

ASSAM ELECTRICITY GRID CORPORATION LIMITED

Regd. Office: 1st Floor, Bijulee Bhawan, Paltan Bazar, Guwahati – 781001
CIN: U40101AS2003SGC007238
Ph:- 0361-2739520/Fax:-0361-2739513 Web: www.aegcl.co.in



BID IDENTIFICATION NO: AEGCL/DGM/LAC/TT/TL-69/2022/601; Dated: 07/04/2022

Bidding Document
For

Erection works alongwith foundation construction and supply of all foundation materials and structure earthing of all equipments including testing & commissioning for construction of 33kV feeder bay for Barpeta Cancer Hospital at 132/33kV Barpeta GSS.

**DEPUTY GENERAL MANAGER,
LOWER ASSAM T&T CIRCLE, AEGCL
NARENGI, GUWAHATI-26.**

SECTION - 1
INSTRUCTION TO BIDDER

1.1.0 Scope of Bid :-

1.1.1. The **Deputy General Manager, Lower Assam, T&T Circle, AEGCL** on behalf of Assam Electricity Grid Corporation Ltd, hereinafter referred to as AEGCL or Purchaser invites sealed tenders in prescribed form, from reputed engineering firms/ contractors having sound technical and financial capabilities for the following work. A single stage two envelope procedure (**Techno-Commercial and Price Bid**) will be adopted for this tender.

- a) **NAME OF WORK :- . Erection works alongwith foundation construction and supply of all foundation materials and structure earthing of all equipments including testing & commissioning for construction of 33kV feeder bay for Barpeta Cancer Hospital at 132/33kV Barpeta GSS**
- b) **ESTIMATED VALUE FOR THE WORK :- Rs. 14,86,599.00 (Rupees Fourteen lakh Eighty Six Thousand Five Hundred and Ninety Nine) only including taxes.**
- c) **Fund: Deposit Work.**
- d) **Key Dates: Refer to NIT.**
- e) **Bidding address :-**
O/O The Deputy General Manager
Lower Assam, T&T Circle, AEGCL,
Narengi.Guwahati-26
- f) **Interested bidders may purchase the tender documents from the office of The Deputy General Manager, Lower Assam, T&T Circle, AEGCL, Narengi.Guwahati-26 during office hours.** Bidders may obtain further information from the office of the Deputy General Manager, Lower Assam T&T Circle, AEGCL, Narengi, Guwahati - 781026, Assam. [e-mail: dgmftc.guwahati@aegcl.co.in]

1.2.0 Cost of Bidding :- The bidder shall bear all costs associated with the preparation and submission of its bid and AEGCL will in no case be responsible or liable for those costs.

Tender Paper Cost and Mode of Payment:

The tender document can be downloaded from AEGCL website (www.aegcl.co.in). For tender documents downloaded from AEGCL website, tender paper cost (in the form of A/C payee DD/Bankers Cheque) has to be submitted along with tender quotation. The cost of the tender paper is **Rs. 2000/- (Rupees Two Thousand Only)** to be pledged in favour of **"AEGCL, Guwahati"**.

1.3.0 Bidding procedure :-

Two envelope bidding procedure will be adopted. Bidders are to submit two sealed envelopes simultaneously, one containing the technical & Commercial Part-I (Technical & Commercial Bid) proposal and the other the price proposal Part-II (Price Bid), enclosed together in one sealed envelope. Initially, only the Part-I bids shall be opened. Part-I proposals submitted by bidders, which do not conform to the specified requirement, may be rejected as deficient bids. The Part-II (Price Bid) proposals of technically qualified bidders will be opened at a date and time, which will be informed to all the qualified bidders of Part-I.

1.4.0 Scope of work :-

1.4.1 The major scopes of work are as follows:-

- a) Erection of mounting structure as required including construction of foundation and supply of all foundation materials and structure earthing of all equipments.
- b) Erection, Testing and Commissioning of all 33kV bay equipments including laying of control cables and earthing equipment as required.
- c) Erection of switchyard lattice tower structures and beam including construction of foundation.
- d) Installation of earthing system
- e) Construction of cable trench and slab (C-Type & D-Type)
- f) Construction of switchyard PCC and providing gravelling.
- g) Installation and commissioning of Control & Relay Panel into existing SAS system including Testing & Commissioning. Integration of the CRP with the existing SAS system should be done by authorized personnel of OEM (SAS).
- h) Arrangements of any permits required for transportation and movement of equipments shall be arranged by the contractor. However, AEGCL shall assist as far as practicable in the process.

1.4.2 The successful bidder will be expected to complete the works within **2 months from the date of site handover**. Bidder must submit a completion schedule bar chart for activities to complete the work within this time schedule.

1.5.0 ELIGIBILITY CRITERIA

1.5.1 To be qualified for award of Contract, bidders:

i) Must have experience having completed similar nature of works previously in AEGCL/APDCL during the last 5 years ending last day of the month previous to the one in which applications are invited should be either of the following:

- a) **Three completed similar works** costing not less than an amount equal to **40% of the estimated cost, or**
- b) **Two completed similar works** costing not less than an amount equal to **50% of the estimated cost, or**
- c) **One completed similar works** costing not less than an amount equal to **80% of the estimated cost**

Note: "Similar nature of works" implies works related to dismantling, erection, testing and commissioning works in 33kV or above Transmission Line/ Substation including civil works and the nature of works should be clearly defined. The bidder must submit experience and completion certificate for scrutiny by AEGCL. In addition to above, the criteria regarding satisfactory performance of works, personnel, establishment, plant, equipment, etc. may be incorporated according to the requirement of the Project.

ii) Must compulsorily meet each of the following minimum criteria.

I. PERSONNEL CAPABILITY

The Bidder must have suitably qualified personnel to fill positions required for contract implementations. The Bidder will supply information of the key personnel, design & engineering staff, support staff, field staff giving details of experience in 33 kV or above voltage class Sub-Station and an alternate staff who meet the following minimum experience requirements.

II. FINANCIAL CAPABILITY

- a) The Bidder should demonstrate that he has access to, or has available, liquid assets, unencumbered realassets, line of credit and other financial means (interialia including a Guarantee or an undertaking from a Bank or financier) sufficient to meet the cash flow during the construction period and in no case should be less than 80% of the total work value.
- b) Average Annual turnover should be minimum Rs. 4,45,980.00 calculated as total certified payments received for contracts in progress or completed during the last 3 (three) years, ending 31st March of the previous financial year.
- c) Bidder shall submit the complete annual reports together with Audited statement of accounts of the company for last 3 (three) years. The Bidder shall submit the audited balance sheet and income statement of its own (separate) for the last three years and must demonstrate the soundness of their financial position showing long term profitability. Wherever necessary the Employer may make enquiries with Bidder's bankers.
- d) Bidder must keep GST liabilities up to date and non-payment of GST liabilities and non-filing of relevant GST return more than 3 (three) months shall be reckoned as GST defaulter and this may be considered a cause for disqualification of a bidder and the bid may be rejected.

III. LITIGATION HISTORY

Bidders shall submit details of all litigation, arbitration or other claims, whether pending, threatened or resolved in the last five years, with the exception of immaterial claims with a cumulative impact of not more than 10% of their total assets. The Employer may disqualify bidders in the event that the total amount of pending or threatened litigation or other claims represent more than 50% of their total assets.

V. Joint venture bid will not be accepted

1.5.2 The Bidder's offer shall include and substantiate data on qualifying requirements such as:

- a) *Copies of original documents defining the constitution or legal status, place of registration, and principal place of business, written power of attorney of the signatory of the Bid to commit the Bidder.*
- b) *Copies of valid Electrical Licence, Civil Licence and valid Labour Licence issued by competent authority in the State of Assam or in the State where the bidder's business is registered.*
- c) *Copies of PAN, GST Registration Certificate as per Goods & Services Tax laws, EPF.*
- d) *Total monetary value of similar work performed by the bidder in each of the last three years.*
- e) *Experience in works of a similar nature and volume for each of the last three years, and details of works under way or contractually committed in AEGCL.*

- f) *Qualifications and experience of key site management and technical personnel proposed for the Contract.*
 - g) *Reports on the financial standing of the Bidder, such as profit and loss statements and audited annual accounts certified by CA of the company for the last three years including IT return duly acknowledged by the tax department for the last three years.*
 - h) *Evidence of adequacy of working capital for this contract (access to line (s) of credit and availability of other financial resources).*
 - i) *Information regarding any litigation, current or during the last five years, in which the Bidder is involved, the parties concerned, and disputed amount.*
- 1.5.3 **Sub-contractor's experience and resources shall not be taken into account in determining the bidder's compliance with the qualifying criteria.**
- 1.5.4 Even though the bidders meet the above qualifying criteria, they are subject to be disqualified if they have:
Made misleading or false representations in the forms, statements and attachments submitted in proof of the qualification requirements.
- 1.5.5 Notwithstanding anything stated herein above, AEGCL reserves the right to assess the capacity and capability of the bidder to execute the work, should the circumstance warrant such assessment in the overall interest of AEGCL.
- 1.5.0 **Site Visit:** - The interested bidders may visit and examine the site of works and its surroundings and obtain for itself on its own responsibility all information that may be necessary for preparing the bid. The costs of visiting the Site shall be at the bidder's own expense.
- 1.6.0 **Clarification on Bidding Documents :-**
- 1.7.1 A prospective bidder requiring any clarification of the bidding documents may notify AEGCL in writing at the following address-
Deputy General Manager, Lower Assam T&T Circle, AEGCL, Narengi, Guwahati-26
- AEGCL will respond to any request for clarification which it receives earlier than 3 days prior to the deadline for submission of bids.
- 1.7.2 Verbal clarification and information given by AEGCL or its employee(s) or representative (s) shall not in any way be binding on AEGCL.
- 1.7.0 **Amendment of Bidding Documents**
- 1.8.1 At any time prior to the deadline for submission of bids, the AEGCL may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective bidder, modify the bidding documents by issuing addenda.
- 1.8.2 Any addendum thus issued shall be part of the bidding documents pursuant to Sub-Clause, and shall be communicated in writing or by fax to all purchasers of the bidding documents. Prospective bidders shall acknowledge receipt of each addendum by fax to AEGCL.
- 1.8.0 **Language of Bid**
- 1.9.1 The bid, and all correspondence and documents related to the bid, exchanged between the bidder and AEGCL shall be written in the English language. Supporting documents and printed literature furnished by the bidder shall also be in English language.
- 1.9.0 **Documents Comprising the Bid**
- 1.10.1. The bid submitted by the bidder shall comprise two envelopes submitted simultaneously, one containing only the technical proposal and the other the price proposal.
- 1.10.2. The Bid submitted by bidders shall contain the following:
- a) Bid Submission Sheet
 - b) Duly signed bid document
 - c) Documentary evidence to establish that the Bidder meet the qualifying requirements in accordance with Clause 1.5.0.
 - d) Documents to be furnished as per Clause 1.5.2.
 - e) The Bid Guarantee (Bid Security) in accordance with Clause 1.15.0 & its sub clauses of this Section.
 - f) All Bidding Schedules properly filled up including Price Bid Schedules.

- g) All other information and documents such as type test reports, drawings, technical leaflets etc, as required in the Technical Specification

1.10.0 Bid Form and Price Schedules

- 1.11.1 The Bidder shall complete the Bid Form and the appropriate Price Schedules furnished in the bidding documents in the manner and detail indicated therein, following the requirements of Clauses 1.11.0.

1.11.0 Bid Prices

- 1.12.1 Bidders shall give a breakdown of the prices in the manner and detail called for in the **Schedules of Prices**.
- 1.12.2 In the Schedules, Bidders shall give the required details and a breakdown of their prices, including all taxes, duties, levies, and charges payable as of twenty eight (28) days prior to the deadline for submission of bids, as follows:
- (a) Plant and equipment (**Schedules of Prices**) shall be quoted on an EXW (ex-factory, ex-works, ex-warehouse or off-the-shelf, as applicable). All taxes and duties taxes as applicable and freight and insurance shall be indicated separately.

1.12.0 Price Adjustment

- 1.13.1 Prices quoted by the Bidder shall be FIRM during performance of the contract. Duties and Taxes shall be adjusted, except there is variation due to changes in legislation of the Country.

1.13.0 Insurance

The Bidder shall insure the Works/Materials (in transit and at the site) in accordance with the requirements of General Conditions of Contract. The Bidder shall provide details of the policies that he intends to take out as part of his Bid submission. **The bid price shall include all costs in pursuance of fulfilling insurance liabilities under the contract.**

1.14.0 Bid Validity

- 1.15.1 Bids shall remain valid for a period of **180 (One Eighty)** days after the date of opening of Technical Bids.
- 1.15.2 In exceptional circumstances, prior to expiry of the original bid validity period, AEGCL may request that the bidders extend the period of validity for a specified additional period. The request and the responses thereto shall be made in writing. A bidder may refuse the request without forfeiting its bid security. A bidder agreeing to the request will not be required or permitted to modify its bid, but will be required to extend the validity of its bid security for the period of the extension, and in compliance with Clause 1.15.0 in all respects.

1.15.0 Bid Security (Earnest Money)

- 1.16.1 **The Bidder shall furnish, as part of its bid with the Technical Proposal, a bid security in the amount of Rs. 29700.00 (Rupees Twenty Nine Thousand Seven Hundred) only.**
- 1.16.2 For participation in the bidding procedure, participants must compulsorily pay the Bid Security / Earnest Money Deposit in the form of DD/Fixed Deposit/bank Guarantee/Banker's Cheque in favour of "AEGCL, Guwahati". The bid security shall remain valid for 30 days beyond the original validity period for the bid, and beyond any period of extension subsequently requested.
- 1.16.3 Any bid not accompanied by an acceptable bid security shall be rejected as non-responsive.
- 1.16.4 The bid securities of unsuccessful bidders will be returned as promptly as possible, against written request from the unsuccessful bidders.
- 1.16.5 The bid security of the successful bidder will be returned when the bidder has signed the Contract Agreement and furnished the required performance security.
- 1.16.6 The bid security may be forfeited
- (a) if the bidder withdraws its bid, except as provided in Sub-Clause 1.221.22.1;
- (b) if the bidder does not accept the correction of its bid price, pursuant to Sub-Clause 1.271.27.2 or
- (c) in the case of a successful bidder, if it fails within the specified time limit to
- (i) sign the Contract Agreement,
- (ii) furnish the required performance security.

1.16.7. No interest shall be payable by AEGCL on the above bid guarantee.

1.16.0 Alternative Proposals by Bidders

1.17.1 Bidders shall submit offers, which comply with the Bidding Documents, including the basic AEGCL's Requirements as indicated in the bidding documents. Alternatives will not be considered. The attention of bidders is drawn to the provisions of Clause 1.27.0 regarding the rejection of bids which are not substantially responsive to the requirements of the bidding documents.

1.17.0 Format and Signing of Bid

- 1.18.1. The bidder shall prepare one original and two copies of the bid proposal, clearly marking each one as: "ORIGINAL- BID PROPOSAL, etc as appropriate. In the event of discrepancy between the original and any copy, the original shall prevail.
- 1.18.2. The original and all copies of the bid shall be typed or written in indelible ink (in the case of copies, Photostats are also acceptable) and shall be signed by a person or persons duly authorized to sign on behalf of the bidder. All pages of the bid where entries or amendments have been made shall be initialed by the person or persons signing the bid.
- 1.18.3. The bid shall contain no alterations, omissions or additions, except those to comply with instructions issued by AEGCL, or as necessary to correct errors made by the bidder, in which case such corrections shall be initialed by the person or persons signing the bid.
- 1.18.4. The Bidders must submit the Bid Guarantee in separate sealed envelope, super-scribed as under:
"BID GUARANTEE (Name of the Package)"
- 1.18.5. The Bid must contain the name, residence and place of business of the person or persons making the Bid and must be signed and sealed by the Bidder with his usual signature. The names of all persons signing should also be typed or printed below the signature.
- 1.18.6. Bids by Corporation / Company must be signed with the legal name of the Corporation/Company by the President, Managing Director or by the Secretary or other person or persons authorized to Bid on behalf of such Corporation/Company in the matter.
- 1.18.7. A Bid by a person who affixes to his signature the word 'President', 'Managing Director', 'Secretary', 'Agent', or other designation without disclosing his principal will be rejected.
- 1.18.8. Satisfactory evidence of authority of the person signing on behalf of the Bidder shall be furnished with the Bid.
- 1.18.9. The Bidder's name stated on the proposal shall be exact legal name of the firm
- 1.18.10. Bids not conforming to the above requirements of signing may be disqualified.

1.18.0 Sealing and Marking of Bids

- 1.19.1. All tenders shall have to be submitted in prescribed forms attached herewith eventually to be drawn up in the rules of AEGCL.
- 1.19.2. Two different envelopes (inner) are to be used as follows-
- 1.19.3. **Envelope-1:** Bid document signed by the bidder on all pages, Tender Document cost, Earnest Money, Techno-commercial data of the Bidder and other necessary documents must be enclosed.
- 1.19.4. **Envelope-2:** Price Bid.
- 1.19.5. Both the inner envelopes are to be enclosed in an outer envelope and submitted duly. The inner and outer envelopes shall:
a) Bear the name and address of the bidder
b) Bear address to the bidding authority
c) Bear the specific identification of this bid indicated in the Bid Document.
- 1.19.6. If all the envelopes are not sealed and marked as required, the employer will assume no responsibility for misplacement or premature opening of the bid.
- 1.19.7. If the outer envelope is not sealed and not marked as above, AEGCL will assume no responsibility for the misplacement or premature opening of the bid.
- 1.19.8. The Bid must be accompanied with requisite BID SECURITY in a separate sealed cover.

1.19.9. The Bidders have the option of sending the Bids by post/courier or in person. Bids submitted by Telex/ Telegram/Fax will not be accepted. No request from any Bidder to AEGCL to collect the proposal from Airlines/Cargo Agents etc shall be entertained by AEGCL.

1.19.0 Deadline for Submission of Bids

1.20.1 Bids must be received by AEGCL at the address specified above no later than refer to NIT.

1.20.2 AEGCL may, at its discretion, extend the deadline for submission of bids by issuing an addendum in accordance with Clause 1.7.0, in which case all rights and obligations of AEGCL and the bidders previously subject to the original deadline will thereafter be subject to the deadlines extended.

1.20.0 Late Bids

1.21.1 Any bid received by AEGCL after the deadline for submission of bids prescribed in Clause 1.19.0 will be rejected and returned unopened to the bidder.

1.21.0 Withdrawal of Bids

1.22.1 The bidder may withdraw its bid after bid submission, provided that written notice of the withdrawal is received by AEGCL prior to the deadline for submission of bids.

1.22.2 The bidder's withdrawal notice shall be prepared, sealed, marked and delivered in accordance with the provisions of Clause 1.18.0, with the envelopes additionally marked "WITHDRAWAL".

1.22.3 Withdrawal of a bid during the interval between the deadline for submission of bids and the expiration of the period of bid validity specified in Sub-Clause 1.15.1 may result in the forfeiture of the bid security pursuant to Sub-Clause 1.16.6.

1.22.0 Opening of Bids

1.23.1 AEGCL will open the Technical Bids (Part-I) , in the presence of bidders' representatives who choose to attend; at the following location:

Deputy General Manager.
LA T&T Circle, AEGCL, Narengi
Guwahati-26

The bidders' representatives who are present shall sign a register evidencing their attendance.

1.23.2 Envelopes marked "WITHDRAWAL" shall be opened and read out first. Bids for which an acceptable notice of withdrawal has been submitted pursuant to Clause 1.21.0 shall not be opened.

1.23.3 The bidders' names, the Bid Prices, the presence or absence of Bid Security, and such other details as AEGCL may consider appropriate, will be announced and recorded by AEGCL at the opening. The bidders' representatives will be required to sign this record.

1.23.0 Process to Be Confidential

1.24.1 Information relating to the examination, clarification, evaluation and comparison of bids and recommendations for the award of a contract shall not be disclosed to bidders or any other persons not officially concerned with such process. Any effort by a bidder to influence AEGCL's processing of bids or award decisions may result in the rejection of the bidder's bid.

1.24.0 Preliminary Examination of Bids and Determination of Responsiveness

1.25.1 Prior to the detailed evaluation of bids, AEGCL will examine the bids to determine whether they are complete and all documents as per Clause 1.9.0 are provided or not, whether the documents have been properly signed, whether the required security is included, and whether the bids are generally in order and provides any clarifications and/or substantiation that AEGCL may require pursuant to Clause 1.25.0.

1.25.2 A substantially responsive bid is one which conforms to all the terms, conditions and requirements of the bidding documents, without material deviation or reservation and includes the amendments and changes, if any. AEGCL may waive any minor non-conformity or irregularity in a Bid which does not constitute a material deviation or reservation, provided such deviation or reservation does not (i) affect in any substantial way the scope, quality or performance of the Works; (ii) limit in any substantial way, inconsistent with the bidding document, AEGCL's rights or bidder's obligations under the contract; or (iii) whose rectification would affect unfairly the competitive position of other bidder's presenting substantially responsive bids.

1.25.3 Any bids found to be non-responsive for any reason or not meeting the minimum levels of the performance or other criteria specified in the bidding documents will be rejected by AEGCL and not included for further consideration.

1.25.0 Clarification of Bid Proposals and Contacting AEGCL

- 1.26.1 To assist in the examination, evaluation and comparison of Bids, AEGCL may, at its discretion, ask any bidder for clarification of its bid. The request for clarification and the response shall be in writing or by mail, but no change in the price or substance of the bid shall be sought, offered or permitted except as required to confirm the correction of arithmetic errors discovered by AEGCL in the evaluation of the bids in accordance with Clause 1.26.0.
- 1.26.2 Subject to Sub-Clause 1.26.1, no bidder shall contact AEGCL on any matter relating to its bid from the time of opening Bids to the time the contract is awarded. If the bidder wishes to bring additional information to the notice of AEGCL, it should do so in writing.
- 1.26.3 Any effort by the bidder to influence AEGCL in AEGCL's evaluation of price proposals, bid comparison or contract award decisions may result in the rejection of the bidder's bid.

1.26.0 Correction of Errors

- 1.27.1 Price Proposals determined to be substantially responsive will be checked by AEGCL for any arithmetic errors. Arithmetic errors will be rectified on the following basis. If there is a discrepancy between the unit rate and the total cost that is obtained by multiplying the unit rate and quantity, the unit rate shall prevail and the total cost will be corrected unless in the opinion of AEGCL there is an obvious misplacement of the decimal point in the unit rate, in which case the total cost as quoted will govern and the unit rate corrected. If there is a discrepancy between the total bid amount and the sum of total costs, the sum of the total costs shall prevail and the total bid amount will be corrected.
- 1.27.2 The amount stated in the Form of Bid for Price Proposal will be adjusted by AEGCL in accordance with the above procedure for the correction of errors and, shall be considered as binding upon the bidder. If the bidder does not accept the corrected amount of bid, its bid will be rejected, and the bid security may be forfeited in accordance with Sub-Clause 1.16.6(b).

1.27.0 Evaluation and Comparison of Bid Proposals

- 1.28.1 AEGCL will evaluate and compare only the bids determined to be substantially responsive in accordance with Clause 1.24.0.
- 1.28.2 For equipments and materials, the comparison shall be of the ex-factory price of equipments and materials offered (such price to include all costs as well as duties and taxes paid or payable on components and raw material incorporated); plus the cost of transportation, local taxes and duties, civil works, installation and other services required under the contract with due corrections as per Clause 1.26.0. AEGCL's comparison will also include the costs if any, resulting from application of the evaluation procedures described in Sub-Clause 1.28.4.
- 1.28.3 AEGCL will carry out a detailed evaluation of the bids in order to determine whether the bidders are qualified and whether the technical aspects are substantially responsive to the requirements set forth in the bidding documents. In order to reach such a determination, AEGCL will examine the information supplied by the Bidders and other requirements in the bidding documents, taking into account the following factors:
 - (a) Qualification
 - (i) the determination will take into account the Bidder's financial and technical capabilities and past performance; it will be based upon an examination of the documentary evidence of the Bidder's qualifications submitted by the Bidder, pursuant to Clause 1.5.0 as well as such other information as AEGCL deems necessary and appropriate; and
 - (ii) an affirmative determination will be a prerequisite for AEGCL to continue with the evaluation of the proposal; a negative determination will result in rejection of the Bidder's bid.
 - (b) Technical
 - (i) overall completeness and compliance with AEGCL's Requirements; the technical merits of materials and equipments offered and deviations from AEGCL's Requirements; suitability of the facilities offered in relation to the environmental and climatic conditions prevailing at the site; quality, function and operation of any process control concept included in the bid;
 - (c) Commercial
 - (i) Deviations and omissions from the contractual and commercial conditions as identified in the Bid.
 - (ii) compliance with the time schedule called for in the Bidding Document and evidenced as needed in a milestone schedule provided in the bid; and
 - (iii) the functional guarantees of the facilities offered against the specified performance criteria of the plant and equipment.
- 1.28.4 Pursuant to Sub-Clause 1.28.3, the following evaluation methods will be followed:
 - (a) **Time Schedule:** The plant and equipment covered by this bidding are required to be shipped, installed and the facilities completed within the period specified in Sub-Clause

Bidders submitting bids which deviate from the time schedule specified will be rejected.

(b) **Deviations from the Bidding Document:**

Bidders shall base their Bid price on the terms & conditions specified in the Bidding Documents.

Bids with material deviations and omissions shall be rejected.

(c) **Functional Guarantee of the facilities:**

Bidders shall state the functional guarantees (e.g. guaranteed performance or ratings or efficiency) of the proposed Goods in response to AEGCL's Requirements (Technical Specifications). Goods, Plant and equipment offered shall have a minimum performance (functional guarantees/ratings) specified in the Technical Specifications to be considered responsive. Bids offering Goods, plant and equipment with functional guarantees less than the minimum specified shall be rejected.

1.28.5 **Bid Evaluation Method for Abnormally Low Bids (ALB):**

The following methodology will be practiced for identification and treatment of the Abnormally Low Bids (ALB) in this tender process of AEGCL:

(a) Identification:

For the identification of the Abnormally Low Bids, two approaches as applicable shall be adopted:

(i) **Absolute Approach** when there is fewer than five substantially responsive bidders and if the bid price is 20% or more below AEGCL's cost estimate then AEGCL's tender evaluation committee should clarify the Bid price with the bidder to determine whether the Bid is abnormally low.

(ii) **Relative Approach** is a statistical comparison method which will be applied when there are more than five nos. of substantially responsive bids. A potential ALB is identified where the low Bid is more than one standard deviation below the average of substantially responsive bids received.

In this approach first the Average bid price is determined and then by deducting the standard deviation from the average bid price, potentially ALB may be determined.

(b) In case of ALB, the tender evaluation committee of the respective tenders shall undertake the following three stage review which are as follows:

(i) Identify ALB as per the step mentioned in Clause No.(a).(i) and 10.b.(ii) whichever is applicable.

(ii) Clarify and analyse the bidders resource inputs and pricing, including overheads, contingencies and profit margins. In that respect committee may seek the reference of the guidelines of World Bank, AIIB, ADB etc.

(iii) Decide whether to accept or reject the tender.

(c) Additional Performance Security in case of acceptance of ALB:

(i) If any abnormally low bid is accepted under point no. (b) (iii), after taking of additional performance security as per the assessment of the committee, however the total performance security should not have to exceed 20% of the total contract value.

(ii) The additional performance security shall be treated as part of the original performance security and shall be valid for a period coextensive with the applicable defect liability period of the contract.

(iii) Non submission of the additional performance security shall constitute sufficient ground to rejection of the bid and similar assessment shall be initiated for the next ranked bidder identified as ALB.

1.28.5 AEGCL reserves the right to accept or reject any variation or deviation. Variations, deviations, and other factors which are in excess of the requirements of the bidding documents or otherwise result in the accrual of unsolicited benefits to AEGCL shall not be taken into account in bid evaluation.

1.28.0 Award

1.29.1 Subject to Clause 1.29.0, AEGCL will award the Contract to the bidder whose bid has been determined to be substantially responsive to the bidding documents provided that such bidder has been determined to be qualified.

1.29.0 Employer's Right to Accept any Bid and to Reject any or all Bids

1.30.1 Notwithstanding Clause 1.28.0, AEGCL reserves the right to accept or reject any bid, and to annul the bidding process and reject all bids, at any time prior to award of Contract, without thereby incurring any liability to the affected bidder or bidders or any obligation

to inform the affected bidder or bidders of the grounds for AEGCL's action. AEGCL is not bound to accept the offer of the lowest bidder.

1.30.0 Notification of Award

1.31.1 Prior to expiration of the period of bid validity prescribed by AEGCL, AEGCL will notify the successful bidder by fax, confirmed by letter, that its bid has been accepted. This letter (hereinafter and in the Conditions of Contract called the "Letter of Acceptance") shall name the sum which AEGCL will pay the Contractor in consideration of the execution, completion and maintenance of the Works by the Contractor as prescribed by the Contract (hereinafter and in the Conditions of Contract called "the Contract Price").

1.31.2 The notification of award will constitute the formation of the Contract.

1.31.0 Signing of Contract Agreement

1.32.1 At the same time that it notifies the successful bidder that its bid has been accepted, AEGCL will send the bidder the Form of Contract Agreement incorporating all agreements between the parties.

1.32.2 Within **15 (fifteen) days** of receipt of the Form of Agreement, the successful bidder shall sign the Form and return it to AEGCL.

1.32.0 Performance Security

1.33.1 Within **15 (fifteen) days** of receipt of the notification of award from AEGCL, the successful bidder shall furnish to AEGCL a performance security in an amount of 10 (ten) percent of the Contract Price in accordance with the Conditions of Contract. The form of performance security provided in **Section 5** of the bidding documents may be used or some other form acceptable to AEGCL. The above performance security may be withdrawn on submission of performance security as per clause No 2.6.0

1.33.2 In case the bidder fails to submit the Performance Security in the form of Bank Guarantee, an amount equivalent to 10% of the Contract Price shall be retained as Security Deposits which shall be retained up to 90 (ninety) days after the end of Warranty Period.

1.33.0 Corrupt or Fraudulent Practices

1.34.1 It is required that bidders/suppliers/contractors observe the highest standard of ethics during the procurement and execution of the contracts. In Pursuance of this Clause AEGCL;

(a) defines, for the purposes of this provision, the terms set forth below as follows:

- (i) "corrupt practice" means behavior on the part of officials in the public or private sectors by which they improperly and unlawfully enrich themselves and/or those close to them, or induce others to do so, by misusing the position in which they are placed, and it includes the offering, giving, receiving or soliciting of anything of value to influence the action of any such official in the procurement process or in contract execution; and
- (ii) "fraudulent practice" means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the Borrower, and includes collusive practice among bidders (prior to or after bid submission) designed to establish bid prices at artificial non-competitive levels and to deprive the Borrower of the benefits of free and open competition;

(b) will reject a proposal for award if it determines that the bidder recommended for award has engaged in corrupt or fraudulent practices in competing for the contract in question;

(c) will declare a firm ineligible, either indefinitely or for a stated period of time, to be awarded a contract by AEGCL if it at any time determines that the firm has engaged in corrupt or fraudulent practices in competing for, or in executing, a contract.

SECTION-2

SPECIAL CONDITIONS OF CONTRACT.

2.1.0 INTRODUCTION

2.1.1. This Special Conditions of Contract is supplementary to AEGCL's "General Conditions of Supply and Erection of AEGCL 2009", copies of which will be supplied with this Bidding Document. **However, in case of any contradiction, stipulations made in this Bidding Document, it shall prevail.**

2.2.0 CONTRACTOR TO INFORM HIMSELF FULLY

2.2.1. The contractor should admit that he has examined the general condition of contract, specifications and schedule and has satisfied as to all the conditions and circumstances affecting the contract prices and fixed his price according to his own views on these matters and acknowledge that no additional allowances except as otherwise provided therein will be levied. The purchaser shall not be responsible for any misunderstanding or incorrect information obtained by the contractor other than information given to the contractor in writing by the purchaser.

2.3.0 EXTENSION OF TIME

2.3.1. If the completion of the work is delayed due to reason beyond the control of the contractor, the contractor should without delay give notice to AEGCL within 7 (seven) days in writing of his claim for an extension of time. The AEGCL may extend the completion date as may be reasonable but without prejudice to other terms and conditions of the contract.

2.4.0 VARIATIONS, ADDITIONS AND OMISSIONS

2.4.1. The contractor shall not modify any of the terms and conditions except as directed in writing by AEGCL.

2.4.2. The AEGCL shall have the right during the contract to amend, alter, omit or otherwise vary any of the items by notice in writings. The contractor shall carry out such variations although the said variations shall not exceed 15% of the contract price except with written consent of the purchaser. The amount of such variations shall be determined in accordance with rates specified in the contract and where such rates are not available this will be mutually agreed between the purchaser and the contractor.

2.5.0 RETENTION MONEY: -

2.5.1 10% retention money will be deducted from running bill, which will be released along with the final bill on completion of the work in all respect.

2.6.0 PERFORMANCE SECURITY (Contract Performance Guarantee)

2.6.1. As a Contract Performance Security, the successful Bidder, to whom the work is awarded, shall be required to furnish a Performance Guarantee from a Nationalized Bank, in the form attached with the Bidding Document (Section -5) in favour of the AEGCL. The guarantee amount shall be equal to ten percent (10%) of the Contract Price and it shall guarantee the faithful performance of the contract in accordance with the terms and conditions specified in these documents and specifications. The guarantee shall be valid up to 90 (ninety) days after the end of Warranty Period.

2.6.2. In case the bidder fails to submit the Performance Security in the form of Bank Guarantee, an amount equivalent to 10% of the Contract Price shall be retained as Security Deposits which shall be retained up to 90 (ninety) days after the end of Warranty Period

2.6.3. The performance guarantee shall cover additionally the following guarantees to the owner:

- a) The successful Bidder guarantees the successful and satisfactory operation of the equipment furnished and erected under the contract, as per the specifications and documents.
- b) The successful Bidder further guarantees that the equipment/material provided and installed by him shall be free from all defects in design, material and workmanship and shall upon written notice from the Owner fully remedy

2.6.4. The Contract performance Guarantee will be returned to the Contractor without any interest at the end of warranty period and written request from the contractor.

2.7.0 TAKING OVER

2.7.1. When entire scope of works is completed by the Contractor and successfully commissioned in accordance with the Contract, the same shall be taken over by AEGCL and a Taking-Over Certificate for the Works shall be issued.

2.7.2. The date of issue of the 'Taking Over Certificate' by AEGCL or its representative shall be the date of taking over the works.

2.8.0 TERMS OF PAYMENT

The terms of payment for the supply work shall be as follows

- i. No advance payment shall be made in this contract.
- ii. No claim for interest shall be entertained by AEGCL
- iii. Running bill: Maximum 4 nos. of progressive bills would be entertained during the erection work. The 1st progressive bill would be entertained on completion of 40% of total erection cost. Minimum value of each additional 2 nos. of progressive bills should be for remaining 20% of Work Order Value.
- iv. Remaining 20% of the total work value shall be paid to the contractor on successful completion of 100% erection, testing and commissioning activities of the project, which should be certified by the Project Manager..
- v. The price is firm and no price variation shall be applicable.
- vi. Final bill must contain the original site register.
- vii. Payment is subject to availability of specific fund.
- viii. The Bidder / Firm will have to be submitted the following Net Banking details.
 - a) Banker's Name & Branch
 - b) Account No
 - c) Banker's address
 - d) Banker's IFSC Code
 - e) Banker's RTGS Code

2.9.0 WARRANTY

- 2.9.1. The term period of warranty shall mean the period of 12 months from the date of Taking Over of the Work by AEGCL. A Taking over Certificate (TOC) will be issued by the appropriate authority.

2.10.0 LIABILITY FOR ACCIDENTS AND DAMAGE

- 2.10.1. The contractor shall indemnify the company (AEGCL) against any loss, damage, and injury to any person or to any property and against any other liability or obligation and against all actions, suits, claims demands costs, charges and expenses arising in connection with such damage, injury, liability or obligation resulting from:-
- (a) the negligence of the contractor and his workers, agents, subcontractors; and/or
 - (b) the lack of or inadequacy of safety devices on equipment supplied under this contract.

2.11.0 USE OF MATERIALS ARRANGED BY THE BOARD

- 2.11.1. If any materials supplied by AEGCL are found to be misused or wasted due to negligence by the contractor comes to the notice of the Board then the contractor shall be liable to pay compensation to the Board as may be decided by the Board.

2.12.0 PENALTY FOR DELAYED EXECUTION

- 2.12.1. In the event of delay in completing the work extending beyond the date of completion or beyond the extended date, if any, permitted by the Board, the contractor shall pay as agreed liquidated damage and not as a penalty a sum equal to 1% of the contract price under this contract for each week of delay or part thereof subject to a maximum of 10% of the contract price.

2.13.0 SETTLEMENT OF THE DISPUTE & ARBITRATION

- 2.13.1. Any dispute arising out of the contract will first be discussed and settled bilaterally between the Assam Electricity Grid Corporation Limited and firms/ contractors. In case, the dispute cannot be settled bilaterally, it will be referred to arbitration by an arbitrator to be appointed by the AEGCL. The contractor shall not stop the work during settlement of any arbitration case. All disputes arising out of the agreement so made shall be subjected to the jurisdiction of district court of Kamrup District.

2.14.0 FORCE MAJEURE

- 2.14.1. Force Majeure shall be considered as any circumstances beyond the reasonable control of the party claiming relief, including but not limited to strikes lockout, civil commotion, riot, insurrection, hostilities, war, fire, flood, earthquake, delay in delivery of equipments or part thereof by AEGCL, would entitle contractor to extension of time.

2.15.0 PROGRESS REPORT

- 2.15.1. The contractor shall submit to AEGCL monthly progress report within the first week of every month giving the status of the contract work along with adequate number of photograph, indicating the various stages of execution of this contract.

2.16.0 ACCOMMODATION OF CONTRACTOR'S PERSONNEL

- 2.16.1. No quarter shall normally be provided by the Board for the accommodation of any of the contractor's employee in connection with the erection work, in exceptional cases, where accommodation is provided to the contractor at AEGCL's discretion, recoveries shall be made at such rates as may be fixed by the Board towards rent of the buildings and furniture and fittings if any therein as well as charges for electric supply, water supply and conservancy.
- 2.16.2. The contractor shall at his own expenses make adequate arrangements for housing, supply of drinking water and provision of latrines and urinals for his staff and labour and disposal of sewage.

2.17.0 AGE LIMIT OF LABOUR

- 2.17.1. The contractor shall not employ persons below the age of 18 years as labours for the erection work.

2.18.0 SAFETY & PRECAUTIONS

- 2.18.1. The contractor shall provide adequate safety devices like head protective gears, belt etc, to his labours while executing the erection work.

2.19.0 INSURANCE

- 2.19.1. The Contractor at his cost shall arrange, secure and maintain all insurance as may be pertinent to the Works and obligatory in terms of law to protect his interest and interests of the Employer / AEGCL against all perils detailed herein. The form and the limit of such insurance as defined herein together with the under-writer in each case shall be acceptable to the AEGCL. However, irrespective of such acceptance, the responsibility to maintain adequate insurance coverage at all time during the period of contract shall be of the contractor alone. The contractor's failure in this regard shall not relieve him of any of his contractual responsibilities and obligations. The insurance covers to be taken by the contractor shall be in a joint name of the Employer and the Contractor. The Contractor shall, however, be authorized to deal directly with Insurance Company or companies and shall be responsible in regard to maintenance of all insurance covers.
- 2.19.2. Any loss or damage to the equipment and material (including equipments & materials handed over to Contractor for execution of the Contract) during handling, transportation, storage, erection, putting into satisfactory operation and all activities to be performed till the successful completion of commissioning of the equipment shall be to the account of Contractor. The Contractor shall be responsible for preference of all claims and make good the damages or loss by way of repairs and/or replacement of the equipment, damaged or lost. The contractor shall provide the Employer with copy of all insurance policies and documents taken out by him in pursuance of the contract. Such copies of documents shall be submitted to the Employer immediately after such insurance coverage. The Contractor shall also inform the Employer in writing at least sixty (60) days in advance regarding the expiry/cancellation and/or change in any of such documents and ensure revalidation, renewal, etc., as may be necessary well in time.
- 2.19.3. The perils required to be covered under the insurance shall include, but not be limited to fire and allied risks, miscellaneous accidents (erection risks) workman compensation risks, loss or damage in transit, theft, pilferage riot and strikes and malicious damages, civil commotion, weather condition, accidents of all kinds, etc. The scope of such insurance shall be adequate to cover the replacement/reinstatement cost of the equipment for all risks up to and including delivery of goods and other costs till the equipment is delivered at Site. The insurance policies to be taken should be on replacement value basis and/or incorporating escalation clause. Notwithstanding the extent of insurance cover and the amount of claim available from the underwriters, the contractor shall be liable to make good the full replacement/rectification value of all equipments/materials and to ensure their availability as per project requirements.
- 2.19.4. The insurance shall also cover the Contractor against all claims arising from injuries, disabilities, disease or death of members of public or damage to property of others, due to any act or omission on the part of the Contractor, his agents, his employees, his representatives and Sub-contractors or from riots, strikes and civil commotion.
- 2.19.5. All costs on account of insurance liabilities covered under the contract will be to Contractor's account and will be included in Contract Price. However, the owner may from time to time, during the pendency of the contract, asks the contractor in writing to limit the insurance coverage, risks and in such a case, the parties to the contract will agree for a mutual settlement, for reduction in Contract price to the extent of reduced premium amount. The Contractor, while arranging the insurance shall ensure to obtain all discounts on premium which may be available for higher volume or for reason of financing arrangement of the project.

2.20.0 GENERAL CONDITIONS OF CONTRACT:

2.20.1 INSPECTION OF SITE: -

a) The Bidder is advised to visit and examine the site where the work is to be carried out and its surroundings, nature of work, site conditions, area for storage of materials, etc. and obtain for itself on its own responsibility all information that may be necessary for preparing the bid and entering into a contract. The costs of visiting the site shall be at the Bidder's own expense. Non-familiarity with the site conditions will not be considered a reason either for extra claims or for not carrying out the work in strict conformity with the specifications & requirement. For site visit and any clarification/information/assistance, the intending Bidder may contact The AGM (Civil), Guwahati Works Division, AEGCL, Kahilipara, Guwahati-19.

2.20.2 PRICE BID:-

- a) Unless otherwise specified in the Bid Document and/or AEGCL's Requirements, bidders shall quote for the entire plant and services on a single responsibility basis such that the total bid price covers all the Contractor's obligations mentioned in or to be reasonably inferred from the bidding document in respect of the including procurement, delivery, testing of materials, construction, installation and completion of the Work. The rate should also include the cost of testing of materials at the approved laboratory, carriage and transportation of sample, preparation of report, submission of report in all respect as required by AEGCL. This includes all requirements under the Contractor's responsibilities for completing the work and where so required by the bidding document, the acquisition of all permits, approvals and licenses, etc.; the operation, maintenance and training services and such other items and services as may be specified in the Bidding Document, all in accordance with the requirements of the General Conditions. Items against which no price is entered by the Bidder will not be paid for by the Employer when executed and shall be deemed to be covered by the prices for other items.
- b) Bidders are required to quote the price for the commercial, contractual and technical obligations outlined in the bidding document.
- c) **Bidders quoted price should include all cost of testing of materials, transportation of sample, storage, preparation and submission of report during approval period, construction period as well as after completion of the work.**
- d) Whenever forest produces like sand, stone, timbers etc are used in the work the contractor have to furnish documentary proof that requisite royalty on such produces has been paid to the concerned Department, otherwise will be deducted at source at applicable rate.
- e) Taxes like work contract, income tax etc. which need to be deducted at source as per the prevailing law, will be deducted at source.
- f) The Bided Price should on Fixed Price basis, prices quoted by the Bidder shall be fixed during the Bidder's performance of the contract and not subject to variation on any account.

20.2.3 SITE FACILITIES:-

- a) AEGCL will not provide any accommodation at the work site to the contractor and their field personnel. No claim shall be entertained from the bidder for making his own arrangement for providing accommodation to the labourers and bidder will bear entire expense. The same has to be arranged by the contractor on their own. However, if space or storing zone is available at the site, AEGCL may provide space for storage of the materials but responsibility of the material and their safety shall be taken care of by the Contractor. In case of non-availability of space under AEGCL the same should be arranged by the contractor outside AEGCL campus/work site at their own cost and responsibility.
- b) AEGCL shall not be responsible for the safety of the workers at site either on account of the works executed by the Contractor or on account of the works executed by any other agency involved at that time.

- c) AEGCL shall on no account be responsible for the expenses incurred by the Contractor during the progress of work at site, towards any incidental expenditure like medical amenities to the workers at site, security arrangements.
- d) The quoted price shall be deemed to include charges for all site facilities for labour that are considered necessary for execution of the work.
- e) No claim shall be entertained from the bidder for making his own arrangement for approach roads from outside PWD road to the site and bidder will bear entire expenses.
- f) AEGCL on no account shall be responsible for storage of materials or loss or pilferage or theft either in respect of the material stored or material already billed and paid for by AEGCL.
- g) Any facilities available at site shall be utilized only with prior permission of AEGCL and it should not be taken as granted for availing such services.

20.2.4 DEFECT AFTER COMPLETION OF WORK:-

- a) The contractor shall make good at his own cost and to the satisfaction of AEGCL all defects, or other faults which may appear during the defect liability period. In default, AEGCL may employ and pay other agency or persons to amend and make good such damages. Losses and expenses consequent thereon or incidental thereto shall be made good and borne by the contractor, failing which the same shall be recoverable from the payment due to the contractor and performance guarantee. In the event of amount due and performance guarantee being insufficient, the balance amount will be recovered from the contractor from the amount due or retained for other works executed in AEGCL.

20.2.5 VARIATION AND DEVIATION OF QUANTITY:-

- a) The Tendered rates shall hold good for any variations in the Tendered quantities for legitimate completion of works as per original design on account of any modification in the bill of quantities.
- b) **Deletion of work:**
AEGCL and its representative have the right to delete or decrease any item or quantity from schedule of quantity at its discretion if deemed necessary. No claim by the contractor will be admissible for this deletion or deduction of Item/quantity from schedule of quantity.

20.2.6 LABOUR LEGISLATION: -

- a) The Bidders shall comply with the provisions of the Apprentices Act 1961, payment of Wages Act 1936, Minimum Wages Act 1948, Employees Liability Act 1938, Workmen's Compensation Act 1923, Industrial Disputes Act 1947, Maternity Benefits Act 1961, and the Contract Labour (Regulation and Abolition) Act 1970, Provident Fund Act or the modifications thereof or any other laws relating thereto and the rules made there under from time to time.
- b) The Bidder shall indemnify and keep indemnified AEGCL against payments to be made under and for the observance of the laws aforesaid and the Contractors' Labour Regulations without prejudice to his right to claim. The laws aforesaid shall be deemed to be a part of this contract and any breach thereof shall be deemed to be a breach of this contract.
- c) The Bidder shall at his own expense arrange for all the safety provisions for the safety of all workers and employees directly or indirectly employed on the work by the Bidder.
- d) The Bidder shall be fully responsible at his own expenses for compliance all the labour regulations and rules to be observed by them. The Bidder shall fully indemnify AEGCL against any action by the state and/or Central Government for any default or alleged default by the Bidder for violation of any of such rules and regulations. If, due to any default of the Bidder, AEGCL has to incur any expenditure for compliance of the rules and regulations or for any other reason connected with such default, AEGCL shall be entitled to recover from the Bidder all such expenditure in full from any payment

due to the Bidder.

20.2.7 GOVERNMENT AND LOCAL RULES:-

- a) The Contractor shall conform to the provisions of all local bye-laws and acts relating to the work and to the regulations etc. of the Government and Local Authorities and of any Company whose system and design is proposed to be connected/utilized. The cost, if any, shall be deemed to have been included in his quoted rates, taking into account all liabilities and shall indemnify AEGCL against such liabilities and shall defend all actions arising from.
- b) Any taxes, royalties and duties as per Govt. Law should be responsible of the contractor and must be included in their quoted rate.

20.2.8 ELIGIBILITY OF CONTRACTORS EMPLOYEES: -

- a) The Contractor shall employ in and about the Execution of the works only such persons as are skilled and experienced in their several trades. A list of such personal should be submitted in corresponding Appendix.

20.2.9 ENGINEER AT LIBERTY TO OBJECT: -

- a) AEGCL's Site in-charge shall have right to remove any person provided by the Contractor who, in the opinion of the Site in-charge, misconducts himself, or is incompetent or negligent in the proper performance of his duties, or whose presence on Site is otherwise considered by the Engineer to be undesirable, and such person shall not be again allowed upon the Works without consent of the Engineer. Any person so removed from the Works shall be replaced immediately without hampering the work.

SECTION 3

PURCHASER'S REQUIREMENTS

3.1.0 SCOPE

3.1.1 The brief description of scope of works covered under this Bidding Document is furnished below:

- a) **Construction of extended earthmat and installation of Earthing Flats, Rod Electrodes, Pipe Electrodes, Ground Wire and earthing of equipments and structures with the earth mat and construction of treated earth pits. Switchyard PCC, laying of gravel of the switchyard etc as brought out in the Specification and Schedule of Requirements as per this section (3.2.0).**
- b) **Erection of mounting structure as required including construction of foundation and supply of all foundation materials and structure earthing.**
- c) **Erection, Testing and Commissioning of all equipments (CB, CT, PT, LA, Isolator, PI) including laying of control cables and earthing equipment as required.**
- d) **Erection of switchyard lattice tower structures and beam including construction of foundation.**
- e) **Installation of earthing system**
- f) **Construction of cable trench and slab (C-Type & D-Type) as per latest IS standards.**
- g) **Installation and commissioning of Control & Relay Panel into existing SAS system including Testing & Commissioning. Integration of the CRP with the existing SAS system should be done by authorized personnel of OEM (SAS).**
- h) **The price quoted shall include cost of all materials and labour to complete the job in all respect as per Bill of Quantity and Specifications laid out in this Section.**

3.2.0 GENERAL

3.2.1 The intent of this Section of the Specification is to cover requirements, which are to be followed in construction of earth pits including erection of Pipe electrodes, rod electrodes and the connection to the existing Earth mat in the switchyard and Switchyard PCC

3.2.2 The work shall be carried out according to the design/drawings/specifications to be provided by the AEGCL. Certain minimum requirements are indicated in this Section for guidance purposes only. However, the Contractor shall quote according to the complete requirements.

3.2.3 The bidder must employ at least one supervisor having valid HT supervisory license from Govt. of Assam.

3.3.0 SURFACE PREPARATION AND STONE SPREADING INCLUDING PCC SPECIFICATIONS

3.3.1 Before taking up PCC base (pro 1:4:8) and stone filling, the area shall be thoroughly de-weeded including removal of roots and laying of gravel.

3.3.2 The Contractor shall have to prepare the site by earth cutting or filling as per site condition to arrive at the required level as specified in Clause 3.3.6. **Contractors are advised to visit relevant sites to assess the requirement of earthwork before quoting.**

3.3.3 The surface of the switchyard area shall be maintained, rolled/ compacted to the lines and grades as decided by Engineer-in-Charge. De-weeding including removal of roots shall be done before rolling is commenced. Engineer-in-Charge shall decide final formation level so as to ensure that the site appears uniform devoid of undulations.

3.3.4 A base layer of PCC of 80 mm thickness with proportion of 1:3:6 shall be provided before spreading of crushed rocks. PCC base shall be done in panels of 4 m x 4 m with expansion gap of 25 mm between panels. The gap shall be filled with bitumen. Each panel shall be provided with four (4) numbers of PVC pipes (per panel) of 100 mm dia of length 450 mm for soaking of water. The pipes will be provided with gratings at the top and the same will be flushed with the PCC top.

3.3.5 Over the PCC layer, a surface course of minimum 100 mm thickness of broken stone shall be spread. For this purpose, the recovered gravel from the switchyard shall be used. Any additional quantity of gravel required to achieve 100mm thickness shall be supplied by the contractor.

3.3.6 The ground leveling activities should be done in such a manner that after construction of PCC and spreading of gravel as per specified requirements, clearance from the top of the gravel layer to the plinth should be a minimum of 300mm.

3.3.7 *The Bidder should note that the price quoted shall be inclusive of cost of all activities for site preparations, such as clearing the area, earth filling, earth cutting, levelling etc. It is advised that the Bidders should visit the concerned sites before finalising their bids.*

3.4.0 **EARTHING SYSTEM**

3.4.1 **General**

- (a) Installation of earth electrode for LA with test links including construction of covered earth pits.
- (b) Construction of extended Earthmat using GI flat and connection to rises for equipment earthing as directed.
- (c) Construction of auxillary earthmat for Isolator MOM box.
- (d) All conductors buried in earth and concrete shall be GI. All conductors above ground level and earthing leads, cable trench earthing shall be of galvanised steel.
- (e) Light poles, junction boxes on the poles, cable and cable boxes/glands, lockout switches etc. shall be connected to the earthing conductor running along with the supply cable which inturn shall be connected to earthing grid conductor at a minimum two points
- (f) The metallic switchyard security fencing may not be connected to the substation main earth grid. The security fencing shall be earthed by running a separate 40 mm dia MS rod earthing conductor along the fence along with 40 mm dia rod electrodes of 3000 mm long at regular intervals and at each corner
- (g) For transformer earthing, two electrodes are to be connected to treated earth pits and the same shall be connected to the existing earth mat. Also, LAs on HV and LV side of transformers are to be earthed using one electrode which shall be connected to the earth mat.
- (h) Ineffective/damaged Equipment/Structure earthing identified for the substation equipments in coordination with the concerned Resident Engineer shall be properly earthed using electrodes and GI flats as required.
- (i) Placing of electrodes should be such that if the length of earth electrode is "l", the next electrode should be placed at "2l" distance from the 1st.
- (j) Security fencing should be separately earthed. At max, 4 no. of 40 mm dia rod electrodes of 3000 mm long electrodes may be used for the earthing of the fencing on each side.
- (k) Parts of the switchyard where earthing mat (main mesh) does not exist at present (if any) as identified by the concerned Resident Engineer or as per BoQ and necessary earthing activities to be undertaken.
- (l) Also, the proper earthing of Kiosks as per direction of the concerned Resident Engineer in the switchyard and depending on availability of earth-mat in that area of the switchyard, necessary earthing activities are to be carried out.
- (m) One number 40 mm dia, 3000 mm long earth electrode with test link, CI frame and cover shall be provided to connect each down conductor of surge arresters, capacitive voltage transformers, lightning masts and towers with peak.
- (n) For substation equipments, the connection between existing earthing pads and the earthing grid shall be made by two short earthing leads (one direct and another through the support structure) free from kinks and splices. In case earthing pads are not provided on the item to be earthed, same shall be provided in consultation with Purchaser.
- (o) All lighting panels, junction boxes, receptacles fixtures, conduits etc. shall be grounded in compliance with the provision of I.E. rules
- (p) Each earthing lead from the neutral of the power transformer/Reactor shall be directly connected to two pipe electrodes in treated earth pit (as per IS) which in turn, shall be buried in Cement Concrete pit with a cast iron cover hinged to a cast iron frame to have an access to the joints. All accessories associated with transformer/reactor like cooling banks, radiators etc. shall be connected to the earthing grid at minimum two points
- (q) Neutral points of systems of metallic enclosures and frame works associated with all current carrying equipment and extraneous metal works associated with electric system shall be connected to the existing earth mat.
- (r) Earthing connections with equipment earthing pads shall be bolted type. Contact surfaces shall be free from scale, paint, enamel, grease, rust or dirt. Two bolts shall be provided for making each connection. Equipment bolted connections, after being checked and tested, shall be painted with anti-corrosive paint/compound.
- (s) The 65x12 mm GI flat (or higher) shall be clamped with the equipment support structures at 1000mm interval.
- (t) Connection between equipment earthing lead and main earthing conductors and between main earthing conductors shall be welded type. For rust protections, the welds should be treated with red lead and afterwards coated with two layers bitumen compound to prevent corrosion.
- (u) All ground connections shall be made by electric arc welding. All welded joints shall be allowed to cool down gradually to atmospheric temperature before putting any load on it. Artificial cooling shall not be allowed.
- (v) All earthing activities shall conform to the Code of practice for Earthing IS: 3043 and as directed by the site-incharge.
- (w) Installation of Ground wire is to be done as instructed by Engineer-in-Charge.

3.4.2 Details of Earthing System

| Sl. No. | Item | Size | Materials |
|---------|--|---------------------------|------------|
| 1 | Main Earthing Conductor to be buried in ground | 65 mm x 12 mm (or higher) | GI Flat |
| 2 | Conductor above ground & earthing leads (for equipment), Risers. | 65 mm x 12 mm (or higher) | GI Flat |
| 3 | Conductor above ground & earthing leads(for columns & aux. structures), Risers | 65 mm x 12 mm (or higher) | GI Flat |
| 4 | Earthing of outdoor marshalling boxes, MOM boxes, Junction boxes and along outdoor cable trenches, etc (wherever applicable) | 50 mm x 6 mm | GI Flat |
| 5 | Rod Earth Electrode | 40mm dia, 3000 mm long | Mild Steel |
| 6 | Pipe Earth Electrode (in treated earth pit) as per IS 3043. | 40mm dia, 3000 mm long | GI Pipe |

3.5.0 Progress Reporting

The Contractor shall submit for approval, within four weeks of the issue of letter of award, an outline of the design, engineering, material procurement, production, site mobilisation, man and machine deployment, delivery, erection, testing, commissioning, and handing over programme as mentioned earlier. Within a further period of 4 weeks the Contractor shall provide a detailed programme scheduling the future activities in the form of Bar chart and/or any other form to be agreed upon by AEGCL. The Contractor shall submit monthly progress reports to AEGCL office not later than the fifth day of the following month. The reports shall show clearly and accurately the position of all activities associated with design, material procurement, manufacture, works tests, shipping, site erection, testing and commissioning with regard to the agreed contract programme. In addition to the routine monthly progress report the Contractor shall also submit to AEGCL by the 25th day of every month, a man hour schedule for the following month, detailing the man hours scheduled for that month, skill-wise and area-wise. The preferred format for presentation of programmes is MS Project version 4.0 or any latest. The programmes and monthly updates shall be submitted on Email/CD/Hard copy. The design aspect of the progress report shall include a comprehensive statement on drawing and calculations submitted for approval. The position on material procurement shall give the date and details of orders placed and indicate the delivery date quoted by the manufacturer. If any delivery date has an adverse effect on the contract programme the Contractor shall state the remedial action taken to ensure that delays do not occur. The position on manufacture shall indicate the arrival of material, the progress of manufacture and date at which the equipment will be ready for transport. Any events that may adversely affect completion in the manufacturer's works shall also be reported. All works, tests executed shall be listed and the test-results shall be remarked upon. Any test failures shall be highlighted, and the Contractor shall detail the necessary steps taken in order to avoid any adverse effect on the contract completion dates. The despatch of each order shall be monitored on the progress report giving the date by which the equipment will be available for transport, the estimated time of arrival on site and the dates actually achieved. The site works shall be segregated into civil, mechanical and electrical works for reporting purposes and each section of the site works shall be monitored giving the percentage completion and the estimated completion date in accordance with the contract programme. The number of men working on site, both labour and supervisory staff, shall be reported together with any incidents or events that may affect the progress of site works.

Any delays which may affect any milestone or final completion dates shall be detailed by the Contractor who shall state the action taken to effect contract completion in accordance with the contract programme.

The contractor shall provide two copies of the progress report to AEGCL office. All other activities listed in other sections of tender document also shall be provided.

3.6.0 Standards

Except where otherwise specified or implied, the Contract Works shall comply with the latest edition of the relevant Indian Standards, International Electro technical Commission (IEC) standards and any other standards mentioned in this Specification. The Contractor may submit for approval, equipment or materials conforming to technically equivalent National Standards. In such cases copies of the relevant Standards or part thereof, in the English language shall be submitted with the tender. In case of conflict the order of precedence shall be (1) IEC, (2) IS and (3) another alternative standard.

The supply and erection requirements and procedures to be followed during the installation of the equipment shall be in accordance with the relevant Indian/International Standards/Regulations, ASME codes, accepted good engineering practice, drawings and other applicable Indian codes and laws and regulations.

Reference to a particular standard or recommendation in this Specification does not relieve the Contractor of the necessity of providing the Contract Works complying with other relevant standards or recommendations.

The list of standards provided in the Chapter 1 of this Specification is not to be considered exhaustive and the Contractor shall ensure that equipment supplied under this contract meets the requirements of the relevant standard whether or not it is mentioned therein.

3.7.0 Language and System of Units

The English language shall be used in all written communications between the Employers, AEGCL and the Contractor with respect to the services to be rendered and with respect to all documents and drawings procured or prepared by the Contractor pertaining to the work, unless otherwise agreed by the Employer.

It is required that danger plates, equipment designation labels or plates, instruction notices on plant and general substation notices be written in English. Control switch and lamp labels, indicator lamp and annunciator inscriptions shall be in English only.

The design features of all equipment shall be based on the SI system of units.

Mass and size of parts and quantities of oil

The mass and dimensions of any item of equipment shall not exceed the figures stated in the Schedules. Each item shall be labelled to indicate its mass, quantity of oil (if any) and any special handling instructions.

3.8.0 General Requirements

Bolts and nuts

All bolts, studs, screw threads, pipe threads, bolt heads and nuts shall comply with the appropriate national standards for metric threads, or the technical equivalent.

Except for small wiring, current carrying terminal bolts or studs, for mechanical reasons, shall not be less than 6 mm in diameter.

All nuts and pins shall be adequately locked.

Wherever possible bolts shall be fitted in such a manner that in the event of failure of locking resulting in the nuts working loose and falling off, the bolt will remain in position.

All bolts, nuts and washers placed in outdoor positions shall be treated to prevent corrosion, by hot dip galvanising or electro galvanising to service condition 4. Appropriate precautions shall be taken to prevent electrolytic action between dissimilar metals.

Where bolts are used on external horizontal surfaces where water can collect, methods of preventing the ingress of moisture to the threads shall be provided.

Each bolt or stud shall project at least one thread but not more than three threads through its nut, except when otherwise approved for terminal board studs or relay stems. If bolts and nuts are placed so that they are inaccessible by means of ordinary spanners, special spanners shall be provided.

The length of the screwed portion of the bolts shall be such that no screw thread may form part of a shear plane between members.

Taper washers shall be provided where necessary.

Protective washers of suitable material shall be provided front and back on the securing screws.

3.9.0 General

All machining, drilling, welding, engraving, scribing or other manufacturing activities which would damage the final surface treatment shall be completed before the specified surface treatment is carried out.

3.9.1 Galvanising

All metal surfaces shall be subjected to treatment for anti-corrosion protection. All ferrous surfaces for external use shall be hot dip galvanised. High tensile steel nuts, bolts and spring washers shall be electro galvanised to service condition 4. All steel conductors including those used for earthing and grounding (above ground level) shall also be galvanised according to IS 2629.

All galvanising shall be applied by the hot dip process and shall comply with IS 2629, IS 2633, IS 4759, IS 1367 or IS 6745.

All welds shall be de-scaled, all machining carried out and all parts shall be adequately cleaned prior to galvanising. The preparation for galvanising and the galvanising itself shall not adversely affect the mechanical properties of the coated material.

The threads of all galvanised bolts and screwed rods shall be cleared of spelter by spinning or brushing. A die shall not be used for cleaning the threads unless specially approved by AEGCL. All nuts shall be galvanised with the exception of the threads which shall be oiled. Surfaces which are in contact with oil shall not be galvanised or cadmium plated.

Partial immersion of the work will not be permitted, and the galvanising tank must therefore be sufficiently large to permit galvanising to be carried out by one immersion.

Galvanising of wires shall be applied by the hot dip process and shall meet the requirements of IS 2141.

The minimum weight of the zinc coating shall be 610 gm/sq. m. and minimum thickness of coating shall be 86 microns for all items thicker than 5 mm. For items of less than 5 mm thickness requirement of coating thickness shall be as per BS 729. For surface which shall be embedded in concrete, the zinc coating shall be a minimum of 800 gm/sq. m.

The galvanised surfaces shall consist of a continuous and uniform thick coating of zinc, firmly adhering to the surface of steel. The finished surface shall be clean and smooth and shall be free from defects such as discoloured patches, bare spots, unevenness of coating, spelter which is loosely attached to the steel globules, spiky deposits, blistered surface, flaking or peeling off, etc. The presence of any of these defects noticed on visual or microscopic inspection shall render the material liable to rejection.

After galvanising no drilling or welding shall be performed on the galvanised parts of the equipment excepting that nut may be threaded after galvanising. Sodium dichromate treatment shall be provided to avoid formation of white rust after hot dip galvanisation.

The galvanised steel shall be subjected to six one-minute dips in copper sulphate solution as per IS 2633.

Sharp edges with radii less than 2.5 mm shall be able to withstand four immersions of the Standard Preece test. All other coatings shall withstand six immersions. The following galvanising tests should essentially be performed as per relevant Indian Standards.

- Coating thickness
- Uniformity of zinc
- Adhesion test
- Mass of zinc coating

Galvanised material must be transported properly to ensure that galvanised surfaces are not damaged during transit. Application of zinc rich paint at site shall not be allowed.

3.10.0 Cleaning, Painting And Topicalization

3.10.1 General

All paints shall be applied in strict accordance with the paint manufacturer's instructions.

All painting shall be carried out on dry and clean surfaces and under suitable atmospheric and other conditions in accordance with the paint manufacturer's recommendations.

An alternative method of coating equipment such as with epoxy resin-based coating powders will be permitted, subject to the approval of AEGCL, and such powders shall comply with the requirements of IEC 455. The Contractor shall provide full details of the coating process to AEGCL for approval.

It is the responsibility of the Contractor to ensure that the quality of paints used shall withstand the tropical heat and extremes of weather conditions specified in the schedules. The paint shall not peel off, wrinkle, be removed by wind, storm and handling on site and the surface finish shall neither rust nor fade during the service life of the equipment.

The colours of paints for external and internal surfaces shall be in accordance with the approved colour schemes.

3.10.2 Works painting processes

All steelworks, plant supporting steelworks and metalwork, except galvanised surfaces or where otherwise specified, shall be shot blasted to BS 7079 or the equivalent ISO standard. All sheet steel work shall be degreased, pickled, phosphated in accordance with the IS 6005 "Code of Practice for phosphating iron and sheet steel". All surfaces shall then be painted with one coat of epoxy zinc rich primer, two pack type, to a film thickness of 50 microns. This primer shall be applied preferably by airless spray and within twenty minutes but not exceeding one hour of shot blasting.

All rough surfaces of coatings shall be filled with an approved two pack filler and rubbed down to a smooth surface.

The interior surfaces of all steel tanks and oil filled chambers shall be shot blasted in accordance with BS 7079 or the equivalent ISO, and painted within a period of preferably twenty minutes, but not exceeding one hour with an oil resisting coating of a type and make to the approval of AEGCL.

The interior surfaces of mechanism chambers, boxes and kiosks, after preparation, cleaning and priming as required above, shall be painted with one coat zinc chromate primer, one coat phenolic based undercoating, followed by one coat phenolic based finishing paint to a light or white colour. For equipment for outdoor use this shall be followed by a final coat of anti-condensation paint of a type and make to the approval of AEGCL, to a light or white colour. A minimum overall paint film thickness of 150 microns shall be maintained throughout.

All steelworks and metalwork, except where otherwise specified, after preparation and priming as required above shall be painted with one coat metallic zinc primer and two coats of micaceous iron oxide paint followed by two coats of either phenolic based or enamel hard gloss finished coloured paint to the approval to an overall minimum paint film thickness of 150 microns.

Galvanised surfaces shall not be painted in the works.

All nuts, bolts, washers etc., which may be fitted after fabrication of the plant shall be painted as described above after fabrication.

The painted metal works shall be subjected to paint qualification test as per draft ANSI/IEEE-Std. 37.21-1985 clause 5.2.5.

3.10.3 Site painting

After erection at site, the interior surfaces of mechanism chambers and kiosks shall be thoroughly examined, and any deteriorated or mechanically damaged surfaces of such shall be made good to the full Specification described above.

After installation/erection at site all surfaces of steelworks and metalwork shall be thoroughly washed down. Any deteriorated or otherwise faulty paint-work removed down to bare metal and made good to the full Specification described above, then painted one further coat of phenolic based undercoating and one coat phenolic based hard gloss finishing paint to provide an overall minimum paint film thickness of 200 microns.

Any nuts, bolts, washers, etc., which have been removed during site erection, or which may be required to be removed for maintenance purposes shall be restored to their original condition.

All paint work shall be left clean and perfect on completion of the works.

6.12 Colour Schemes

The Contractor shall propose a colour scheme for the sub-station for the approval of AEGCL. The decision of AEGCL shall be final. The scheme shall include:

- Finishing colour of indoor equipment
- Finishing colour of outdoor equipment
- Finish colour of all cubicles
- Finishing colour of various auxiliary system equipment including piping.
- Finishing colour of various building items.

All steel structures, plates etc. shall be painted with non-corrosive paint on a suitable primer. It may be noted that normally all Employer's electrical equipment in Employer's switchyard are painted with shade 631 of IS: 5 and Employer will prefer to follow the same for this project also.

Appendix-1

BID SUBMISSION SHEET
(On The Applicant's Letter Head)

To,

The Deputy General Manager,
Lower Assam T&T Circle,
Assam Electricity Grid Corporation Limited
Narengi, Guwahati-26.

Sub:-

Bid Identification no. :

Sir,

Having examined the terms & conditions, technical specifications, detailed items of work etc. as well as acquainting myself/ourselves with site of work, surroundings to get the required materials etc., I am/we are to submit herewith my/our tender for the above mentioned work. My/our rates are quoted as per the specification laid down in the schedule of items of work, considering cost of design & preparation of structural drawing, materials, labours, haulage, taxes, royalty etc.

I /We clearly understand that all materials, tools and plants, machineries, labours, haulage etc. required in the work shall have to be arranged by me/us from my/our own resources in the events of allotment of the work to me/us.

I /We also clearly understand that in the event of acceptance/approved of my/our tender, the work shall have to be executed strictly as per specifications and the same shall have to be completed in all respects within the stipulated time failing which I am/We are liable to be penalized as per rules laid down in Tender document as well as agreement thereof.

My /Our Bid consisting of the Technical Bid and the Price Bid shall be valid for a period of days from the date fixed for the bid submission deadline in accordance with the Bidding Documents, and it shall remain binding upon us and may be accepted at any time before the expiration of that period

Name

In the capacity of

Signed

Duly authorized to sign the Bid for and on behalf of

Date

Appendix-2
PROFILE OF THE BIDDER

| Sl. No. | Particulars | To be filled by Bidder |
|-----------|---|---|
| a) | Name of the Bidder | :- |
| b) | Registration with Memorandum of Association | :- |
| c) | PAN | :- |
| d) | GST Registration number | :- |
| e) | Labour Licence registration | :- |
| f) | Electrical Licence registration | |
| g) | Employees Provident Fund (if available) | |
| h) | Employees State Insurance Certificate (if available) | |
| i) | Income Tax Clearance Certificate | :- |
| j) | Bank Solvency Certificate | :- |
| k) | Date of Establishment/ Incorporation | :- |
| l) | Postal Address | :- |
| | House No. | :- |
| | Lane | :- |
| | Street | :- |
| | Town/Village | :- |
| | Post Office | :- |
| | P.S. | :- |
| | District | :- |
| | Pin code | :- |
| m) | Telephone Number | :- |
| | Mobile No. | :- |
| | E-Mail Address | :- |
| | Website | :- |
| n) | Name(s) of the Owners/Directors/Partners | |
| o) | Name of the Banker with Address and Telephone Number | :- |
| p) | Contact Person Details <i>(Furnish here name of that person with whom AEGCL may get in touch for more information or clarifications)</i> | Name:- Designation:- Mobile Number:- Email Address:- |

Note: Bidder may attach additional sheets, if required.

Appendix-3

Form of Performance Security

Bank Guarantee

(To be stamped in accordance with Stamp Act)

Issuing bank and address with phone & email id:

BG no. and date:

BG expiry date:

Claim upto date:

To:

The Deputy General Manager,
Lower Assam T&T Circle,
AEGCL, Narengi, Guwahati-781026

WHEREAS _____ [*name and address of Contractor*] has undertaken, in pursuance of Contract No. (LoA No.) Dated (LoA date) to execute _____ [*name of Contract*] (hereinafter called "the Contract");

AND WHEREAS it has been stipulated by you in the said Contract that the contractor shall furnish you with a Bank Guarantee by a recognized/scheduled bank for the sum specified therein as security for compliance with its obligations in accordance with the Contract;

AND WHEREAS we have agreed to give the contractor such a Bank Guarantee;

NOW THEREFORE we hereby affirm that we are the Guarantor and responsible to you, on behalf of the contractor, up to a total of [*amount of Guarantee in figure*] [*amount in words*], such sum being payable in the currencies in which the Contract Price is payable, and we undertake to pay you, upon your first written demand 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 for the sum specified therein.

We hereby waive the necessity of your demanding the said debt from the Contractor/Manufacturer before presenting us with the demand.

We further agree that no change or addition to or other modification of the terms of the Contract or of the scope to be performed thereunder or of any of the Contract documents which may be made between you and the Contractor shall in any way release us from any liability under this guarantee, and we hereby waive notice of any such change, addition or modification.

BG shall be valid up to <date>.

Signature and Seal of the Guarantor _____
Name of Bank _____
Address _____
Date _____

Note:

1. *All italicized text is for use in preparing this form and shall be deleted from the final document. An amount is to be inserted by the Guarantor, representing the percentage of the Contract Price specified in the Contract.*
2. *This guarantee shall be valid upto 90 (ninety) days beyond the Warranty Period as per the Contract.*
3. *For BG amount equal to or more than 50,000.00, BG should be signed by two bank officers to be valid.*
4. *Address of the banker with email and phone number for correspondence with banker should be clearly mentioned. Any correspondence related to the BG with the banker shall be made to the address mentioned in the BG.*