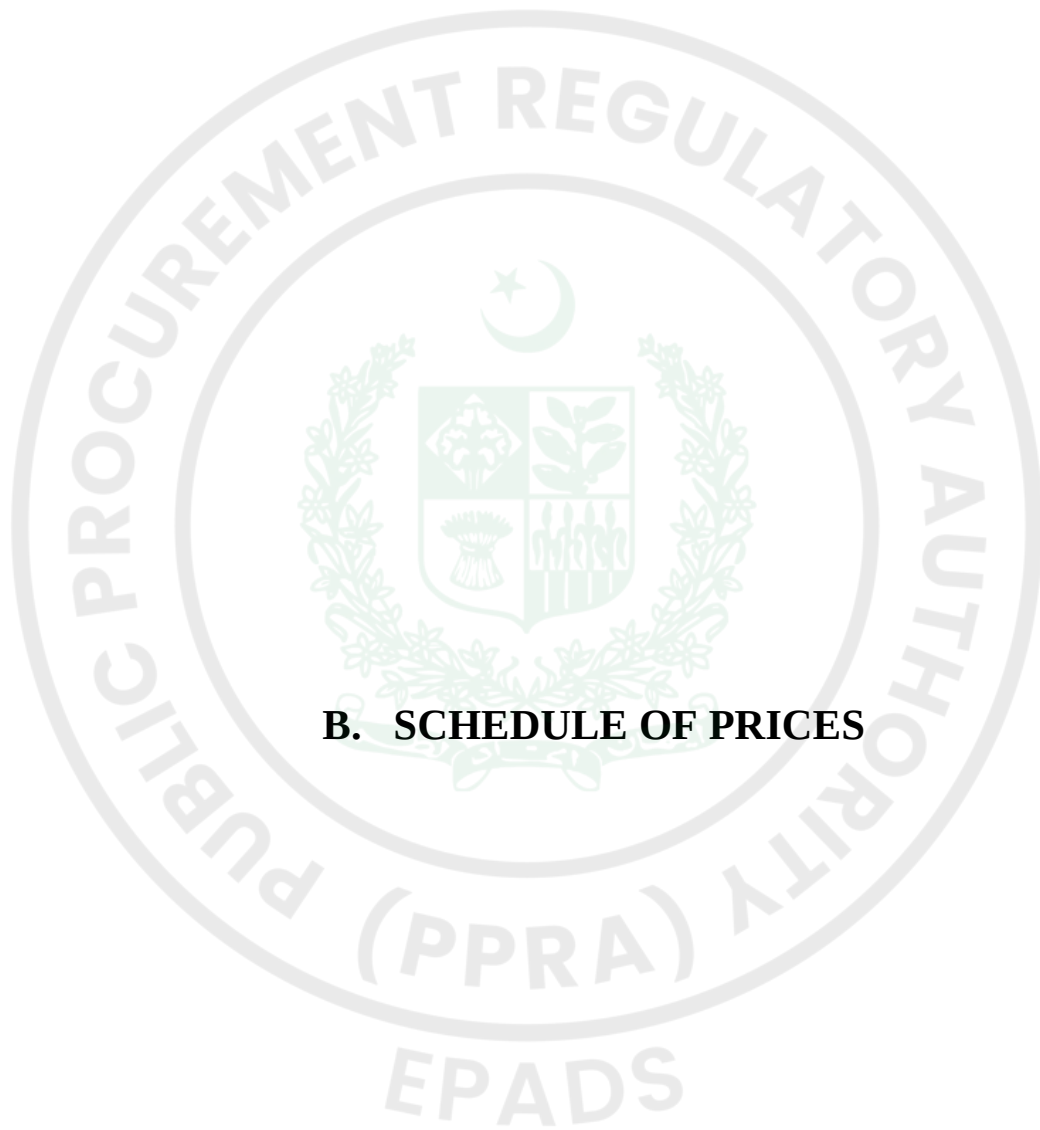
NOTE

EARTH PIT DIMENSION: 450X450X600

NOTES:-

- THIS DRAWING IS FOR INDICATIVE DESIGN MODEL AND SHOULD BE READ IN CONJUNCTION WITH SPECIFICATIONS AND ITEMS OF BILL OF QUANTITIES.
- CONNECTION SHALL BE BOLTED WITH THIMBLES, BRASS NUTS, BOLTS/WASHER ETC.
- CONTRACTOR SHALL MEASURE EARTHING RESISTANCE IN THE PRESENCE OF SITE ENGINEER, FOR FINAL ACCEPTANCE.
- THE VALUE OF EARTH RESISTANCE SHALL BE INCORPORATED IN FINAL AS-BUILT DRAWINGS.
- THE LOCATION OF THE ELETRICAL EQUIPMENT SHOWN IN THE DRAWINGS IS TENTATIVE AND SHALL BE FINALIZED AS PER SITE REQUIREMENT.

CLIENT  PAKISTAN CRICKET BOARD (PCB)		CONSULTANT  NATIONAL ENGINEERING SERVICES PAKISTAN (PVT.) LTD. HEAD OFFICE:- NESPAK HOUSE, I-C, BLOCK-N, MODEL TOWN EXTENSION, LAHORE, PAKISTAN.		04				DRAWN	USMAN HAMEED	PROJECT	GADDAFI STADIUM LAHORE	ROD & BORE TYPE EARTHING DETAILS		SCALE
				03				SUBMITTED				N.T.S		
				02				RECOMMENDED						
				01				CHD./VER.						
				REV.	DATE	DESCRIPTION	APPROVED	APPROVED				REV.		
												DATE	DRAWING No.	REV.
												SEP, 2026	4521/161/C/5E001	0



B. SCHEDULE OF PRICES

SUPPLY, INSTALLATION, TESTING, COMMISSIONING INCLUDING CIVIL WORKS, OPERATION & MAINTENANCE OF DIESEL GENERATOR SETS FOR GADDAFI STADIUM LAHORE

SCHEDULE OF PRICES (A)

Item No.	Description	Unit	Qty.	Supply of Goods		Installation, Testing, Commissioning & Civil Works	
				(I)		(II)	
				Unit Price (PKR) (incl. all applicable taxes and duties)	Total Price (PKR) (incl. all applicable taxes and duties)	Unit Price (PKR) (incl. all applicable taxes except Sales Tax on Services)	Total Price (PKR) (incl. all applicable taxes except Sales Tax on Services)
(a)	(b)	(c)	(d)	(e)	(f) = (d) x (e)	(g)	(h) = (d) x (g)
(A)	Design, Supply, transportation at site, storage, installation, testing and commissioning of the following items of work (unless specifically stated otherwise) including all material, labour, tools and accessories etc. required for proper completion of each item as per specification and drawings and/or as directed by the Engineer.						
1.0	<u>DIESEL GENERATOR, FOUNDATION & CANOPY</u>						
1.1	400 Volts, three phase four wire, 50 Hz skid mounted Prime power rating brand new DG set including fuel tank (built-in or separate) as per 12 hours of operation @ 70% loading of the rated capacity of the DG set. Contractor shall provide fuel monitoring system comprising fuel flow meter with totalizer for measurement of hourly and cumulative diesel consumption, calibrated diesel tank level sensor for monitoring diesel quantity, filling and utilization in litres and compatible DG set control module/remote monitoring system for real-time monitoring and recording of fuel consumption and tank level, complete with all accessories, cabling, calibration and integration. All necessary Equipment/Hardware/Software shall be deemed to be included in the quoted price. The cost of the fuel tank, whether integral or provided separately, required to achieve the specified fuel storage capacity for the stipulated working hours shall be deemed to be included in the quoted price. No separate payment shall be made for the fuel tank. Note: Contractor shall comply with all applicable EPA environmental requirements, regulations, emission standards and permissible limits for the DG Set. The Contractor shall obtain and submit all required EPA approvals, NOCs, emission test reports and compliance certificates, as applicable, prior to commissioning and during operation.						
a)	150 kVA (For Small Digital Screen)	Each	1				
b)	250 kVA (For Big Digital Screen)	Each	1				
c)	350 kVA (For Flood Lights on Poles)	Each	6				
d)	750 kVA (For Far End Building)	Each	1				
e)	1000 kVA (For Main & Pavilion Building)	Each	1				

SUPPLY, INSTALLATION, TESTING, COMMISSIONING INCLUDING CIVIL WORKS, OPERATION & MAINTENANCE OF DIESEL GENERATOR SETS FOR GADDAFI STADIUM LAHORE

SCHEDULE OF PRICES (A)

Item No.	Description	Unit	Qty.	Supply of Goods		Installation, Testing, Commissioning & Civil Works	
				(I)		(II)	
				Unit Price (PKR) (incl. all applicable taxes and duties)	Total Price (PKR) (incl. all applicable taxes and duties)	Unit Price (PKR) (incl. all applicable taxes except Sales Tax on Services)	Total Price (PKR) (incl. all applicable taxes except Sales Tax on Services)
1.2	Sound proof, weather proof canopy for the following DG sets. The canopy shall attenuate the sound level to below 85dB at a distance of 1 meter or less than 75dB at a distance of 3 meters from it. Textured insulation materials, comprising of fire retardant resin, organic glass/rock fiber to ensure uniform long lasting absorption of sound. The canopy shall be constructed with weather proof corrosion resistant material and shall be modular in design. All sheet components pre-treated with cold fast prior to powder coating.						
	a) 150 kVA (For Small Digital Screen)	Each	1				
	b) 250 kVA (For Big Digital Screen)	Each	1				
	c) 350 kVA (For Flood Lights on Poles)	Each	6				
	d) 750 kVA (For Far End Building)	Each	1				
	e) 1000 kVA (For Main & Pavilion Building)	Each	1				
1.3	RCC Foundation for the following DG sets.						
	a) 150 kVA (For Small Digital Screen)	Each	1				
	b) 250 kVA (For Big Digital Screen)	Each	1				
	c) 350 kVA (For Flood Lights on Poles)	Each	6				
	d) 750 kVA (For Far End Building)	Each	1				
	e) 1000 kVA (For Main & Pavilion Building)	Each	1				

SUPPLY, INSTALLATION, TESTING, COMMISSIONING INCLUDING CIVIL WORKS, OPERATION & MAINTENANCE OF DIESEL GENERATOR SETS FOR GADDAFI STADIUM LAHORE

SCHEDULE OF PRICES (A)

Item No.	Description	Unit	Qty.	Supply of Goods		Installation, Testing, Commissioning & Civil Works	
				(I)		(II)	
				Unit Price (PKR) (incl. all applicable taxes and duties)	Total Price (PKR) (incl. all applicable taxes and duties)	Unit Price (PKR) (incl. all applicable taxes except Sales Tax on Services)	Total Price (PKR) (incl. all applicable taxes except Sales Tax on Services)
2.0	<u>ATS/AMF/SYNCHRONIZATION PANELS</u> AMF/ATS/Synchronization panels with 14 SWG sheet steel, RAL colour 7032/7035, IP class 54 including all installation and operational accessories complete in all respect for proper operation of following DG set rating:	Each	1				
2.1	<u>Suitable for 150 kVA (For Small Digital Screen)</u> <u>ATS Components Details for 150 kVA DG Set</u> 02 Nos.400A (Adj.) MCCB (Motorized) 4Pole 02 Nos.400A Manual Changeover (MCO) 4Pole 01 No. ATS/AMF module 02 Nos. VSS (07 position) 02 Nos. 0-600 Volts AC DIGITAL Voltmeter 06 Nos. 400/5 Amps Current Transformers 02 Nos. ASS (04 position) 02 Nos. 0-400 Amps AC DIGITAL Ammeter 06 Nos. Phase indication Lights 220VAC 04 Nos. Indication Lights (ON/OFF) 220 VAC 01 No. U-O-V relay with phase failure detection 415 VAC 3 phase and phase sequence relay 03 Nos. Timer Relay with Base 220-240 VAC 04 Nos. Industrial Relays 04 Nos. Relay Socket 12 Nos. Control MCBs 01 No. Battery Charger 12/24 V Line up Terminals 2.5 mm 01 No. Emergency Stop Switch 01 Panel light with limit switch 01 No. Exhaust Fan						

SUPPLY, INSTALLATION, TESTING, COMMISSIONING INCLUDING CIVIL WORKS, OPERATION & MAINTENANCE OF DIESEL GENERATOR SETS FOR GADDAFI STADIUM LAHORE

SCHEDULE OF PRICES (A)

Item No.	Description	Unit	Qty.	Supply of Goods		Installation, Testing, Commissioning & Civil Works	
				(I)		(II)	
				Unit Price (PKR) (incl. all applicable taxes and duties)	Total Price (PKR) (incl. all applicable taxes and duties)	Unit Price (PKR) (incl. all applicable taxes except Sales Tax on Services)	Total Price (PKR) (incl. all applicable taxes except Sales Tax on Services)
2.2	Suitable for 250 kVA (For Big Digital Screen) <u>ATS Components Details for 250 kVA DG Set</u> 02 Nos.630A (Adj.) MCCB (Motorized) 4Pole 02 Nos.630A Manual Changeover (MCO) 4Pole 01 No. ATS/AMF module 02 No. VSS (07 position) 02 No. 0-600 Volts AC DIGITAL Voltmeter 06 Nos. 800/5 Amps Current Transformers 02 Nos. ASS (04 position) 02 Nos. 0-630 Amps AC DIGITAL Ammeter 06 Nos. Phase indication Lights 220VAC 04 Nos. Indication Lights (ON/OFF) 220 VAC 01 No. U-O-V relay with phase failure detection 415 VAC 3 phase and phase sequence relay 03 Nos. Timer Relay with Base 220-240 VAC 04 Nos. Industrial Relays 04 Nos. Relay Socket 12 Nos. Control MCBs 01 No. Battery Charger 12/24 V Line up Terminals 2.5 mm 01 No. Emergency Stop Switch 01 Panel light with limit switch 01 No. Exhaust Fan	Each	1				

SUPPLY, INSTALLATION, TESTING, COMMISSIONING INCLUDING CIVIL WORKS, OPERATION & MAINTENANCE OF DIESEL GENERATOR SETS FOR GADDAFI STADIUM LAHORE

SCHEDULE OF PRICES (A)

Item No.	Description	Unit	Qty.	Supply of Goods		Installation, Testing, Commissioning & Civil Works	
				(I)		(II)	
				Unit Price (PKR) (incl. all applicable taxes and duties)	Total Price (PKR) (incl. all applicable taxes and duties)	Unit Price (PKR) (incl. all applicable taxes except Sales Tax on Services)	Total Price (PKR) (incl. all applicable taxes except Sales Tax on Services)
2.3	Suitable for 500 kVA & 750 kVA (For Far End Building) <u>Synchronization Panel Components Details for 500 kVA & 750 kVA DG Set</u> 01 No.1000A (Adj.) ACB (Motorized) 4Pole 02 Nos.1600A (Adj.) ACB (Motorized) 4Pole Mechanical/Electrical interlocking 03 Nos. Deepsea module (UK) 03 Nos. VSS (07 position) 03 Nos. 0-600 Volts AC DIGITAL Voltmeter 09 Nos. 1600/5 Amps Current Transformers 03 Nos. ASS (04 position) 03 Nos. 0-1600 Amps AC DIGITAL Ammeter 09 Nos. Phase indication Lights 220VAC 06 Nos. Indication Lights (ON/OFF) 220 VAC 03 No. U-O-V relay with phase failure detection 415 VAC 3 phase and phase sequence relay 03 Nos Timer Relay with Base 220-240 VAC 06 Nos. Industrial Relays 06 Nos. Relay Socket 18 Nos. Control MCBs 02 No. Battery Charger 12/24 V Line up Terminals 2.5 mm 03 No. Emergency Stop Switch 03 Panel light with limit switch 03 No. Exhaust Fan	Each	1				
2.4	<u>BUS BAR CHAMBER</u> 14 SWG steel sheet clad IP 54 color RAL 7032/7035 powder coated bus bar chamber including 1200A Cu busbar for cable jointing etc. complete with all components/ accessories as per specifications and drawings.	Each	4				

**SUPPLY, INSTALLATION, TESTING, COMMISSIONING INCLUDING CIVIL WORKS, OPERATION & MAINTENANCE OF DIESEL GENERATOR SETS FOR GADDAFI
STADIUM LAHORE**

SCHEDULE OF PRICES (A)

Item No.	Description	Unit	Qty.	Supply of Goods		Installation, Testing, Commissioning & Civil Works	
				(I)		(II)	
				Unit Price (PKR) (incl. all applicable taxes and duties)	Total Price (PKR) (incl. all applicable taxes and duties)	Unit Price (PKR) (incl. all applicable taxes except Sales Tax on Services)	Total Price (PKR) (incl. all applicable taxes except Sales Tax on Services)

SUPPLY, INSTALLATION, TESTING, COMMISSIONING INCLUDING CIVIL WORKS, OPERATION & MAINTENANCE OF DIESEL GENERATOR SETS FOR GADDAFI STADIUM LAHORE

SCHEDULE OF PRICES (A)

Item No.	Description	Unit	Qty.	Supply of Goods		Installation, Testing, Commissioning & Civil Works	
				(I)		(II)	
				Unit Price (PKR) (incl. all applicable taxes and duties)	Total Price (PKR) (incl. all applicable taxes and duties)	Unit Price (PKR) (incl. all applicable taxes except Sales Tax on Services)	Total Price (PKR) (incl. all applicable taxes except Sales Tax on Services)
3.0	<u>LOW VOLTAGE POWER CABLE</u>						
3.1	Supply and erection of single core PVC insulated, PVC sheathed copper conductor, 600/1000 volts grade cable, in prelaidd G.I. pipe/M.S. conduits/PVC pipe/G.I. wire/trenches, etc (rate for cable only):-						
	95 mm sq (37/0.072") (1 No. per Phase & Neutral) from 150kVA DG set to ATS panel	Rm.	40				
	185 mm sq (37/0.103") (1 No. per Phase & Neutral) from 250kVA DG set to ATS panel	Rm.	40				
	300 mm sq (61/0.099") (1 No. per Phase & Neutral) from 350kVA DG set to ATS panel	Rm.	100				
	300 mm sq (61/0.099") (2 No. per Phase & Neutral) from 750kVA DG set to ATS panel	Rm.	80				
	630 mm sq (127/0.093") (2 Nos. per Phase & Neutral) from 1000kVA DG set to ATS panel	Rm.	80				
3.2	Supply and erection of single core PVC insulated copper conductor cables, 450/750 volts grad cable, in prelaidd PVC pipe/M.S. conduit/G.I. pipe/ wooden strip batten/wooden casing an capping/G.I. wire/trenches (rate for cables only)						
	50 mm sq (19/0.072")	Rm.	10				
	70 mm sq (19/0.083")	Rm.	150				
	95 mm sq (37/0.072")	Rm.	10				
	150 mm sq (37/0.093")	Rm.	100				
	300 mm sq (61/0.099")	Rm.	10				
	630 mm sq (127/0.093")	Rm.	10				

SUPPLY, INSTALLATION, TESTING, COMMISSIONING INCLUDING CIVIL WORKS, OPERATION & MAINTENANCE OF DIESEL GENERATOR SETS FOR GADDAFI STADIUM LAHORE

SCHEDULE OF PRICES (A)

Item No.	Description	Unit	Qty.	Supply of Goods		Installation, Testing, Commissioning & Civil Works	
				(I)		(II)	
				Unit Price (PKR) (incl. all applicable taxes and duties)	Total Price (PKR) (incl. all applicable taxes and duties)	Unit Price (PKR) (incl. all applicable taxes except Sales Tax on Services)	Total Price (PKR) (incl. all applicable taxes except Sales Tax on Services)
3.3	<u>CONTROL CABLES</u> Supply, installation, testing, commissioning and termination of 6 core 2.5 mm sq, PVC insulated 600/1000 Voltage grade unarmoured copper conductor shielded control cable to be laid direct in ground, pulled in PVC pipe already laid, on surface of wall or cable trays etc. including all accessories as required complete in all respects (Imported copper shall be used. Verified documentary evidence for source of copper & PVC shall be furnished prior to manufacturing)	Rm.	200				
4.0	<u>CONDUIT/PIPE</u>						
4.1	PVC pipe/conduit Class-B 100 mm dia with accessories suitable for laying multi-core cables in walls/ barriers/structure.	Rm.	50				
4.2	PVC pipe/conduit Class-B 100 mm dia with accessories suitable for laying multi-core cables including excavation.	Rm.	100				
4.3	PVC pipe/conduit Class-D 100 mm dia with accessories suitable for laying multi-core cables on road crossings including excavation.	Rm.	100				
5.0	<u>ROD & BORE TYPE EARTHING</u>						
	<u>Rod Type</u>						
5.1	Providing,making & testing/commissionin of Rod type Earth point comprising of 5/8"dia.(16mmdia)10ft long copper coated M.S.rod driven in ground duly fixed with clamp with Tinned earth test link copper plate (300x50x10mm),i/c the cost of brass nuts,spacers,bolts washers lugs etc including earth pit and RCC cover as approved and directed by Engineer Incharge.	Each	2				
	<u>Bore Type</u>						

SUPPLY, INSTALLATION, TESTING, COMMISSIONING INCLUDING CIVIL WORKS, OPERATION & MAINTENANCE OF DIESEL GENERATOR SETS FOR GADDAFI STADIUM LAHORE

SCHEDULE OF PRICES (A)

Item No.	Description	Unit	Qty.	Supply of Goods		Installation, Testing, Commissioning & Civil Works	
				(I)		(II)	
				Unit Price (PKR) (incl. all applicable taxes and duties)	Total Price (PKR) (incl. all applicable taxes and duties)	Unit Price (PKR) (incl. all applicable taxes except Sales Tax on Services)	Total Price (PKR) (incl. all applicable taxes except Sales Tax on Services)
5.2	Providing, making & testing/commissioning of Bore type earthing point by drilling 3"dia bore hole up to water table/moist soil by laying 2"dia perforated GI.pipe (Medium Quality) fixed with 40mm dia and 250mm long tinned copper spike at bottom,i/c the cost of Tinned earth test link copper plate (300x50x10mm) ,brass nuts, spacers, bolts washers lugs etc but excluding the cost of coppers trand & manhole, 02Nos. 70 mm2 bare stranded electrolytic copper conductor lead in prelaidd G.I perforated pipe and connected to tinned copper spike as shown on drawing. 2 Nos. of leads to be installed including all accessories like brass nuts, bolts, washers etc complete in all respect, Construction of earthing pit (manhole) of internal size 18"x18"x24" deep with 9" thick brick wall with cement mortar, internal plaster 1:4, RCC 4" thick cover with lifting hooks including all accessories complete in all respect as approved and directed by Engineer Incharge.	Each	20				
6	SUB-TOTAL (ITEMS 1 TO 5)			-		-	
7	Sales Tax on Services @ 16% on SUB-TOTAL of Column II (Installation, Testing, Commissioning & Civil Works)			N/A		-	
8	TOTAL (ITEM 6 + 7)						
TOTAL A: Cost of Supply of Goods and Cost of Installation, Testing, Commissioning & Civil Works (I + II)							

SUPPLY, INSTALLATION, TESTING, COMMISSIONING INCLUDING CIVIL WORKS, OPERATION & MAINTENANCE OF DIESEL GENERATOR SETS FOR GADDAFI STADIUM LAHORE

SCHEDULE OF PRICES (B)

Item No.	Description	Unit	Qty.	Operation and Maintenance (B)	
				Unit Rate (PKR) (incl. all applicable taxes and duties except Sales Tax on Services)	Total Amount (PKR) (incl. all applicable taxes and duties except Sales Tax on Services)
	Operation & Maintenance of DG Sets per month for the total period of 02 years for the following DG Sets. Note: a) Contractor shall be responsible to provide all the consumables like lube oil, filter (oil, fuel and air) etc. during operation and maintenance period of two (02) years as per the specifications. The cost for the same is to be included in the quoted price. b) Permanent operator(s) of the DG sets shall be available at site during matches as scheduled by PCB, for 150 kVA, 250kVA & 350kVA DG sets and permanent operator(s) of the DG sets shall be available at site during office working hours/matches (as required by the Procuring Agency), for 750kVA & 1000kVA DG sets. c) Fuel shall be provided by the Employer.				
1	01 No. 150 kVA DG set (For Small Digital Screen)	Month	24		
2	01 No. 250 kVA DG set (For Big Digital Screen)	Month	24		
3	06 Nos. 350 kVA DG set (For Flood Lights on Poles)	Month	24		
4	01 No. 750 kVA DG set (For Far End Building)	Month	24		
5	01 No. 1000 kVA DG set (For Main & Pavilion Building)	Month	24		
6	SUB-TOTAL OF ITEM 1 TO 5				
7	Sales Tax on Services @ 16% on SUB-TOTAL (6)				
	TOTAL B: Cost of Operation and Maintenance (ITEM 6 + 7)				
	BID PRICE: GRAND TOTAL (A + B)				