#### **BIDDING DOCUMENT**

FOR

CONSTRUCTION OF GAURD FOR 220KV SARUSAJAI-AGIA D/C LINE SECTION PASSING THROUGH DPS CAMPUS, AHOMGAON UNDER DEPOSIT SCHEME.



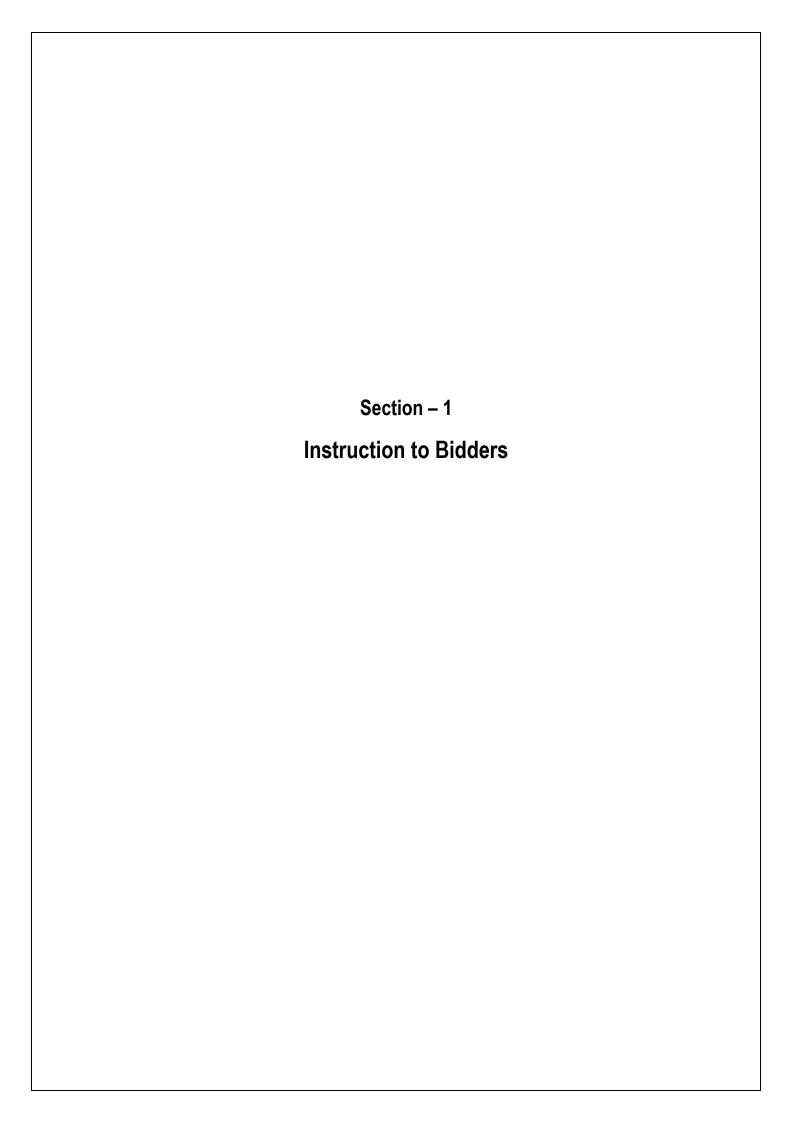
# ASSAM ELECTRICITY GRID CORPORATION LIMITED

## BID IDENTIFICATION NO: AEGCL/MD/DEPOSIT/TL-2(Pt-III)/2017/01

Date: 22.02.2017

Managing Director
Assam Electricity Grid Corporation Limited.
Bijulee Bhawan, Paltan Bazar, Guwahati-1

	MAIN CONTENTS	
Section – 1	Instruction to Bidders	1
Section –2	Bidding Forms	21
Section - 3	Employer's Requirements	48



### **Section 1 - Instructions to Bidders**

This section specifies the procedures to be followed by Bidders in the preparation and submission of their Bids. Information is also provided on the submission, opening, and evaluation of bids and on the award of contract.

#### **Table of Clauses**

1.1.0 Genera	1	3
1.1.1	Scope of Bid	3
1.1.2	<b>-</b>	3
1.2.0 Conter	its of Bidding Document	3
1.2.1		3
1.2.2	•	4
1.2.3	Amendment of Bidding Document	4
1.3.0 Prepar	ation of Bids	4
1.3.1	Cost of Bidding	4
1.3.2	Language of Bid	5
	Documents Comprising the Bid	5
1.3.4	Letter of Bid and Schedules	
1.3.5	Documents Establishing the Eligibility and Qualifications of the Bidder	5 5
1.3.6	Documents Establishing Conformity of the Plant and Services	5
1.3.7	Subcontractors	6
1.3.8	Bid Prices and Discounts	6
1.3.9	Period of Validity of Bids	7
1.3.10	Bid Security	7
1.3.11	Format and Signing of Bid	7
1.4.0 Submis	ssion and Opening of Bids	8
1.4.1	Submission, Sealing and Marking of Bids	8
1.4.2	Deadline for Submission of Bids	8
1.4.3	Late Bids	8
1.4.4	Withdrawal, Substitution, and Modification of Bids	8
1.4.5		8
1.5.0 Evalua	tion and Comparison of Bids	9
1.5.1	Confidentiality	9
1.5.2	Clarification of Bids	9
1.5.3	Deviations, Reservations, and Omissions	10
1.5.4	Preliminary Examination of Technical Bids	10
1.5.5	Responsiveness of Technical Bid	10
1.5.6	Nonmaterial Nonconformities	10
1.5.7	Detailed Evaluation of Technical Bids	11
1.5.8	Eligibility and Qualification of the Bidder	11
1.5.9	Correction of Arithmetical Errors	11
1.5.10	Evaluation of Price Bids	12
1.5.11	Comparison of Bids	12
1 5 12	Employer's Right to Accept Any Bid, and to Reject Any or All Bids	12

Saction	1 _	Instructions	· to E	2idda

1.6.0 Award	of Contract		12
1.6.2 1.6.3	Award Criteria Notification of A Signing of Conf Performance Se	tract	12 12 12 12
APPENDIX	TO ITB - 1:	Bid Data Sheet	14
<b>APPENDIX</b>	TO ITR - 2	Evaluation and Qualification Criteria	16

#### Section 1 - Instructions to Bidders

#### 1.1.0 General

#### 1.1.1. Scope of Bid

- 1.1.1.1. In support of the Invitation for Bids indicated in the Bid Data Sheet (BDS), the *Managing Director* on behalf of *Assam Electricity Grid Corporation Limited (AEGCL)* (hereinafter referred to as "the Purchaser"), issues this Bidding Document for the supply of Goods and Related Services incidental thereto as specified in Section 2 (Employer's Requirements). The name and identification no. of this Competitive Bidding are provided in the in the Bid Data Sheet (BDS) attached as Appendix to ITB-1 of this Section.
- 1.1.1.2. Unless otherwise stated, throughout this Bidding Document definitions of terms shall be as prescribed in **Section 4** (Special Conditions of Contract).

#### 1.1.2. Eligible Bidders

- 1.1.2.1. A Bidder may be a firm or company registered in India. When the bidder is a firm, the names and address of the partners should be indicated and a copy of the certificate of registration with the concerned Registrar of firms should be enclosed with the Bid.
- 1.1.2.2. When the bidder is a Company, the company registration document along with Memorandum of Association should be submitted.
- 1.1.2.3. When the bidder is an individual carrying on business in a firm's name, the tender should be submitted by the owner of the firm, who may describe himself as carrying on business in the firm's name.
- 1.1.2.4. When the bidder is a Joint Venture (JV) of two or more firms as partners, all partners shall be jointly and severally liable. The JV shall legally authorized one of the partners as the lead partner for the purpose of submitting the bid, incur liabilities; receive payments and instructions on behalf of the others. A copy of the registered JV agreement, executed on Non judicial stamp paper, shall be submitted with the bid.
- 1.1.2.5. However, in case of successful bid, the agreement shall be signed by all the partners, so as to be legally binding on all the partners.
- 1.1.2.6. Joint Venture agreement must be registered in the court of law. Notarised joint venture agreement shall not be acceptable.

#### 1.2.0 Contents of Bidding Document

#### 1.2.1. Sections of Bidding Document

1.2.1.1. The Bidding Document consists of Parts 1, 2, and 3, which include all the Sections indicated below, and should be read in conjunction with any Addenda issued in accordance with ITB *Clause 1.2.3*.

Section 1 - Instructions to Bidders (ITB) with Appendix-1 and Appendix-2

Section 2 - Bidding Forms (BDF)

Section 3 - Employer's Requirements (ERQ)

Section 4 - "General Conditions of Supply and Erection of AEGCL"

(This section is supplied separately)

Section 5- Special Conditions of Contract (SCC)

Section 6 - Contract Forms (COF)

- 1.2.1.2. The completed Section 6 and other documents as specified in Section-6 shall constitute "the Contract".
- 1.2.1.3. The Invitation for Bids issued by the Employer is not part of the Bidding Document.
- 1.2.1.4. The Employer is not responsible for the completeness of the Bidding Document and its addenda, if they were not obtained directly from the source stated by the Employer in the Invitation for Bids.

1.2.1.5. The Bidder is expected to examine all instructions, forms, terms, and specifications in the Bidding Document. Failure to furnish all information or documentation required by the Bidding Document may result in the rejection of the bid.

#### 1.2.2. Clarification of Bidding Document, Site Visit, Pre-Bid Meeting

- 1.2.2.1. A prospective Bidder requiring any clarification of the Bidding Document shall contact the Employer in writing at the Employer's address indicated in the BDS or raise his enquiries during the pre-bid meeting if provided for in accordance with ITB Clause 1.2.2.4. The Employer will respond to any request for clarification, provided that such request is received no later than seven (7) days prior to the deadline for submission of bids. The Employer's response shall be in writing with copies to all Bidders who have acquired the Bidding Document in accordance with ITB Clause 1.2.1.4, including a description of the inquiry but without identifying its source. Should the Employer deem it necessary to amend the Bidding Document as a result of a request for clarification, it shall do so following the procedure under ITB Clause 1.2.3 and ITB Clause 1.4.2.2.
- 1.2.2.2. The Bidder is advised to visit and examine the site where the works are to be carried out and its surroundings and obtain for itself on its own responsibility all information that may be necessary for preparing the bid and entering into a contract for the provision of plant and services. The costs of visiting the site shall be at the Bidder's own expense.
- 1.2.2.3. The Bidder and any of its personnel or agents will be granted permission by the Employer to enter upon its premises and lands for the purpose of such visit, but only upon the express condition that the Bidder, its personnel, and agents will release and indemnify the Employer and its personnel and agents from and against all liability in respect thereof, and will be responsible for death or personal injury, loss of or damage to property, and any other loss, damage, costs, and expenses incurred as a result of the inspection.
- 1.2.2.4. The Bidder's designated representative is invited to attend a pre-bid meeting, if provided for in the **BDS**. The purpose of the meeting will be to clarify issues and to answer questions on any matter that may be raised at that stage.
- 1.2.2.5. The Bidder is requested, as far as possible, to submit any questions in writing, to reach the Employer not later than **one week** before the pre-bid meeting.
- 1.2.2.6. Minutes of the pre-bid meeting, including the text of the questions raised, without identifying the source, and the responses given, together with any responses prepared after the meeting, will be transmitted promptly to all Bidders who have acquired the Bidding Document in accordance with *ITB Clause 1.2.1.4*. Any modification to the Bidding Document that may become necessary as a result of the pre-bid meeting shall be made by the Employer exclusively through the issue of an Addendum pursuant to *ITB Clause 1.2.3* and not through the minutes of the pre-bid meeting.
- 1.2.2.7. Nonattendance at the pre-bid meeting will not be a cause for disgualification of a Bidder.

#### 1.2.3. Amendment of Bidding Document

- 1.2.3.1. At any time prior to the deadline for submission of bids, the Employer may amend the Bidding Document by issuing addenda.
- 1.2.3.2. Any addendum issued shall be part of the Bidding Document and shall be communicated in writing to all who have obtained the Bidding Document from the Employer in accordance with *ITB Clause 1.2.1.4*.
- 1.2.3.3. To give prospective Bidders reasonable time in which to take an addendum into account in preparing their bids, the Employer may, at its discretion, extend the deadline for the submission of bids, pursuant to *ITB Clause* 1.4.2.2.
- 1.3.0 Preparation of Bids
- 1.3.1. Cost of Bidding

1.3.1.1. The Bidder shall bear all costs associated with the preparation and submission of its Bid, and the Employer shall not be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process.

#### 1.3.2. Language of Bid

1.3.2.1. The Bid, as well as all correspondence and documents relating to the bid exchanged by the Bidder and the Employer, shall be written in the English language. Supporting documents and printed literature that are part of the Bid may be in another language provided they are accompanied by an accurate translation of the relevant passages into the English language, in which case, for purposes of interpretation of the Bid, such translation shall govern.

#### 1.3.3. Documents Comprising the Bid

- 1.3.3.1. The Bid shall comprise two bids submitted online simultaneously, one called the 'Technical Bid' containing the documents listed in *ITB Clause 1.3.3.2* and the other the **Price Bid** containing the documents listed in *ITB Clause 1.3.3.3*.
- 1.3.3.2. Online Technical Bid submitted by the Bidder shall comprise the following:
  - (a) Letter of Technical Bid;
  - (b) Bid Security, in accordance with IFB & ITB Clause 1.3.10;
  - (c) Written confirmation authorizing the signatory of the Bid to commit the Bidder, in accordance with *ITB Clause 1.3.11.2*;
  - (d) Documentary evidence in accordance with *ITB Clause 1.3.5* establishing the Bidder's eligibility and qualifications to perform the contract if its Bid is accepted;
  - (e) Documentary evidence establishing in accordance with *ITB Clause 1.3.6* that the plant and services offered by the Bidder conform to the Bidding Document;
  - (f) Documents as called for in *ITB Clauses 1.1.2.1, 1.1.2.2*, and *1.1.2.3*;
  - (g) List of manufacturer/subcontractors, in accordance with *ITB Clauses 1.3.7.1*; and
  - (h) any other document required in the **BDS**.
- 1.3.3.3. Online Price Bid submitted by the Bidder shall comprise the following:
  - (a) Letter of Price Bid;
  - (b) completed schedules as required, including Price Schedules, in accordance with *ITB Clauses 1.3.4* and *1.3.8*; and
  - (c) any other document required in the BDS

#### 1.3.4. Letter of Bid and Schedules

1.3.4.1. The Letters of Technical Bid and Price Bid, and the Schedules, and all documents listed under *ITB*Clause 1.3.3, shall be prepared using the relevant forms furnished in Section 2 (Bidding Forms). The forms must be completed without any alterations to the text, and no substitutes shall be accepted. All blank spaces shall be filled in with the information requested.

#### 1.3.5. Documents Establishing the Eligibility and Qualifications of the Bidder

1.3.5.1. To establish its eligibility and qualifications to perform the Contract in accordance with Appendix 2 of ITB (Evaluation and Qualification Criteria), the Bidder shall provide the information requested in the corresponding information sheets included in Section 2 (Bidding Forms).

#### 1.3.6. Documents Establishing Conformity of the Plant and Services

1.3.6.1. The documentary evidence of the conformity of the plant and services to the Bidding Document may be in the form of literature, drawings and data, and shall furnish:

- (a) a detailed description of the essential technical and performance characteristics of the plant and services, including the functional guarantees of the proposed plant and services, in response to the Specification;
- (b) a commentary on the Employer's Specification and adequate evidence demonstrating the substantial responsiveness of the plant and services to those specifications. Bidders shall note that standards for workmanship, materials and equipment designated by the Employer in the Bidding Document are intended to be descriptive (establishing standards of quality and performance) only and not restrictive. The Bidder may substitute alternative standards, brand names and/or catalog numbers in its bid, provided that it demonstrates to the Employer's satisfaction that the substitutions are substantially equivalent or superior to the standards designated in the Specification.

#### 1.3.7. Subcontractors

- 1.3.7.1. For major items of plant & equipment and services as listed by the Employer in Appendix 2 (Evaluation and Qualification Criteria), which the Bidder intends to purchase or subcontract, the Bidder shall give details of the name and addresses of the proposed Subcontractors, including manufacturers, for each of those items. In addition, the Bidder shall include in its bid information establishing compliance with the requirements specified by the Employer for these items. Bidders are free to list more than one Subcontractor against each item of the plant and services. Quoted rates and prices will be deemed to apply to whichever Subcontractor is appointed, and no adjustment of the rates and prices will be permitted.
- 1.3.7.2. The Bidder shall be responsible for ensuring that any plant or services to be provided by the Subcontractor comply with the requirements of *ITB Clause 1.3.5.1*.

#### 1.3.8. Bid Prices and Discounts

- 1.3.8.1. Unless otherwise specified in the BDS and/or Section 3 (Employer's Requirements), bidders shall quote for the entire plant & equipment 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 design, manufacture, including procurement and subcontracting (if any), delivery, construction, installation and completion of the plant. This includes all requirements under the Contractor's responsibilities for testing, pre-commissioning and commissioning of the plant 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.
- 1.3.8.2. Bidders are required to quote the price for the commercial, contractual and technical obligations outlined in the bidding document. No deviation in this regard normally, shall be accepted.
- 1.3.8.3. Bidders shall give a breakdown of the prices in the manner and detail called for in the Price Schedules included in Section 2 (Bidding Forms).
- 1.3.8.4. Bidders shall note that the plant and equipment included in Schedule Nos. 1 excludes materials used for civil, foundation and other construction works and other minor items. All such materials/items shall be included and priced under Schedule No. 2, Installation and Other Services.
- 1.3.8.5. In the Schedules, bidders shall give the required details and a breakdown of their prices as called for in these Schedules.
- 1.3.8.6. Installation and other Services shall be quoted in Schedule No. 2 and 2A and shall include prices for all labor, contractor's equipment, temporary works, construction or other materials/ minor items not specified in Schedule-1, consumables and all other matters and things of whatsoever nature, including operations and maintenance services, the provision of operations and maintenance manuals, training, etc., where identified in the Bidding Document, as necessary for the proper execution of the installation and other services. The prices of Installation and other services shall be inclusive of all taxes, like service taxes,

work contract taxes etc. and sales & other taxes applicable on all materials/items supplied under Schedule No. 2 and 2A.

- 1.3.8.7. The prices shall be either fixed or adjustable as specified in the **BDS**.
  - (a) In the case of Fixed Price, 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 quotation will be treated **as non-responsive and rejected**.
  - (b) In the case of Adjustable Price, prices quoted by the Bidder shall be subject to adjustment during performance of the contract to reflect changes in the cost elements such as labor, material, transport and contractor's equipment in accordance with the procedures specified in the corresponding Appendix to the Contract Agreement. A bid submitted with a fixed price quotation will not be rejected, but the price adjustment will be treated as zero. Bidders are required to indicate the source of labor and material indices in the corresponding Form in Section 2 (Bidding Forms).

#### 1.3.9. Period of Validity of Bids

- 1.3.9.1. Bids shall remain valid for the period specified in the BDS after the bid submission deadline date prescribed by the Employer. A bid valid for a shorter period shall be rejected by the Employer as non-responsive.
- 1.3.9.2. In exceptional circumstances, prior to the expiration of the bid validity period, the Employer may request Bidders to extend the period of validity of their bids. The request and the responses shall be made in writing. If a bid security is requested in accordance with *ITB Clause 1.3.10*, it shall also be extended for a corresponding period. A Bidder may refuse the request without forfeiting its bid security. A Bidder granting the request shall not be required or permitted to modify its bid.

#### 1.3.10. Bid Security

- 1.3.10.1. The Bidder shall furnish as part of its bid, in original form, either a Bid Security as specified in the **BDS**. The amount of Bid Security shall be as specified in the **BDS**.
- 1.3.10.2. The bid security shall be a demand guarantee, in the forms of an unconditional bank guarantee from a Scheduled or Nationalized Bank. The bid security shall be submitted using the 'Bid Security Form' included in Section 3 (Bidding Forms). The form must include the complete name of the Bidder. The bid security shall be valid for thirty days (30) beyond the original validity period of the bid, or beyond any period of extension if requested under *ITB Clause 1.3.9.2*.
- 1.3.10.3. Bids not complying with *ITB Clause* 1.3.10.1 and *ITB Clause* 1.3.10.2, *shall be rejected* by the Employer as *non-responsive*.
- 1.3.10.4. The bid security of the successful Bidder shall be returned as promptly as possible once the successful Bidder has signed the Contract and furnished the required performance security.
- 1.3.10.5. The bid security of unsuccessful Bidders shall be returned as promptly as possible upon the successful Bidder's furnishing of the performance security pursuant to *ITB Clause 1.6.4*.
- 1.3.10.6. The bid security may be forfeited:
  - (a) if a Bidder withdraws its bid during the period of bid validity specified by the Bidder on the Letter of Bid Form, except as provided in *ITB Clause 1.3.9.2* or
  - (b) if the successful Bidder fails to:
    - (i) sign the Contract in accordance with *ITB Clause 1.6.1*; or
    - (ii) furnish a performance security in accordance with *ITB Clause 1.6.2*.
- 1.3.10.7. The Bid Security of a JV shall be in the name of the JV that submits the bid.

#### 1.3.11. Format and Signing of Bid

1.3.11.1. The Bidder shall prepare one original of the Technical Bid and one original of the Price Bid comprising the Bid as described in *ITB Clause* 1.3.3 and clearly mark it "ORIGINAL - TECHNICAL BID" and "ORIGINAL -

- PRICE BID". In addition, the Bidder shall submit copies of the bid, in the number specified in the **BDS** and clearly mark each of them "COPY" In the event of any discrepancy between the original and the copies, the original shall prevail.
- 1.3.11.2. The original and all copies of the Bid shall be typed or written in indelible ink and shall be signed by a person 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 where entries or amendments have been made shall be signed or initialed by the person signing the bid.
- 1.3.11.3. A bid submitted by a JV shall be signed so as to be legally binding on all partners.
- 1.3.11.4. Any interlineations, erasures, or overwriting shall be valid only if they are signed or initialed by the person signing the bid.

#### 1.4.0 Submission and Opening of Bids

- 1.4.1. Submission, Sealing and Marking of Bids
- 1.4.1.1. Bidders must submit their bid online. Procedures for online submission of bid are in accordance with **IFB** & as given in the portal.
- 1.4.1.2. Bidders submitting bids online shall upload scanned copy of the original and each copy of the Bid, The rest of the procedure shall be in accordance with **IFB**.
- 1.4.2. Deadline for Submission of Bids
- 1.4.2.1. Bids must be submitted online on stipulated time and no bid can be accepted by the system after expiry of closing time.
- 1.4.2.2. The Employer may, at its discretion, extend the deadline for the submission of bids by amending the Bidding Document in accordance with *ITB Clause 1.2.3*, in which case all rights and obligations of the Employer and Bidders previously subject to the deadline shall thereafter be subject to the deadline as extended.

#### 1.4.3. Late Bids

- 1.4.3.1. No bid can be submitted online after expiry of the stipulated time & date.
- 1.4.4. Withdrawal, Substitution, and Modification of Bids
- 1.4.4.1. A Bidder may withdraw, substitute, or modify its bid before closing date & time.
  - (a) prepared and submitted in accordance with IFB Clause 2.0.
  - (b) received by the Employer prior to the deadline prescribed for submission of bids, in accordance with *ITB Clause 1.4.2*.
- 1.4.4.2. Bids requested to be withdrawn in accordance with *ITB Clause 1.4.2.1* shall be returned unopened to the Bidders.
- 1.4.4.3. No bid may be withdrawn, substituted, or modified in the interval between the deadline for submission of bids and the expiration of the period of bid validity specified by the Bidder on the Letter of Technical Bid or any extension thereof.

#### 1.4.5. Bid Opening

- 1.4.5.1. The Employer shall conduct the opening of Technical Bids in the presence of Bidders' designated representatives who choose to attend, and at the address, date and time specified in the *BDS*. The Price Bids will remain unopened and will be held in custody of the Employer until the specified time of their opening.
- 1.4.5.2. Technical Bids 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 Employer may consider appropriate.

Only Technical Bids and alternative Technical Bids read out and recorded at bid opening shall be considered for evaluation. No Bid shall be rejected at the opening of Technical Bids except for late bids, in accordance with *ITB Sub-Clause 1.4.3.1*.

- 1.4.5.3. The Employer shall prepare a record of the opening of Technical Bids that shall include, as a minimum: the name of the Bidder and whether there is a withdrawal, substitution, or modification; and alternative proposals; and the presence or absence of a bid security or a bid securing declaration, if one was required. The Bidders' representatives who are present shall be requested to sign the record. The omission of a Bidder's signature on the record shall not invalidate the contents and effect of the record.
- 1.4.5.4. At the end of the evaluation of the Technical Bids, the Employer will invite bidders who have submitted substantially responsive Technical Bids and who have been determined as being qualified for award to attend the opening of the Price Bids. The date, time, and location of the opening of Price Bids will be advised in writing by the Employer. Bidders shall be given reasonable notice of the opening of Price Bids.
- 1.4.5.5. The Employer shall conduct the opening of Price Bids of all Bidders who submitted substantially responsive Technical Bids, in the presence of Bidders' representatives who choose to attend at the address, date and time specified by the Employer. The Bidder's representatives who are present shall be requested to sign a register evidencing their attendance.
- 1.4.5.6. All Price Bids 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 Bid Prices, including any discounts and alternative offers; and
  - d) any other details as the Employer may consider appropriate.

Only Price Bids, discounts, and alternative offers read out and recorded during the opening of Price Bids shall be considered for evaluation. No Bid shall be rejected at the opening of Price Bids.

1.4.5.7. The Employer shall prepare a record of the opening of Price Bids that shall include, as a minimum: the name of the Bidder, the Bid Price (per lot if applicable), any discounts, and alternative offers. The Bidders' representatives who are present shall be requested to sign the record. The omission of a Bidder's signature on the record shall not invalidate the contents and effect of the record.

#### 1.5.0 Evaluation and Comparison of Bids

#### 1.5.1. Confidentiality

- 1.5.1.1. Information relating to the evaluation of bids and recommendation of contract award shall not be disclosed to Bidders or any other persons not officially concerned with such process.
- 1.5.1.2. Any attempt by a Bidder to influence the Employer in the evaluation of the bids or Contract award decisions may result in the rejection of its bid.
- 1.5.1.3. Notwithstanding *ITB Clause* 1.5.1.2, from the time of bid opening to the time of Contract award, if any Bidder wishes to contact the Employer on any matter related to the bidding process, it should do so in writing.

#### 1.5.2. Clarification of Bids

1.5.2.1. To assist in the examination, evaluation, and comparison of the Technical and Price Bids, and qualification of the Bidders, the Employer may, at its discretion, ask any Bidder for a clarification of its bid. Any clarification submitted by a Bidder that is not in response to a request by the Employer shall not be considered. The Employer's request for clarification and the response shall be in writing. No change in the substance of the Technical Bid or prices in the Price Bid shall be sought, offered, or permitted, except to confirm the correction

- of arithmetic errors discovered by the Employer in the evaluation of the bids, in accordance with *ITB Clause* **1.5.9**.
- 1.5.2.2. If a Bidder does not provide clarifications of its bid by the date and time set in the Employer's request for clarification, its bid may be rejected.

#### 1.5.3. Deviations, Reservations, and Omissions

- 1.5.3.1. During the evaluation of bids, the following definitions apply:
  - a) "Deviation" is a departure from the requirements specified in the Bidding Document;
  - b) "Reservation" is the setting of limiting conditions or withholding from complete acceptance of the requirements specified in the Bidding Document; and
  - c) "Omission" is the failure to submit part or all of the information or documentation required in the Bidding Document.

#### 1.5.4. Preliminary Examination of Technical Bids

- 1.5.4.1. The Employer shall examine the Technical Bid to confirm that all documents and technical documentation requested in *ITB Sub-Clause* 1.3.3.2 have been provided, and to determine the completeness of each document submitted. If any of these documents or information is missing, *the Bid may be rejected*.
- 1.5.4.2. The Employer shall confirm that the following documents and information have been provided in the Technical Bid. If any of these documents or information is missing, the offer **shall be rejected**.
  - a) Letter of Technical Bid;
  - b) written confirmation of authorization to commit the Bidder;
  - c) Bid Security, if applicable; and
  - d) Technical Proposal in accordance with ITB 1.3.7.

#### 1.5.5. Responsiveness of Technical Bid

- 1.5.5.1. The Employer's determination of a bid's responsiveness is to be based on the contents of the bid itself, as defined in *ITB Clause 1.3.3*.
- 1.5.5.2. A substantially responsive Technical Bid is one that meets the requirements of the Bidding Document without material deviation, reservation, or omission. A material deviation, reservation, or omission is one that,
  - a) if accepted, would:
    - (i). affect in any substantial way the scope, quality, or performance of the plant and services specified in the Contract; or
    - (ii). limit in any substantial way, inconsistent with the Bidding Document, the Employer's rights or the Bidder's obligations under the proposed Contract; or
  - b) if rectified, would unfairly affect the competitive position of other Bidders presenting substantially responsive bids.
- 1.5.5.3. The Employer shall examine the technical aspects of the Bid submitted in accordance with *ITB Clause 1.3.7*, Technical Proposal, in particular to confirm that all requirements of Section 3 (Employer's Requirements) have been met without any material deviation or reservation.
- 1.5.5.4. If a bid is not substantially responsive to the requirements of the Bidding Document, it shall be rejected by the Employer and may not subsequently be made responsive by correction of the material deviation, reservation, or omission.

#### 1.5.6. Nonmaterial Nonconformities

1.5.6.1. Provided that a Bid is substantially responsive, the Employer may waive any nonconformity in the bid that does not constitute a material deviation, reservation or omission.

- 1.5.6.2. Provided that a Bid is substantially responsive, the Employer may request that the Bidder submit the necessary information or documentation, within a reasonable period of time, to rectify nonmaterial nonconformities in the Bid related to documentation requirements. Requesting information or documentation on such nonconformities shall not be related to any aspect of the Price Bid. Failure of the Bidder to comply with the request may result in the rejection of its Bid.
- 1.5.6.3. Provided that a Bid is substantially responsive, the Employer shall rectify nonmaterial nonconformities related to the Bid Price. To this effect, the Bid Price shall be adjusted, for comparison purposes only, to reflect the price of a missing or non-conforming item or component. The adjustment shall be made using the method indicated in *Appendix 2 of ITB (Evaluation and Qualification Criteria)*.

#### 1.5.7. Detailed Evaluation of Technical Bids

- 1.5.7.1. The Employer will carry out a detailed technical evaluation of the bids not previously rejected as being substantially non-responsive, in order to determine whether the technical aspects are in compliance with the Bidding Document. In order to reach such a determination, the Employer will examine and compare the technical aspects of the bids on the basis of the information supplied by the bidders, taking into account the following:
  - a) overall completeness and compliance with the Employer's Requirements; deviations from the Employer's Requirements; conformity of the plant and services offered with specified performance criteria; suitability of the plant and services offered in relation to the environmental and climatic conditions prevailing at the site; and quality, function and operation of any process control concept included in the bid. The bid that does not meet minimum acceptable standards of completeness, consistency and detail will be rejected for non-responsiveness;
  - b) type, quantity and long-term availability of mandatory and recommended spare parts and maintenance services; and
  - c) other relevant factors, if any, listed in *Appendix to ITB-2 (Evaluation and Qualification Criteria*).

#### 1.5.8. Eligibility and Qualification of the Bidder

- 1.5.8.1. The Employer shall determine to its satisfaction during the evaluation of Technical Bids whether a Biddermeets the eligibility and qualifying criteria specified in *Appendix to ITB-*2 (Evaluation and Qualification Criteria).
- 1.5.8.2. The determination shall be based upon an examination of the documentary evidence of the Bidder's qualifications submitted by the Bidder, pursuant to *ITB Clause* 1.3.5.
- 1.5.8.3. An affirmative determination shall be a prerequisite for the opening and evaluation of a Bidder's Price Bid. A negative determination shall result into the disqualification of the Bid, in which event the Employer shall not open the Price Bid of the Bidder.
- 1.5.8.4. The capabilities of the manufacturers and subcontractors proposed in its Bid to be used by the Bidder will also be evaluated for acceptability in accordance with *Appendix to ITB-2* (Evaluation and Qualification Criteria). Their participation should be confirmed with a letter of intent between the parties, as needed. Should a manufacturer or subcontractor be determined to be unacceptable, the Bid will not be rejected, but the Bidder will be required to substitute an acceptable manufacturer or subcontractor without any change to the bid price. Prior to signing the Contract, the corresponding *Appendix to the Contract Agreement* shall be completed, listing the approved manufacturers or subcontractors for each item concerned.

#### 1.5.9. Correction of Arithmetical Errors

- 1.5.9.1. During the evaluation of Price Bids, the Employer shall correct arithmetical errors on the following basis:
  - a) where there are errors between the total of the amounts given under the column for the price breakdown and the amount given under the Total Price, the former shall prevail and the latter will be corrected accordingly:
  - b) where there are errors between the total of the amounts of Schedule Nos. 1, 2 and 2A and the amount given in Schedule No. 3 (Grand Summary), the former shall prevail and the latter will be corrected accordingly; and

- c) if there is a discrepancy between words and figures, the amount in words shall prevail, unless the amount expressed in words is related to an arithmetical error, in which case the amount in figures shall prevail subject to (a) and (b) above.
- 1.5.9.2. If the Bidder that submitted the lowest evaluated bid does not accept the correction of errors, its bid shall be disqualified and its bid security may be forfeited.

#### 1.5.10. Evaluation of Price Bids

- 1.5.10.1. The Employer shall use the criteria and methodologies listed in this Clause. No other evaluation criteria or methodologies shall be used.
- 1.5.10.2. To evaluate a Price Bid, the Employer shall consider the following:
  - a) the bid price, including taxes, as quoted in the Price Schedules;
  - b) price adjustment for correction of arithmetical errors in accordance with *ITB Clause 1.5.9.1*; and
  - c) the evaluation factors if any indicated in Appendix 2 (Evaluation and Qualification Criteria).
- 1.5.10.3. If price adjustment is allowed in accordance with *ITB Clause 1.3.8.7*, the estimated effect of the price adjustment provisions of the Conditions of Contract, applied over the period of execution of the Contract, shall not be taken into account in bid evaluation.

#### 1.5.11. Comparison of Bids

1.5.11.1. The Employer shall compare all substantially responsive Bids to determine the lowest evaluated bid, in accordance with *ITBClause* 1.5.10.2.

#### 1.5.12. Employer's Right to Accept Any Bid, and to Reject Any or All Bids

1.5.12.1. The Employer reserves the right to accept or reject any bid, and to annul the bidding process and reject all bids at any time prior to contract award, without thereby incurring any liability to Bidders. In case of annulment, all bids submitted and specifically, bid securities, shall be promptly returned to the Bidders.

#### 1.6.0 Award of Contract

#### 1.6.1. Award Criteria

1.6.1.1. The Employer shall award the Contract to the Bidder whose offer has been determined to be the lowest evaluated bid and is substantially responsive to the Bidding Document, provided further that the Bidder is determined to be eligible and qualified to perform the Contract satisfactorily.

#### 1.6.2. Notification of Award

- 1.6.2.1. Prior to the expiration of the period of bid validity, the Employer shall notify the successful Bidder, in writing, that its bid has been accepted. The notification letter (hereinafter and in the Conditions of Contract and Contract Forms called the "Letter of Acceptance") shall specify the sum that the Employer will pay the Contractor in consideration of the execution and completion of the plant and services (hereinafter and in the Conditions of Contract and Contract Forms called "the Contract Price").
- 1.6.2.2. Until a formal contract is prepared and executed, the notification of award shall constitute a binding Contract.

#### 1.6.3. Signing of Contract

- 1.6.3.1. Within 15 days of receipt of the Letter of Acceptance, the successful Bidder shall be required to sign the Contract Agreement.
- 1.6.3.2. The contract signing shall take place at the premises of the Employer.

#### 1.6.4. Performance Security

1.6.4.1. Within fifteen (15) days of the receipt of notification of award from the Employer, the successful Bidder shall furnish the performance security in accordance with the conditions of contract, using for that purpose the

- Performance Security Form included in *Appendix 4, Section 6 (Contract Forms)*, or another form acceptable to the Employer.
- 1.6.4.2. Failure of the successful Bidder to submit the above-mentioned Performance Security or sign the Contract shall constitute sufficient grounds for the annulment of the award and forfeiture of the bid security. In that event the Employer may award the Contract to the next lowest evaluated Bidder whose offer is substantially responsive and is determined by the Employer to be qualified to perform the Contract satisfactorily.

## APPENDIX TO ITB - 1 Bid Data Sheet

#### A. Introduction

ITB 1.1.1.1	The number of the Invitation for Bids is
	The Employer is: Assam Electricity Grid Corporation Limited.
	The name of the Bid is: Construction of Gaurd for 220kV Sarusajai-Agia D/C Line Passing through DPS Campus at Ahomgaon under Deposit Scheme
	The identification numbers of Bids are:

ITB 1.2.2.1	For <u>clarification purposes</u> only, the Employer's address is:
	Attention: The Managing Director, AEGCL Street Address: Bijulee Bhawan, Paltanbazar
	Floor/Room number: First Floor
	City: Guwahati
	PIN Code: <b>781001</b>
	Country: India
	Telephone: +91 361 2739520
	Facsimile number: +91 361 2739513
	Electronic mail address: corporate @aegcl.co.in
ITB 1.2.2.4	Employer may invite intending Bidders to a pre-bid meeting, if Employer feels it is necessary. The date and time of such pre-bid meeting shall be intimated to intending bidders in due course of time.

ITB 1.3.3.2(h)	The Bidder shall submit with its Technical Bid the following additional documents:							
	1. Guaranteed and other Technical Particulars as required in Section 3, 'Employer's							
	Requirements'							
	2. Type Test Certificates							
	3. Manufacturer's Authorization.							
ITB 1.3.8.1	Unless otherwise specifically indicated in the Section 3 (Employer's Requirements), bidders shall quote for the entire plant and services on 'single responsibility basis'.							
ITB 1.3.8.7	The prices quoted by the Bidder shall be <b>FIRM</b>							
ITB 1.3.9.1	The bid validity period shall be <b>180 (one hundred eighty)</b> days.							
ITB 1.3.10.1	The Bidder shall furnish a bid security in the amount of Rs. 92,000.00							
ITB 1.3.11.2	The written confirmation of authorization to sign on behalf of the Bidder shall consist of:							
	a) The written confirmation of Authorization to sign on behalf of the Bidder shall consist of							

Notarized Power of Attorney for both individual or joint venture bidders..

b) Bids submitted by Joint Venture or Consortium shall also include an undertaking signed by all the parties (I) stating that all parties shall be jointly and severally liable, and (II) nominating a Representative (to act as Lead Partner) who shall have the authority to conduct all business for and on behalf of any and all the parties of the JV during the bidding process and, in the event the JV is awarded the Contract, during contract execution.

c) Joint Venture agreement must be registered.

#### ITB 1.4.2.1 For <u>bid submission purposes</u> only, the Employer's address is

Attention: **The Managing Director, AEGCL**Street Address: **Bijulee Bhawan, Paltanbazar** 

Floor/Room number: First Floor

City: **Guwahati** PIN Code: **781001** 

The deadline for bid submission is

Date: 14.03.2017 Time:14.00 Hours

ITB 1.4.5.1 The bid opening of Technical Bids shall take place at

Office of The Managing Director, AEGCL Street Address: Bijulee Bhawan, Paltanbazar

Floor/Room number: First Floor

City: Guwahati (Assam)

Country: India
Date: 14.03.2017
Time: 15.00 Hours

PIN Code: 781001

### **APPENDIX TO ITB - 2 Evaluation and Qualification Criteria**

This Appendix contains all the criteria that the Employer shall use to evaluate bids and qualify Bidders. In accordance with ITB 1.5.7 and ITB 1.5.8, no other methods, criteria and factors shall be used. The Bidder shall provide all the information requested in the forms included in Section 2 (Bidding Forms).

#### **Table of Criteria**

1.	Evalu	uation	17
	1.1	Technical Evaluation	17
	1.2	Economic Evaluation	17
2.	Qua	lification	17
	2.1	Eligibility	17
	2.2	Pending Litigation	17
	2.3	Financial Situation	18
	2.4	Experience	18
	2.5	Personal	20
	2.6	Subcontractors/Manufacturers/Service Providers	21

Section 1 - Instructions to Bidder 17

#### 1. Evaluation

#### 1.1 Technical Evaluation

In addition to the criteria listed in ITB 1.5.7.1 (a) - (c) the following factors shall apply:

#### 1.2 Economic Evaluation

Any adjustments in price that result from the procedures outlined below shall be added, for purposes of comparative evaluation only, to arrive at an "Evaluated Bid Price." Bid prices quoted by bidders shall remain unaltered.

#### 1.2.1 Quantifiable Deviations and Omissions

Quantifiable Deviations and Omissions from the contractual obligations: No financial assessment shall be made by the Employer for deviations and omissions from the requirements of the Bidding Document. All such deviations, omissions or reservations shall be dealt with in accordance with ITB Clauses 1.5.5.2, 1.5.5.3, 1.5.5.4, 1.5.6.1, 1.5.6.2, 1.5.6.3, 1.5.7.1(a) and 1.5.9.

#### 1.2.2 Time Schedule

Time to complete Works from the Commencement Date specified in **Article 3** of the Contract Agreement for determining time for completion the works is **75 Days from the date of Site Hand Over.** Bids not meeting the above time schedule shall be rejected. However, no credit will be given for earlier completion.

#### 1.2.3 Specific additional criteria

No additional criteria shall be considered except those mentioned in clause **1.2** above.

#### 2. Qualification

#### 2.1 Eligibility

Criteria	(	Compliance R	equirements		Documents
		Joint Venture			
Requirement	Single Entity	All Partners Combined	Each Partner	At Least One Partner	Submission Requirements
2.1.1 Eligibility Requirements					
Requirement of document as per ITB Sub-Clause 1.1.2	Must meet requirement	Must meet requirement	Must meet requirement	Not applicable	Required documents as per ITB Sub-Clause 1.1.2

2.2 Pending Litigation

Criteria	C	Compliance R	equirements		Documents
		,	Joint Venture	!	Submission
Requirement	Single Entity	All Partners Combined	Each Partner	One Partner	Submission Requirements Form LIT - 1
All pending litigation shall be treated as resolved against the Bidder and so shall in total not represent more than 50% percent of the Bidder's net worth.	. ,	Not applicable	Must meet requirement by itself or as partner to past or existing JV	Not applicable	Form LIT - 1

Section 1 - Instructions to Bidder

#### 2.3 Financial Situation

Criteria	Compliance Requirements		Documents		
Requirement	Single Entity	All Partners Combined	Joint Ventu Each Partner	re One Partner	Submission Requirements

#### 2.3.1 Historical Financial Performance

Submission of audited balance sheets, for the last <b>3 (three)</b> years to demonstrate the current soundness of the Bidders financial position and its prospective long-term profitability. As a minimum, a Bidder's net worth calculated as the difference between total assets and	requirement	Not applicable	Must meet requirement	Not applicable	Form FIN - 1 with attachments
total liabilities should be positive.					

2.3.2 Average Annual Turnover

Minimum average annual turnover of Rs. 18,00,000.00 calculated as total certified payments received for contracts in progress or completed, within the last 3 years.	requirement		Must meet 25% of the requirement	Must meet 40% of the requirement (lead partner)	Form FIN - 2
--	-------------	--	--	--	--------------

#### 2.3.3 Financial Resources

Z.J.J Filialicial Resources					
Using Forms FIN – 3 and FIN - 4 in Section 4 (Bidding Forms) the Bidder must demonstrate access to, or availability of, financial resources such as liquid assets, unencumbered real assets, lines of credit, and other financial means, other than any contractual advance payments to meet:  (1) the following cash-flow requirement, Rs18,00,000.00 and  (2) the overall cash flow requirements for this contract and its current works commitment.	requirement	Must meet requirement	Must meet 25% of the requirement	Must meet 40% of the requirement (lead partner)	Form FIN - 3

2.4 Experience

Criteria	(	Documents				
		Jo	oint Venture		Submission	
Requirement	Single Entity	All Partners Combined	Each Partner	One Partner	Requirements	
2.4.1 General Experience						
Experience under contracts in the role of contractor, subcontractor, or management contractor in electrical works for at least the last <b>5</b> ( <b>five</b> ) years prior to the bid submission deadline.	Must meet requirement	Not applicable	Must meet requirement	Not applicabl	Form le EXP - 1	

#### 2.4.2 Specific Experience

#### (a) Contracts of Similar Size and Nature

If Any (Please Mention)	Must meet requirement	Not applicable	Not applicable	Not applicable	Form EXP - 2

(b) Experience in key Activities

(b) Experience in key Activities					
For the above or other contracts executed during the period stipulated in 2.4.2(a) above, a minimum experience in the following key activities:	QIII	must meet all requirements	not applicable	not applicable	Form EXP - 2(b)
The bidder must have completed all the service/work allotted are in successful operation for at least three years as on the date of bid opening. The bidder should list such works executed to substantiate the requirement of this Clause.  Note: If Bidder is not a manufacturer.					
/fabricator/designer, he must meet the requirement of <b>2.6</b>					

#### 2.5 Personal

The Bidder must demonstrate that it has the personnel for the key positions that meet the following requirements:

No.	Position	Total Work Experience [years]	Experience In Similar Work [years]
1	Design Engineer (Electrical): Experienced in detailed engineering and construction activities of transmission lines of 110 kV and above voltage class with similar facilities.	5	3
2	Civil Engineer: Experienced in detailed engineering, design and construction activities in 110 kV and above voltage class transmission lines.	5	3
3	Supervising Engineers/ Construction Supervisors: Experience in erection and commissioning of transmission lines of voltage class 110 kV and above.	5	3

#### 2.6 Additional Requirements:

a. Detailed list of tools, plants, equipment's and machinery available with the tenderer along with their

value (A copy of approved assessor's certificate to be enclosed or affidavit). Preference will be given to

those Contractors who have the following machinery -

(I) Earth excavator-1 No,

- (II) Dumper/tripper/Truck = 2 Nos
- (III) Mixer Machine contractor is appointed, and no adjustment of the rates and prices will be permitted.
- b. Name, qualifications of the technical supervisors and staff under the employment of the tenderer and organization on hand and proposed to be engaged for the subject work (Authenticated by a Chartered Accountant or sworn through affidavit).
- c. Other facilities available with the tenderer not covered hither to.
- c.1. Bidders(s) knowledge from actual personal investigation of the resources of the region or District (S) in which he/they offers the work.
- c.2. Copy of Contract labour license.
- c.3. The Bidder shall furnish copy of their PAN Card. The card must be in the name of firm, in case the tenderer is a partnership Firm.
- c.4. In case the tenderer is a partnership Firm, the work experience, solvency and turn over shall be in the name of partnership Firm only.
- c.5. GRN certificate/VAT registration No./WC-2 and valid labour license.
- c.6. Registered Power of attorney, if any.

#### d. Negotiation with successful bidder:

The AEGCL reserve the right to hold negotiations with lowest who should be lowest, valid, eligible and technically acceptable tenderer considered for award of contract directly if the rates were not unreasonably high.

#### e. Materials of Construction:

- e.1. The Bidder should confirm that the materials of construction will be as blow:
- (a) Cement Lafarge, Ultra Tech, Ambuja or approved brand of manufacture as per specification confirming to IS 269, 1970. (Cement grade to be specified as per the instance of work). The grade of cement shall not be less that M 20.
- (b) Reinforcement bars conforming to relevant IS Code for RCC works, (TMT bar).
- (c) Prior approval from Engineer-in-charge or his authorized representatives shall have to be obtained for utilization of cement/steel brought to the site.
- (d) Purchased documents of cement/steel shall have to be produced and kept in record in the contractor bill.
- (e) The cement/steel purchased from the authorised dealer of local market may be allowed to use after checking the quality.
- (f) Prior to construction BLOCK TEST is to be carried out and in case of any deviation from standard practice any work done will rejected and the contractor will have to reconstruct at his /their cost and labour.

#### 2.7 Contract Agreement:

2.7.1. An agreement shall have to be drawn on non judicial stamp of appropriate value with the Department by the selected Contractor in AEGCL's General Conditions of Supply and Erection 2009 of contract within 10 (ten) days from the date of issue of the LOI/Work Order

Section 2 - Bidding Forms	
Section –2	
Bidding Forms	

### **Section 2 - Bidding Forms**

This Section contains the forms which are to be completed by the Bidder and submitted as part of his Bid.

#### **Table of Forms**

1	Letter of Technical Bid	23
2	Letter of Price Bid	244
3	Price Schedules	255
5	Form of Bid Security	28
6	Technical Proposal	29
	6.1 Site Organization	30
	6.2 Mobilization Schedule	31
	6.3 Construction Schedule	32
	6.4 Personnel	33
	Form PER – 1: Proposed Personnel	33
	Form PER – 2: Resume of Proposed Personnel	34
	6.5 Proposed Subcontractors/Manufacturers for Major Items of Plant and Services	35
	6.6 Manufacturer's / Service Provider's Authorization	36
7	Bidders Qualification	38
	7.1 Form ELI - 1: Bidder's Information Sheet	38
	7.2 Form ELI - 2: JV Information Sheet	39
	7.3 Form LIT - Pending Litigation	39
	7.4 Form FIN - 1: Financial Situation	41
	7.5 Form FIN - 2: Average Annual Turnover	42
	7.6 Form FIN – 3: Financial Resources	43
	7.7 Form FIN- 4: Current Contract Commitments	44
	7.8 Form EXP – 1: General Experience	45
	7.9 Form EXP – 2(a): Specific Experience	46
	7.9 Form EXP - 2(b): Specific Experience in Key Activities	47

#### 1 Letter of Technical Bid

[Bidder's Letterhead]

	Date:Bid Identification No.:Invitation for Bid No.:
То:	
We, th	ne undersigned, declare that:
(a)	We have examined and have no reservations to the Bidding Documents, including Addenda issued in accordance with Instructions to Bidders (ITB) 1.2.3;
(b)	We offer to design, manufacture, test, deliver, install, and commission in conformity with the Bidding Document the following Plant and Services: ;
(c)	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	
	capacity ofd
	authorized to sign the Bid for and on behalf of

#### 2 Letter of Price Bid

[Bidder's Letterhead]

	Date:
	Bid Identification No No.:
	Invitation for Bid No.:
To:	
We, t	he undersigned, declare that:
(i).	We have examined and have no reservations to the Bidding Document, including Addenda issued in accordance with Instructions to Bidders (ITB) 1.2.3;
(ii).	We offer to design, manufacture, test, deliver, install, and commission in conformity with the Bidding Document the following: ;
(iii).	The total price of our Bid is the sum of:
(iv).	Discount offered (if any) for (i)%,
(v).	Our bid shall be valid for a period of days from the date fixed for the 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;
(vi).	If our bid is accepted, we commit to obtain a performance security in accordance with the Bidding Document;
(vii).	We understand that this bid, together with your written acceptance thereof included in your notification of award, shall constitute a binding contract between us, until a formal contract is prepared and executed; and
(viii).	We understand that you are not bound to accept the lowest evaluated bid or any other bid that you may receive.
Name	ə
In the	capacity of
Signe	ed
Duly a	authorized to sign the Bid for and on behalf of
Date	

#### 3 Price Schedules

#### **PREAMBLE**

#### General

1. The Price Schedules as follows:

SI No.	Description of work	Unit	Qnty	Rate in Rs.	Amount in Rs.
1	Supply and fabrication of Steel structure like RS joist pole, joist beam and MS Angle, etc. including two coats of red oxide primer for guarding structure of 220 KV line at DPS Campus complete as per drawing and specification.  (a) Fabrication:- RS Joist-Size-3inchx6 inch For post (6x3)x7.00x15.00=1890.00 Kg (11x2)x7.00x15.00=2310.00 Kg For beam-17x13.00 x15.00=3315.00 Kg  10mm plate —size(200x200mm) (2x 40Nos).x3.04Kg= 243.20Kg  10mm plate —size(200x100mm) (17x14)Nos.x1.52 Kg= 361.76 Kg  50x50x5mm Angle :- (2x40)x0.20x3.8 kg = 60.80 Kg  75x75x6mm Angle :- (2x17)x0.60x 6.8 kg = 138.72 Kg  Total 8319.48kg  Add 5% wastage	Kg	8735.45		0.00
	Nuts and bolts:-assorted size	Kg	110		0.00
2	Supply and erection of 7/10 size stay wire netting for guarding work with all materials & connectors, T&P, and Labours complete as per drawing and specification.	Kg	4770		0.00

3	RCC work in foundation 1:2:4 with maximum size of aggregate 20 mm including breakage of concrete road, earth cutting, labour, materials, equipments, shuttering, head loading etc complete for handling, transportation, batching, mixing, placing, leveling, curing etc. complete inclusive cost of cement and MS rod.  Qnty:- 40x(1.10x1.10x1.00)=48.40CM  40x(0.40x0.40x2.2)= 14.08 CM  Total- 62.48 CM	СМ	62.84		0.00
4	<ul> <li>2.1 2.1.1:- Plain cement concrete works with coarse aggregate of size 13mm to 32mm in foundation bed for footing, steps, walls, brick etc. as directed and specified including dewatering if necessary and curing complete (shuttering shall be measured and paid separately)</li> <li>(a) In prop.1:3:6</li> <li>40x(1.10x1.10x0.05)=2.42 CM</li> </ul>	СМ	2.42		0.00
	EARTHING WORK:-				
5	i) Grounding of steel structure of guarding including cost of grounding materials like 3 mtrs. long 38mm dia GI pipe, 45x6mm GI flate with GI bolt & nuts , washers, Salt, charcoal etc. and welding with all post with labour complete as directed	No	26		0.00
	ii)Construction of cover box of earth pits by RCC work . Wall- 26x 4x(0.7x0.5x0.10)=3.64CM Slab- 26x (0.7x0.7x0.10)= 1.28CM Total-4.92CM	СМ	4.92		0.00
	iii) 2.1 2.1.1:- Plain cement concrete works for base concreting of earth pits.  (a) In prop.1:3:6  Base- 26x(0.70x0.70x0.10)=1.27CM	СМ	1.27		0.00
	Total estimated am	nount		Rs	0.00

NB: Rate to be quoted individually on all above mentioned schedule.

2. The Schedules do not generally give a full description of the plant to be supplied and the services to be performed under each item. Bidders shall be deemed to have read the Employer's Requirements and other sections of the Bidding Document and reviewed the Drawings to ascertain the full scope of the requirements included in each item prior to filling in the rates and prices. The entered rates and prices shall be deemed to cover the full scope as aforesaid, including overheads and profit.

3. If bidders are unclear or uncertain as to the scope of any item, they shall seek clarification in accordance with *ITB* 1.2.2 prior to submitting their bid.

#### **Pricing**

- 4. Prices shall be filled in indelible ink, and any alterations necessary due to errors, etc., shall be initialed by the Bidder.
- 5. Bid prices shall be quoted in the manner indicated in Schedules.
  - As specified in the Bid Data Sheet and Special Conditions of Contract, prices shall be fixed and firm for the duration of the Contract, or prices shall be subject to adjustment in accordance with the corresponding Appendix (Price Adjustment) to the Contract Agreement.
  - Prices given in the Schedules against each item shall be for the scope covered by that item as detailed in Section 6 (Employer's Requirements) or elsewhere in the Bidding Document.
- 6. When requested by the Employer for the purposes of making payments or part payments, valuing variations or evaluating claims, or for such other purposes as the Employer may reasonably require, the Contractor shall provide the Employer with a breakdown of any composite or lump sum items included in the Schedules.

#### 5 Form of Bid Security

#### **Bank Guarantee**

(To be stamped in accordance with Stamp Act) (The non-Judicial Stamp Paper should be in the name of issuing Bank)

Bank's Name, and Address of Issuing Branch or Office				
Ber	neficiary:Name and Address of Employer			
Dat	e:			
Bid	Security No.:			
to y	have been informed that <i>name of the Bidder</i> (hereinafter called "the Bidder") has submitted ou its bid dated (hereinafter called "the Bid") for the execution of <i>name of contract</i> under Invitation for Bids No ("the IFB").			
Furl	thermore, we understand that, according to your conditions, bids must be supported by a bid guarantee.			
sum . <b>am</b>	the request of the Bidder, we name of Bank hereby irrevocably undertake to pay you any or sums not exceeding in total an amount ofamount in figures(			
(a)	has withdrawn its Bid during the period of bid validity specified by the Bidder in the Form of Bid; or			
(b)	does not accept the correction of errors in accordance with the Instructions to Bidders (hereinafter "the ITB"); or			
(c)	having been notified of the acceptance of its Bid by the Employer during the period of bid validity, (i) fails or refuses to execute the Contract Agreement, or (ii) fails or refuses to furnish the Performance Security, in accordance with the ITB.			
Con the noti	s guarantee will expire: (a) if the Bidder is the successful Bidder, upon our receipt of copies of the stract Agreement signed by the Bidder and the performance security issued to you upon the instruction of Bidder; and (b) if the Bidder is not the successful Bidder, upon the earlier of (i) our receipt of a copy your fication to the Bidder of the name of the successful Bidder; or (ii) twenty-eight days after the expiration of Bidder's bid.			
	sequently, any demand for payment under this guarantee must be received by us at the office on or one that date.			
	Bank's seal and authorized signature(s)			

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

#### 6 Technical Proposal

Site Organization

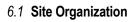
**Mobilization Schedule** 

**Construction Schedule** 

Personnel

**Proposed Subcontractors for Major Items of Plant and Services** 

**Time Schedule** 



The Bidder shall indicate here his proposed site establishment to execute the works if the contract is awarded to him.



The Bidder shall indicate here his proposed mobilization schedule to execute the works if the contract is awarded to him.

#### 6.3 Construction Schedule

The Bidder shall indicate here his proposed Construction Schedule to execute the works if the contract is awarded to him. The Construction Schedule shall match with the time for completion specified.

#### 6.4 Personnel

Bidders should provide the names of suitably qualified personnel to meet the requirements specified in Appendix 2of ITB (Evaluation and Qualification Criteria). The data on their experience should be supplied using the Form below for each candidate.

Form PER – 1: Proposed Personnel

1.	Title of position*
	Name
2.	Title of position*
	Name
3.	Title of position*
	Name
4.	Title of position*
	Name

<sup>\*</sup>As listed in Appendix 2of ITB (Evaluation and Qualification Criteria).

## Form PER – 2: Resume of Proposed Personnel

Position		
Personnel information	Name	Date of birth
	Professional qualifications	
Present employer employment		
	Address of employer	
	Telephone	Contact (manager / personnel officer)
	Fax	E-mail
	Job title	Years with present employer

Summarize professional experience in reverse chronological order. Indicate particular technical and managerial experience relevant to the project.

From	То	Company / Project / Position / Relevant technical and management experience

## 6.5 Proposed Subcontractors/Manufacturers for Major Items of Plant and Services

The following Subcontractors and/or manufacturers are proposed for carrying out the item of the facilities indicated. Bidders are free to propose more than one for each item.

Major Items of Plant and Services	Proposed Subcontractors/Manufacturers	Nationality

#### 6.6 Manufacturer's / Service Provider's Authorization

[The Bidder shall require the Manufacturer/Service Provider's to fill in this Form in accordance with the instructions indicated. This letter of authorization should be signed by a person with the proper authority to sign documents that are binding on the Manufacturer / Service Provider (refer Clause 2.6).

(Manufacturer's / Service Provider's Letterhead)

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

Bid No.: [insert number of bidding process]

To: [Insert: full name of Employer]

WE [insert: name of Manufacturer Service Provider] who are established and reputable manufacturers / Service Provider of [insert: name and/or description of the plant & equipment or services] having production facilities at [insert: address of factory] do hereby authorize [insert: name & address of Bidder] (hereinafter, the "Bidder") to submit a bid the purpose of which is to provide the following goods and services, manufactured and provided by us, and to subsequently negotiate and sign the Contract:

3.	
2.	

We hereby extend our full guarantee and warranty in accordance with *Clause Error!* Reference source not found. of the Special Conditions of Contract, for the above specified plant & equipment and services supporting the supply, installation and achieving of Operational Acceptance of the plant by the Bidder against this Bidding Documents, and duly authorize said Bidder to act on our behalf in fulfilling these guarantee and warranty obligations. We also hereby declare that we and ......, *[insert: name of the Bidder]* have entered into a formal relationship in which, during the duration of the Contract (including warranty / defects liability) we, the Manufacturer or Producer, will make our technical and engineering staff fully available to the technical and engineering staff of the successful Bidder to assist that Bidder, on a reasonable and best effort basis, in the performance of all its obligations to the Employer under the Contract.

For and on behalf of the Manufacturer/Service Provider

Signed:	
Date:	

(This Authorization must be notarized)

In the capacity of *[insert: title of position or other appropriate designation]* and this should be signed by a person having the power of attorney to legally bind the manufacturer.

Date:	
Place:	
	(Signature)
	(Printed Name)
	(Designation)
	(Common Seal)

#### Note:

- 1. The letter of Undertaking should be on the letterhead of the Manufacturer and should be signed by a person competent and having Power of Attorney to legally bind the Manufacturer. It shall be included by the bidder in its bid.
- 2. Above undertaking shall be registered or notarized so as to be legally enforceable.

#### 7 Bidders Qualification

To establish its qualifications to perform the contract in accordance with Appendix 2 of ITB (Evaluation and Qualification Criteria) the Bidder shall provide the information requested in the corresponding Information Sheets included hereunder.

#### 7.1 Form ELI - 1: Bidder's Information Sheet

Bidder's Information		
Bidder's legal name		
In case of JV, legal name of each partner		
Bidder's country of constitution		
Bidder's year of constitution		
Bidder's legal address in country of constitution		
Bidder's authorized representative		
(name, address, telephone numbers, fax numbers, e- mail address)		
Attached are copies of the following original documents.		
☐ 1. In case of single en	. In case of single entity/firm, documents, in accordance with ITB 1.1.2.1.	
☐ 2. In case of single en	tity/firm, documents, in accordance with ITB 1.1.2.2.	
☐ 3. In case of JV, document	3. In case of JV, documents, in accordance with ITB 1.1.2.4.	

### 7.2 Form ELI - 2: JV Information Sheet

Each member of a JV must fill in this form

	JV Information	
Bidder's legal name		
JV Partner's legal name		
JV Partner's place of constitution		
JV Partner's year of constitution		
JV Partner's legal address.		
JV Partner's authorized representative information		
(name, address, telephone numbers, fax numbers, e-mail address)		
Attached are copies of the	following original documents.	
<u> </u>	ation or constitution of the legal entity named above, in accordance with ITB 1.1.2.4.	
■ 2. Authorization to represent the firm named above, in accordance with ITB 1.1.2.4.		

# 7.3 Form LIT - Pending Litigation

Each Bidder or member of a JV must fill in this form

Pending Litigation			
☐ ■No pending litigation in accordance with Criteria 2.2 of Appendix 2 of ITB (Evaluation and Qualification Criteria)			and
□ F	Pending litigation in accordance with Criteria 2.2 of Appendix 2 of ITB(Ecriteria)	Evaluation and (	Qualification
Year	Matter in Dispute	Value of Pending Claim in Rupees	Value of Pending Claim as a Percentage of Net Worth

## 7.4 Form FIN - 1: Financial Situation

Each Bidder or member of a JV must fill in this form

Financial Data for Previous 3 Years [Rupees]				
Year 1:	Year 2:		Year 3:	
Information from Balance Sheet				
Total Assets	al Assets			
Total Liabilities				
Net Worth				
Current Assets				
Current Liabilities				
	Information from	n Income Statement		
Total Revenues				
Profits Before Taxes				
Profits After Taxes	Profits After Taxes			
Attached are copies of financial statements (balance sheets including all related notes, and income statements) for the last three years, as indicated above, complying with the following conditions.				
<ul> <li>All such documents reflect the financial situation of the Bidder or partner to a JV, and not sister or parent companies.</li> </ul>				
<ul> <li>Historic financial st</li> </ul>	<ul> <li>Historic financial statements must be audited by a certified accountant.</li> </ul>			
<ul> <li>Historic financial st</li> </ul>	Historic financial statements must be complete, including all notes to the financial statements.			
<ul> <li>Historic financial statements must correspond to accounting periods already completed and audited (no statements for partial periods shall be requested or accepted).</li> </ul>				

### 7.5 Form FIN - 2: Average Annual Turnover

Each Bidder or member of a JV must fill in this form

Annual Turnover Data for the Last 3 Years		
Year	Amount (Rupees)	
	Average Annual Turnover	

The information supplied should be the Annual Turnover of the Bidder or each member of a JV in terms of the amounts billed to clients for each year for contracts in progress or completed.

#### 7.6 Form FIN – 3: Financial Resources

Specify proposed sources of financing, such as liquid assets, unencumbered real assets, lines of credit, and other financial means, net of current commitments, available to meet the total construction cash flow demands of the subject contract or contracts as indicated in **Appendix 2 of ITB** (Evaluation and Qualification Criteria)

Financial Resources			
No.	Source of financing	Amount (Rupees)	
1			
2			
3			

#### 7.7 Form FIN- 4: Current Contract Commitments

Bidders and each partner to a JV should provide information on their current commitments on all contracts that have been awarded, or for which a letter of intent or acceptance has been received, or for contracts approaching completion, but for which an unqualified, full completion certificate has yet to be issued.

	Current Contract Commitments					
No	Name of Contract	Employer's Contact Address, Tel, Fax	Value of Outstanding Work [Rupees]	Estimated Completion Date	Average Monthly Invoicing Over Last Six Months [Rs/month)]	
1						
2						
3						
4						
5						

## 7.8 Form EXP – 1: General Experience

Each Bidder or member of a JV must fill in this form

General Experience				
Starting Month Year	Ending Month Year	Years	Contract Identification and Name Name and Address of Employer Brief Description of the Works Executed by the Bidder	Role of Bidder

# 7.9 Form EXP – 2(a): Specific Experience

Fill up one (1) form per contract.

	Contract of Simila	ar Size and Nature	
Contract No of	Contract Identification		
Award Date		Completion Date	
Role in Contract	□ Contractor		☐ Subcontractor
Total Contract Amount		(Rupees)	
If partner in a JV or subcontractor, specify participation of total contract amount		Amount	
Employer's Name Address Telephone/Fax Number E-mail			
Descriptio	n of the similarity in accord	ance with Criteria 2.4.2(a) of S	Section 3

# 7.9 Form EXP - 2(b): Specific Experience in Key Activities

Fill up one (1) form per contract

Contract with Similar Key Activities					
Contract No of	Contract Identification				
Award Date		Completion Date			
Role in Contract	□ Contractor	Ţ	☐ Subcontractor		
Total Contract Amount		(Rupees)			
If partner in a JV or subcontractor, specify participation of total contract amount	Percent of Total	Amount			
Employer's Name Address Telephone Number Fax Number E-mail	of the key activities in acco	rdance with Criteria 2.4.2(b) o	f Section 3		

# Section - 3

# **Employer's Requirements**

Wherever there is any variation in between the conditions of the AEGCL's General Conditions of Supply and Erection 2009 and the above terms & conditions, this bid conditions will supersede the conditions of the AEGCL's General Conditions of Supply and Erection 2009.

#### 1.0 Liquidated Damage:

The date of completion of work shall be deemed to be the essence of the contract and shall not be completed no later than the date specified in the contract. In case of failure to complete the work within the stipulated period AEGCL shall be entitled to:

- 1.1. Recover an amount at the rate of 0.5% (Zero Point Five percent) of the Contract Price per week of delay, subject to maximum of 10% (Ten percent) of the contract price as liquidated damage to AEGCL. However, the payment of liquidated damages shall not in any way relieve the Contractor from any of its obligations to complete the works or from any other obligations and liabilities of the Contractor under the Contract.
- 1.2. To complete the balance work giving notice to the Contractor/Firm and to recover any extra expenditure incurred thereby for having to complete the work at a higher price at the risk and responsibility of the Contractor/Firm.
- 1.3. Contractual failure:-Refer clause No.27.1 of AEGCL's General Conditions of supply and erection 2009.

#### 2.0 PERT Chart and/or BAR Chart:

The successful bidder within 10 (ten) days before the contract is awarded will make out a detailed PERT Chart covering all activities along with detailed program chart on accepted scheme indicating various stages of execution, method of execution and completion of work in different stages keeping the period of completion in view and submit the same to the Engineer for the consideration and approval.

#### 3.0 Site Facility

- 3.1. AEGCL will not provide any accommodation at the work site for the contractor and their field personnel. The same have to be arranged by the Bidder/Firm from their own. The contractor shall provide Medical/Hygienic facilities to the personnel engaged by them. The quoted price shall be deemed to include charges for all site facilities for labour that are considered necessary for execution of the work. Subject to availability of land the AEGCL may provide free site for labour camp, construction of yard etc close to site of work. No assurance can be given regarding the vulnerability of AEGCL's land given for use to the Bidder to flooding during high floods. The AEGCL undertakes no responsibility or liability in this regard. The bidder shall make his own arrangement for arranging power supply as may be required for work. The AEGCL may, however assists in recommending his/their application to the Electricity Supply Utility for the power supply on payment basis as per norms of the Electricity Supply Utility.
- 3.2. 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.

#### 4.0 Insurance:

The bidder shall arrange for any pay/cost of personnel accident insurance, medical treatment etc. in respect of their employees assigned to the works for all time and shall govern by Law of land.

#### 5.0 Warranty:

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.

#### 6.0 Safety:

Each and every safety measures for MAN and MACHINE will be the sole responsibility of the Contractor without any prejudice. Compensation claim if any will also be the responsibility of the contractor without any prejudice. As the contract is Turnkey in nature hence AEGCL will not bear any responsibility towards such claim.

#### 7.0 Pollution:

Each and every measure should be taken to adhere to the standard norms to avert any occasion of Air Pollution, Water Pollution, Soil Pollution and Sound Pollution. In case of any deviation leading to any legal action the Contractor will be solely responsible without any prejudice.

#### 8.0 Payment Terms:

- 8.1. No advance/Mobilization advance shall be made in this contract.
- 8.2. Only one Running Bill shall be entertained. Payment of Running Bill shall be admissible against progressive bills provided the Contractor/Firm completes at least 50% of the total amount of the work. 10% Deduction towards RETENTION will be made.
- 8.3. Final payment shall be released to the contractor only after final acceptance by AEGCL.
- 8.4. No claim for interest shall be entertained by AEGCL in respect of any money or balance which may be in AEGCL's hands owing to any dispute or difference or misunderstanding between the contractor and the AEGCL or due to the reason beyond the reasonable control of AEGCL.
- 8.5. Payment is subject to availability of specific fund.
- 8.6. The quantities may vary as per site requirements. Actual work done quantities will be measured after completion of work and will be paid as per certification by Engineer-in-charge.
- 8.7. TDS at actual will be deducted from the payable amount against each invoice/bill.
- 8.8. 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

#### 9.0 Performance Security Deposit:

- 9.1. The successful bidder shall have to deposit through a **Bank Guarantee** from a Nationalized or scheduled Bank of RBI in AEGCL's standard proforma on non-judicial stamp of appropriate value for an amount equivalent to 10% (ten percent) of the total value of the order as performance security, immediately within 10 (ten) days from the issue of the letter of intent/detailed orders (as the case may be), duly pledged in favour of the **Managing Director**, **AEGCL**, **Bijulee Bhawan**, **Paltanbazar**, **Guwahati-1**, and such security deposit shall be valid up to 30 days beyond the warranty period of 12 (twelve) months. The Bank Guarantee (BG) should be sent directly to the **O/O the Managing Director**, **AEGCL**, **Bijulee Bhawan**, **Paltanbazar**, **Guwahati-1** by the issuing Bank under registered post AD.
- 9.2. Please note that, if the selected Bidder / Firm fails to furnish the requisite performance security as stated above and sign the contract within the stipulated period, LOI/work order issued in favour of the Bidder/ Firm will automatically be Null & void.
- 9.3. If the bidder / firm fails or neglects to observe and perform any of his obligations under the contract, Purchaser (AEGCL) shall have the right to forfeit either in full or in part at his absolute discretion, the security deposit furnished by the Contractor/Firm.
- 9.4. No interest shall be payable on such deposits.

#### **10.0 Retention Money:**

10.1. In addition to above performance security deposit, 10% value of each progressive bill will be retained by the Engineer/Purchaser as Retention Money. The amount will be held by the Purchaser (AEGCL) till the work under the contract is completed and the completion certificate is issued in pursuance to clause

10.0 of AEGCL's General Conditions of Supply and Erection 2009.

10.2. If the Firm/Bidder fails or neglects to observe and perform any of his obligations under the contract, the Purchaser (AEGCL) shall have the right to forfeit either in full or in part at his absolute discretion, the security deposit furnished by the supplier/contractor.

10.3. No interest shall be payable on such deposit.

#### 11.0 Force Majeure Condition:

Force Majeure condition shall be considered as any circumstances beyond reasonable control of the party claiming relief, including but not limited to strikes, lockout, civil commotion, riot insurrection, hostilities, mobilization, war, fire, flood, earthquake, malicious damage or accidents could entitle contractor to extension time. Any such delay should intimated within 10 (ten) days from the beginning of such delay to consider/approved, any claim without prior information may not be considered under force Majeure.

#### 12.0 Settlement of Dispute and Arbitration:

Any dispute arising out of the contract will be first settled bilaterally between AEGCL and Contractor. In case, dispute cannot be settled bilaterally, it will be referred to arbitration to be by an arbitrator appointed by AEGCL. The contractor shall not stop the work during settlement of any dispute. All disputes shall be subjected to the jurisdiction of District Court of Kamrup District.

#### 13.0 Scope of Work:

The scope of work under this contract consist of providing of all labours, materials, scaffolding, equipment and plants and transportation of all incidental items not shown or specified but reasonably implied or necessary for the proper completion of work. The scope of work covered by this specification is primarily complete civil works.

#### 13.1. Excavation for Structures:

13.1.1. Pits trenches for foundation and trenches and other structures shall be taken out to the levels and dimensions shown on the approved drawings or to such other levels and dimensions as the Engineer in- charge may direct. The bottom of all excavations shall be carefully levelled and stopped on benches as directed by the Engineer. Any pocket of soft or loose materials and fissures in the bottom pits and trenches shall be removed and the cavities so formed filled or grouted with concrete as directed by Engineer-in-charge. When any excavation has been done and trimmed to the required levels and dimensions, the Engineer-in-charge shall be informed accordingly so that he may inspect the complete pit or trench and no excavation shall be filled in and covered with concrete until it has been inspected and the contractor has been authorized to proceed with work. All surplus excavation not required for refilling shall be deposited in embankments, or otherwise disposed off as directed. The work shall include all necessary sheeting, shoring, bracing, drawing and pumping out water, removal of all legs, stumps, grabs and other deleterious matters, obstructions, necessary for placing the foundations.

13.1.2. When required by the Engineer-in-charge, materials in the last 500mm of depth of the excavations shall not be removed until immediately before the concrete is to be placed.

13.1.3. All excavation for structures shall generally be as small as practicable, consistent with the proper construction of work. Any excavation taken out to a greater depth than that required shall be back filled with concrete of the foundation grade at the cost of the contractor.

13.1.4. Where water is met with during excavation due to stream flow, seepage, sorings, rain or other reasons, the contractor shall take adequate measures such as bailing, pumping, constructing diversion channel, drainage channel, ponds and other necessary works to keep the foundation trenches dry and other necessary and to protect the green concrete against damage by eruption or sudden rising of water level. Approval of the Engineer-in-charge to any method adopted for the adequacy of dewatering and protection arrangements and for the sound safety of the work shall be required.

13.1.5. Refilling of foundation pits and trenches shall be carried out only after the foundation and structure

works within the excavation have been inspected and approved by the Engineer-in-charge. Unless otherwise directed by the Engineer-in-charge all fillings shall consists of approved materials. All space between foundation concrete and the sides of excavation shall be refilled to the original surface using approved plant, in single layers not exceeding 250mm loose thickness which shall be watered and completed to a dry density not less than that of the adjoining soil strata. Timber sheeting and other excavation support shall be carefully removed as the filling proceeds but the removal of such supports will not relieve the contractor of his responsibility for the stability of the works.

13.1.6. Test Block will is to be submitted by the contractor for Testing. Testing fees will be deducted from the subsequent Invoice of the Contractor. In case of failure of Test Block during the Test. The work carried out will be rejected and contractor will have to reconstruct at his / their cost and labour without any prejudice.

#### 13.2. Form Work:

The term form work includes all temporary or permanent form essential for forming the concrete, together with all temporary construction props, bracings required for the support.

- 13.2.1. Forms for concrete shall be made of either metal or timber suitably lined and of substantial and rigid construction true to shape, alignment and dimensions as shown on the approved drawings.
- 13.2.2. Forms shall be mortar tight and shall be made sufficiency rigid by the use of ties and bracings to prevent any displacement, deflection or movement of any kind. They shall be strong enough to withstand of the construction, all pressure, ramming and vibration, movement of persons, materials and plant during and after placing the concrete. Special measures shall be taken to ensure that the form work does not hinder the shrinkage of concrete because without this cracking could occur before the form work is removed.
- 13.2.3. When the Firms are ready for commencing concreting, the contractor shall inform the Engineer-incharge or his representative to inspect and accept the forms as to their strength, alignment and general fitness. Being satisfied with the form work Engineer-in-charge then may allow the contractor for pouring concrete but safety of men, machinery, materials and for result obtained.

#### 13.3. Workability of Concrete:

Optimum quantity of water shall be mixed just to produce a design concrete of required workability. Workability shall be such that the concrete surrounds and properly grips all reinforcement. The degree of consistency, which shall depend upon nature of work and method of vibration of concrete shall be determined by regular slump tests to be carried out by the contractor at his cost. Usually for mass concrete in RCC works where vibrations are used the slumps shall be within 10mm to 25mm. the frequency of such tests and the natures of slumps shall be maintained within the limits specified by the Engineer-in-charge. The Engineer-in-charge also reserves the right to carry out slump tests independently at his own discretion.

- (i) Cement shall have to be weighed from bulk stocks at site and not by bags, it shall be weighed separately from the aggregates.
- (ii) Water shall either be measured by volume in calibrated buckets or weighed. All necessary equipment shall be maintained in a clean and serviceable condition. Their accuracy shall be periodically checked.
- (iii) To maintain the specified water cement ratio constant and at its correct value, moisture contents in both fine and coarse aggregates shall be determined with reference to IS: 2386 (Part-III) and amount of mixing water shall then be adjusted suitably.

#### 13.3.1. Mixing Concrete:

- (i) All concrete shall be mixed at site in a drum type mechanical mixer in first class working condition. Mixing shall be continued till materials are uniformly distributed and an uniform colour of the entire mass is obtained and each individual particle of the coarse aggregate shows complete coating of cement mortar. The mixing shall in no case be less than 2 minutes after all the ingredients have been put into the mixer.
- (ii) Mixer which has been out of use for more than 30 minutes shall be thoroughly cleaned before putting in a new batch. Mixing plant shall be thoroughly cleaned before and after use. A standby mixing plan equivalent to that in use shall be provided and maintained ready for immediate use during any break down.

#### 13.3.2. Construction Joints:

- (i) All construction joints horizontal or vertical shall be at predetermined position according to approved drawing or as directed by the Engineer-in-charge. Prior to commencement of fresh concreting over any construction joint which has set but hardened, the removal of laitance and roughening shall be done by wire brushing and washing and care shall be taken to avoid dislodgement of coarse aggregates. (ii) At construction joints where the concrete has hard, any skin or laitance shall be thoroughly hacked, swept cleaned and washed with clean fresh water. The surplus water shall be removed immediately before depositing fresh, concrete. The neat cement, grout shall be followed by 13mm thick layer of cement mortar of same proportion as in concrete and the concreting resumed immediately thereafter. The first batch of fresh concrete shall be forced hard on to the mortar layer and the set faces, angles and corners by means of compacting tools, vibrators etc. and the damping effect on vibration in such position shall be allowed for.
- (iii) Construction joints shall be avoided as far as possible in case of structure, especially at tensile zones. Where unavoidable, concreting shall be carried out continuously up to such joints which shall preferably to transverse to the line of main compression. However, in all cases, the position of construction joints shall be predetermined and got approved by the Engineer-in-charge.

#### 13.3.3. Reinforcements:

- (i) All reinforcement shall be cleaned thoroughly by removing loose scales, oil, grease or other deleterious materials. The contractor shall obtain the approval of the Engineer-in-charge or his representative to the reinforcement when fixed in position before any concrete is deposited in the forms.
- (ii) Bars shall be bent cold or straightened in a manner to the satisfaction of the Engineer-incharge or his representative. Bars bent during transport or handing shall be straightened before using on work. They shall not be heated to facilities bending. Welding shall be done as per latest IS Code of practice.
- (iii) Placing and maintenance of reinforcement in position.
- a) All reinforcement bars shall be cut and standard hooks for MS rounds made at ends and

accurately placed in position as shown on the approved drawings and shall be securely held in position before and during concreting by annealed binding wires used for binding the reinforcement shall be approved quality soft annealed iron wire not less than 1 mm (18SWG) size, conforming to IS:280.

b) As far as possible, bars of full length shall be used. Where bars are required or permitted to be lapped by the Engineer-in-charge, or his representative, the over laps shall be staggered for different bars and located at points, along the span where neither nor bending moment is maximum. The concrete measured over the reinforcing bars shall be in accordance with the approved drawings.

#### 13.3.4. Weep Holes:

Sufficient Nos of weep holes including provision of Asbestos pipes (in the weep hole portion only) in abutments, wing and return walls is to be provided as directed by the Engineer-incharge with contractors own labour, materials etc. No extra payments will be admissible for provision of the weep holes in RCC/Brick compound boundary wall and no deduction from quantity of concrete/Brick work shall be made for weep holes.

#### 13.3.5. Brick Masonry

Brick work in cement mortar with 1st class brick including racking out joints and dewatering if necessary, and curing complete as directed in sub-structure up to plinth level.

All works cited above shall be performed in conformity with the standard technical specifications in accordance with the drawing approved and release for construction by the employer during the course of work.

#### 13.3.6. Additional Works If Any:

The bidder shall, when order in writing by the concerned authority, perform extra work and furnish extra materials not required by the invitation or included in the 'Bill of quantities', but forming an inseparable part of the work concerned. For extra work and materials will ordinarily be paid for the lump sump or unit price/rates stated in the order. Whenever in the judgment of the concerned authority, it is impracticable, because of the nature of the work or for any other reason to otherwise fixed the price/rate in order, the extra work and materials shall be paid for on the basis or actual necessary cost plus overhead and profit allowances as indicated hereunder.

The actual necessary cost will include:-

- (a) Market value of the materials utilized in the extra work, excluding taxes and duties, if any. Taxes will be dealt separately.
- (b) Actual cost of handling and transportation of materials, wherever applicable.
- (c) Direct labour charges.
- (d) A reasonable allowances for the use of contractors plants and equipment, where required.
- (e) The actual charges of facility like electricity etc. where required.

Further overhead and supervision charges will be allowed @ 10% on the sum of (a) to (e) and a profit will be allowed @ 10% on the sum of (a) to (e). In case any materials or a part is furnished by the department no overhead and profit will be allowed on the value of such materials or parts.

#### 13.3.7. Plea of Custom:

(a) The plea of "Custom" prevailing will not on any account be permitted as an excuse for infringement of any of the conditions of contract or specifications information, specifications, drawings or schedule of quantities.

#### 14.0 Performance Guarantee / Defect Liability Period:

The materials and entire construction/work is to be guaranteed against defective design, materials and

workmanship and for satisfactory performance for a period of 365 days from the date of final acceptance of the completed work.

#### 15.0 Right to Reject:

The AEGCL reserves the right to reject any or all the bids without assigning any reason thereof and the AEGCL further reserves the right to split up the work order in favour of more than one Contractor. The AEGCL also reserves the right to reject the lowest or any other price without assigning any reason. The clauses which are not appearing in this document (bid) will be as per The General Condition of Supply and Erection 2009 of AEGCL. The General Condition of Supply and Erection 2009 of AEGCL is available in the AEGCL's website www.aegcl.co.in under Acts, Rules and Policies.

# Annexure - 2

# Form of Completion Certificate

Contract: [insert name of contract and contract identification details]
Date:  Certificate No.:
To: [insert name and address of Contractor]
Dear Ladies and/or Gentlemen,
Pursuant to SCC Clause <b>Error! Reference source not found.</b> of the Special Conditions of the Contract entered into between yourselves and Assam State Electricity Grid Corporation Limited dated [insert date], relating to the [brief description of the Facilities], we hereby notify you that the following Works were complete on the date specified below, and that, in accordance with the terms of the Contract, the Employer hereby takes over the said works, together with the responsibility for care and custody and the risk of loss thereof on the date mentioned below.
1. Description of the Facilities or part thereof: [ description]
2. Date of Completion: [date]
However, you are required to complete the outstanding items listed in the attachment hereto as soon as practicable.
This letter does not relieve you of your obligation to complete the execution of the Works in accordance with the Contract nor of your obligations during the Defect Liability Period.
Very truly yours,
[Signature]
Project Manager Assam Electricity Grid Corporation Limited

