BIDDING DOCUMENT

FOR

Supply of Power & Control Cables of 1.1 kV Class for Various Substations in Assam (Package-A)

FUND: "Internal Source of Fund"



(E-Tender)

ASSAM ELECTRICITY GRID CORPORATION LIMITED

BID IDENTIFICATION NO:

AEGCL/MD/Tech-1030/CABLES/PACKAGE-A/BID

Section	MAIN CONTENTS	Page No.
Section -1	Instructions to Bidders	3
Section - 2	BIDDING FORMS	19
Section - 3	Purchaser's Requirements	40
Section - 4	General Conditions of Supply and Erection of AEGCL	58
Section - 5	Special Conditions of Contract	59
Section - 6	Contract Forms	67

Section – 1 Instruction to Bidders

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 Ge	neral	3
1.	1.1 Scope of Bid	3
1.	1.2 Eligible Bidders	3
1.2.0 Co	ntents of Bidding Document	3
1.2	2.1 Sections of Bidding Document	3
1.	2.2 Clarification of Bidding Document, Site Visit, Pre-Bid Meeting	3
	2.3 Amendment of Bidding Document	4
1.3.0 Pr	eparation of Bids	4
1.	3.1 Cost of Bidding	4
1.	3.2 Language of Bid	4
1.	3.3 Documents Comprising the Bid	5
1.	3.4 Letter of Bid and Schedules	5
1.	3.5 Documents Establishing the Eligibility and Qualifications of the Bidder	5
1.	3.6 Documents Establishing Conformity of the Goods and Services	5
1.	3.7 Bid Prices	6
1.	3.8 Period of Validity of Bids	6
1.	3.9 Bid Security	6
1.	3.10 Format and Signing of Bid	7
1.4.0 Su	bmission and Opening of Bids	7
1.4	4.1 On-line submission of Bids	7
1.4	4.2 Deadline for Submission of Bids	7
1.4	4.3 Late Bids	7
1.4	4.4 Withdrawal, Substitution, and Modification of Bids	7
1.4	4.5 Bid Opening	7
1.5.0 Ev	aluation and Comparison of Bids	8
1.:	5.1 Confidentiality	8
1.:	5.2 Clarification of Bids	9
1.:	5.3 Deviations, Reservations, and Omissions	9
1.:	5.4 Preliminary Examination of Technical Bids	9
1.:	5.5 Responsiveness of Technical Bid	9
1.	5.6 Nonmaterial Nonconformities	10
1.	5.7 Detailed Evaluation of Technical Bids	10
1.:	5.8 Eligibility and Qualification of the Bidder	10
1.:	5.9 Correction of Arithmetical Errors	11
1.:	5.10 Evaluation of Price Bids	11
1.:	5.11 Comparison of Bids	11
1.:	5.12 Purchaser's Right to Accept Any Bid, and to Reject Any or All Bids	11

1.6.0 Award	of Contract		
1.6.1	Award Criteria		11
1.6.2	Notification of	Award	11
1.6.3	Signing of Con	itract	12
1.6.4	Performance S	Security	12
APPENDIX T	O ITB - 1	Bid Data Sheet	
APPENDIX T	O ITB - 2	Evaluation and Qualification Criteria	

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" or "AEGCL"), issues this Bidding Document for the supply of Goods and Related Services incidental thereto as specified in Section 3 (Purchaser's Requirements). The name and identification nos. of this Competitive Bidding are provided 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.** Subject to meeting the Qualifying Requirements, a Bidder may be a firm or company. 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. Joint Venture is not allowed to participate in this bidding.

1.2.0 Contents of Bidding Document

1.2.1. Sections of Bidding Document

1.2.1.1. The Bidding Document consists of following six Sections, 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 - Purchaser's Requirements (PRQ) 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 shall constitute "the Contract".
- **1.2.1.3.** The Invitation for Bids issued by the Purchaser is not part of the Bidding Document.
- **1.2.1.4.** The Purchaser 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 Purchaser 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 Purchaser in writing at the Purchaser'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 Purchaser 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 Purchaser'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 Purchaser 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 sites 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 sites 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 Purchaser 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 Purchaser 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 Purchaser 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 Purchaser 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.** Non attendance at the pre-bid meeting will not be a cause for disqualification 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 Purchaser 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 Purchaser 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 Purchaser 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 Purchaser 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 Purchaser, 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 envelopes submitted 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*, both envelopes must be submitted online through e-tendering portal at http://assamtenders.gov.in.

1.3.3.2. The Technical Bid submitted by the Bidder shall comprise the following:

- (a) Letter of Technical Bid;
- (b) Bid Security, in accordance with ITB Clause 1.3.9;
- (c) Tender Fee;
- (d) Written confirmation authorizing the signatory of the Bid to commit the Bidder, in accordance with *ITB Clause 1.3.10.1*; (i.e. Notarized Power of Attorney)
- (e) 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;
- (f) 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;
- (g) Documents as called for in ITB Clauses1.1.2.1, 1.1.2.2, and1.1.2.3;
- (h) Any other document required in the BDS.
- **1.3.3.3.** The 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 Clauses1.3.4* and *1.3.7*; 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 Clause1.3.3*, 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 Goods and Services

- **1.3.6.1.** The documentary evidence of the conformity of the goods 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 goods and services, including the functional guarantees of the Goods, in response to the Specification;
 - (b) A commentary on the Purchaser'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 Purchaser 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 Purchaser's satisfaction that the substitutions are substantially equivalent or superior to the standards designated in the Specification.

1.3.7. Bid Prices

- **1.3.7.1.** Unless otherwise specified in the **BDS** and/or Section 3 (Purchaser's Requirements), bidders shall quote for the entire scope of supply and services on a "single responsibility" basis such that the total bid price covers all the Supplier's obligations mentioned in or to be reasonably inferred from the bidding document in respect of the design, manufacture, including procurement, delivery, and completion of the entire scope.
- **1.3.7.2.** 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.
- 1.3.7.3. 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). Separate numbered Schedules included in Section 2 (Bidding Forms) shall be used for each of the following elements. The total amount from each Schedule (1 & 2) shall be summarized in a Grand Summary (Schedule 3) giving the total bid price(s) to be entered in the Bid Form. In case of e-tender, the bidder shall fill up the Price schedules as provided in the online tender.

Schedule No. 1:	Supply of Goods
Schedule No. 2:	Related Services (Freight & Insurance)
Schedule No. 3:	Grand Summary

1.3.7.4. The prices shall be fixed

The 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**.

1.3.8. Period of Validity of Bids

- **1.3.8.1.** Bids shall remain valid for the period specified in the **BDS** after the bid submission deadline date prescribed by the Purchaser. A bid valid for a shorter period **shall be rejected** by the Purchaser as non-responsive.
- 1.3.8.2. In exceptional circumstances, prior to the expiration of the bid validity period, the Purchaser 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 1.3.9*, 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.

1.3.9. Bid Security

- **1.3.9.1.** The Bidder shall furnish as part of its bid, in original form, a Bid Security as specified in the **BDS**. The amount of Bid Security shall be as specified in the **BDS**.
- **1.3.9.2.** 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 1.3.8.2*.
- **1.3.9.3.** Bids not complying with *ITB Clause 1.3.9.1* and *ITB Clause 1.3.9.2*, *shall be rejected* by the Purchaser as *non-responsive*.
- **1.3.9.4.** 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.
- **1.3.9.5.** 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*.
- **1.3.9.6.** 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 1.3.8.2* 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. Format and Signing of Bid

- **1.3.10.1.** 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*
- 1.3.10.2. 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 initialised by the person signing the bid.
- **1.3.10.3.** Any interlineations, erasures, or overwriting shall be valid only if they are signed or initialised by the person signing the bid.

1.4.0 Submission and Opening of Bids

1.4.1. On-line submission of Bids

- **1.4.1.1.** The Technical as well as Price Bid should be submitted through online portal only.
- 1.4.1.2. For Technical bid, all forms and supporting documents as required by *ITB Clause 1.3.2* and duly signed and stamped as per *ITB Clause 1.3.10* are to be uploaded to the e-tendering portal. The documents are to be uploaded in pdf format and each file should not exceed 5 MB is size. In case a document is more that 5 MB in size, the same may be split to make the size below 5 MB.
- **1.4.1.3.** The Price Bid must be submitted in the Price Schedule provided on the e-tendering portal as per the online format.

1.4.2. Deadline for Submission of Bids

- 1.4.2.1. Bids shall be received **ONLINE** only on or before the date and time indicated in the **BDS**.
- **1.4.2.2.** The Purchaser 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 Purchaser 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. The e-tendering portal shall allow the bidders to submit bids up to the date and time specified in *ITB Clause* 1.4.2 as per Server Clock. Bidders are advised to submit their bids well in advance of the deadline for submission of bids to avoid any last minute difficulties.

1.4.4. Withdrawal, Substitution, and Modification of Bids

- **1.4.4.1.** E-tendering portal shall allow modification of bids any time before the deadline for Bid Submission. A bidder may withdraw its bid, by sending a written notice duly signed by an authorized representative, and shall include a copy of the authorization in accordance with *ITB Clause 1.3.10.1*, Notices must be received by the purchaser prior to the deadline prescribed for submission of bids, in accordance with *ITB Clause 1.4.2*.
- **1.4.4.2.** 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 Purchaser shall conduct the opening of Technical Bids through online process at the address, date and time specified in the BDS. The Bid Opening Committee shall open the bids received online in the presence of

Bidders` designated representatives who choose to attend. The Price Bids will remain unopened until the specified time of their opening.

- **1.4.5.2.** First, physical envelopes marked "WITHDRAWAL" shall be opened and read out and the corresponding bid shall not be considered/ rejected with comments. No bid withdrawal shall be permitted unless the corresponding withdrawal notice contains a valid authorization to request the withdrawal duly signed by an authorized representative and is read out at bid opening.
- **1.4.5.3.** All envelops holding the Technical Bids shall be opened one at a time, and the following read out and recorded
 - a) the name of the Bidder;
 - b) the presence of a Bid Security, if required; and
 - c) any other details as the Purchaser 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 withdrawn bids.

- **1.4.5.4.** The Purchaser 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 and alternate 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.
- **1.4.5.5.** At the end of the evaluation of the Technical Bids, the Purchaser 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 Purchaser. Bidders shall be given reasonable notice of the opening of Price Bids.
- **1.4.5.6.** The Purchaser 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 Purchaser. The Bidder's representatives who are present shall be requested to sign a register evidencing their attendance.
- **1.4.5.7.** All envelops containing the Price Bids shall be opened one at a time and the following read out and recorded:
 - a) the name of the Bidder;
 - b) the Bid Prices, including any discounts and alternative offers; and
 - c) any other details as the Purchaser may consider appropriate.

Only Bid Prices and discounts 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.

1.4.5.8. The Purchaser 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. 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

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.

1.5.1.1. Any attempt by a Bidder to influence the Purchaser in the evaluation of the bids or Contract award decisions may result in the rejection of its bid.

1.5.1.2. Notwithstanding *ITB Clause 1.5.1.1*, from the time of bid opening to the time of Contract award, if any Bidder wishes to contact the Purchaser on any matter related to the bidding process, it should do so in writing duly signed by an authorized representative.

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 Purchaser may, at its discretion, ask any Bidder for a clarification of its bid or submission of any shortfall documents. However, the following may be noted in this regard:
 - Any clarification submitted by a Bidder that is not in response to a request by the Purchaser shall not be considered.
 - All clarification or shortfall documents shall be submitted through the e-tendering portal only. No
 other means of communication shall be considered unless specified otherwise.
 - No change in the substance of the Price Bid shall be sought, offered, or permitted, except to confirm the correction of arithmetic errors discovered by the Purchaser 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/shortfall documents of its bid by the date and time set in the Purchaser's request, 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 Purchaser 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 Purchaser shall confirm that the following documents and information have been provided both as hardcopies and alongwith Technical Bid in the e-tendering portal. If hardcopies of any of these documents or information are not submitted by the bidder within the specified time (I.e., atleast 1 (one) hour prior to bid submission deadline), the offer shall be rejected.
 - a) Letter of Technical Bid;
 - b) Written confirmation of authorization to commit the Bidder (i.e. Notarized Power of Attorney);
 - c) Bid Security; and
 - d) Evidence of online submission of Tender Fee

1.5.4.3. Preliminary Requirement of Opening of Technical BIDS

Bidder should submit hard copies of the documents mentioned above in clause 1.5.4.2 (a), (b), (c) and (d) in a physical envelope one day prior to bid submission deadline. Techno-commercial bids shall not be opened if these documents are not submitted in hard copy one day prior bid submission deadline.

1.5.5. Responsiveness of Technical Bid

- **1.5.5.1.** The Purchaser's determination of a bid's responsiveness is to be based on the contents of the bid itself, as defined in *ITB Clause1.3.3*.
- **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 Purchaser'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 Purchaser shall examine the technical aspects of the Bid submitted in accordance with *ITB Clause1.3.6*, Technical Proposal, in particular to confirm that all requirements of Section 3 (Purchaser'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 Purchaser 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 Purchaser 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 Purchaser 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 Purchaser 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 Purchaser 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 Purchaser 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 Purchaser's Requirements; deviations from the Purchaser's Requirements; conformity of the goods and services offered with specified performance criteria; suitability of the goods 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-2 of ITB (Evaluation and Qualification Criteria).

1.5.8. Eligibility and Qualification of the Bidder

- **1.5.8.1.** The Purchaser shall determine to its satisfaction during the evaluation of Technical Bids whether a Bidder meets 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 Clause1.3.5*.

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 Purchaser shall not open the Price Bid of the Bidder.

1.5.9. Correction of Arithmetical Errors

- **1.5.9.1.** During the evaluation of Price Bids, the Purchaser 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 and 2, 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 Purchaser 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 Purchaser 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 Clause1.5.9.1*; 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 Clause1.3.7.5*, 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 Purchaser shall compare all substantially responsive Bids to determine the lowest evaluated bid, in accordance with *ITB Clause 1.5.10.2*.

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

1.5.12.1. The Purchaser 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 Purchaser 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 Purchaser 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 Purchaser will pay the Contractor in consideration of the execution and completion of the plant and services (hereinafter and in the Conditions of 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 **seven (07) 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 Purchaser.

1.6.4. Performance Security

- 1.6.4.1. Within seven (07) days of the receipt of notification of award from the Purchaser, 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 Purchaser.
- **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 Purchaser may award the Contract to the next lowest evaluated Bidder whose offer is substantially responsive and is determined by the Purchaser to be qualified to perform the Contract satisfactorily.

APPENDIX TO ITB – 1

Bid Data Sheet (BDS)

A. Introduction

ITB 1.1.1.1	The number of the Invitation for Bid (IFB) is: AEGCL/MD/Tech-1030/CABLES/2022/PKG-A/IFB			
	The Purchaser is: Assam Electricity Grid Corporation Limited.			
	The name of the Bid is:			
	"Supply of Power & Control Cables and Related Services of 1.1 kV Class for Various Substations in Assam (Package-A)"			
	Bid Identification Number: AEGCL/MD/Tech-1030/CABLES/PACKAGE-A/BID			

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

	The Bidder shall submit with its Technical Bid the following additional documents:
ITB 1.3.3.2(h)	1. Guaranteed and other Technical Particulars as required in Section 3, 'Purchaser's Requirements'
	2. Type Test Certificates
ITB 1.3.7.1	Unless otherwise specifically indicated in the Section 3 (Purchaser's Requirements), bidders shall quote for the entire plant and services on 'single responsibility basis'.
ITB 1.3.7.4	The prices quoted by the Bidder shall be FIXED for entire period of the Contract.
ITB 1.3.8.1	The bid validity period shall be 180 (one hundred eighty) days.
ITB 1.3.9.1	The Bidder shall furnish a bid security amounting to Rs. 2,50,000.00

Т

ITB 1.3.10.1	The bidding is through E-tendering portal and received online, Bidders should submit the following documents in hard copy in a separate envelop one day prior to bid submission deadline:						
	a) Letter of Technical Bid;						
	b) Written confirmation of authorization to commit the Bidder;						
	c) Bid Security;						
	d) Evidence of online submission of Tender Fee.						
	However, a bidder has to submit any document in hard copy if asked by the Purchaser.						
ITB 1.3.10.2	0.2 The written confirmation of authorization to sign on behalf of the Bidder shall consist of a written confirmation of Authorization to sign on behalf of the Bidder shall consist of Notarized Power Attorney .						

ITB 1.4.2.1	For <u>bid submission purposes</u> only, (E-tenders shall be accepted through online portal <u>http://assamtenders.gov.in</u> only) The purchaser's address is: Attention: The Chief General Manager (PP&D), AEGCL Street Address: Bijulee Bhawan, Paltanbazar Floor/Room number: First Floor City: Guwahati PIN Code: 781001 The deadline for bid submission is Date: 02.01.2023 Time: 14.00 Hours
ITB 1.4.5.1	The bid opening of Technical Bids shall take place at <u>AEGCL, 1st Floor, Bijulee Bhawan, Paltanbazar, Guwahati-01</u> Date: 03.01. 2023 Time: 14.00 Hours

APPENDIX TO ITB - 2 Evaluation and Qualification Criteria (ECQ)

This Appendix contains all the criteria that the Purchaser 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

Evaluation		
1.1 Techr	nical Evaluation	16
1.2 Econo	omic Evaluation	16
1.3 Time	Schedule	16
1.4 Speci	ific additional criteria	16
Qualificatio	on	
2.1 Eligib	ility Requirements	16
2.2 Pendi	ing Litigation	16
2.3 Finan	icial Situation	17
2.3.1	Historical Financial Performance	17
2.3.2	Average Annual Turnover	17
2.3.3	Financial Resources/Cash Flow	17
2.4 Experie	nce	17
2.4.1	General Experience	18
2.4.2	Specific experience	18
	1.1 Techi 1.2 Econ 1.3 Time 1.4 Spec Qualification 2.1 2.1 Eligib 2.2 Pend 2.3 Finan 2.3.1 2.3.2 2.3.3 2.4 Experies 2.4.1	 1.1 Technical Evaluation 1.2 Economic Evaluation 1.3 Time Schedule 1.4 Specific additional criteria Qualification 2.1 Eligibility Requirements 2.2 Pending Litigation 2.3 Financial Situation 2.3.1 Historical Financial Performance 2.3.2 Average Annual Turnover 2.3.3 Financial Resources/Cash Flow 2.4 Experience 2.4.1 General Experience

1. Evaluation

1.1 Technical Evaluation

In addition to the criteria listed in ITB 1.5.7.1 (a) – (c), no other factor 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 Purchaser 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.

1.3 Time Schedule

02 (Two) months from the date of issue of LOA. However, minimum 50% of total BoQ quantity must be supplied within 01(one) month from issuance of manufacturing clearance. Bids not meeting the above time schedule shall be rejected. However, no credit will be given for earlier completion.

1.4 Specific additional criteria

In addition to the above, no additional criteria shall be considered for evaluation of Bids.

2 Qualification

Qualification of bidder will be based on meeting the minimum pass / fail criteria specified below

2.1 Eligibility Requirements

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

2.2 Pending Litigation

Criteria	Compliance Requirements				Documents	
	Joint Venture		Submission			
Requirement	Single Entity	All Partners Combined	Each Partner	One Partner	Requirements	
Using the 'Form LIT – 1' (Section 4, Bidding Form), bidder shall list all Pending Litigation. 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.	requirement	Not applicable	Not applicable	Not applicable	Form LIT – 1	

2.3 Financial Situation

Criteria	Co	Compliance Requirements			Documents
Requirement	Single Entity		<u>bint Venture</u> Each Partner	One	Submission Requirements

2.3.1 Historical Financial Performance

Submission of audited balance sheets or, if not required by the law of the Bidder's country, other financial statements acceptable to the Purchaser, for the last 3 (three) 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 total liabilities should be positive.	requirement	Not applicable	Not applicable	Not applicable	Form FIN - 1 with attachments
---	-------------	-------------------	-------------------	-------------------	-------------------------------------

2.3.2 Average Annual Turnover

Minimum average annual turnover of Rs 2,00,00,000.00 (Rupees Two Crores only calculated as total certified payment received for contracts in progress of completed, within the last 3 years.	requirement	Not applicable	Not applicable	Not applicable	Form FIN – 2
--	-------------	-------------------	-------------------	-------------------	-----------------

2.3.3 Financial Resources/Cash Flow

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:	Not applicable	Not applicable	Not applicable	Form FIN – 3
 (1) the following cash-flow requirement, Rs. 90,00,000.00(Rupees Ninety Lakhs only), and (2) the overall cash flow requirements for 				
this contract and its current works commitment.				

2.4 Experience

Criteria	Compliance Requirements		Compliance Requirements		Documents
Requirement	Single Entity	Jo All Partners Combined	oint Venture Each Partner	One Partner	Submission Requirements

2.4.1 General Experience

Experience as manufacturer of power and control cables of 1.1kV class for at least last 5 (five) years prior to the bid submission deadline	requirement	Not applicable	Not applicable	Not applicable	Form EXP – 1	
---	-------------	-------------------	-------------------	-------------------	-----------------	--

2.4.2 Specific Experience

The bidder must have designed, manufactured; type tested, supplied power and control cables of 1.1 kV and/or higher voltage class, which are in successful operation for at least three years as on the date of Bid opening. The bidder should furnish a list of such works executed along with clients' performance certificates to substantiate the requirement of this Clause.	Must meet requirement	Not applicable	Not applicable	Not applicable	Form EXP – 2

- 2.4.3 In case the bidder offers power and control cables of certain make which has been in operation in AEGCL for the last 5 (five) years and for which, the performance is not satisfactory, then AEGCL reserves the right to reject the bid of such bidders at any stage of the bidding process.
- 2.4.4 Manufacturer/Authorized dealer/distributor/agent for supply of power and control cables of 1.1kV class must meet the following minimum criteria. Failure to comply with this requirement will result in rejection of the bidder.
 - a) The bidder must supply minimum 50% of total BoQ quantity within 01 (One) month from issuance of manufacturing clearance.
 - b) The bidder must submit undertaking of the same at the time of bid submission.
- 2.4.5 In case, the Bidder is an authorised dealer/distributor/agent, along with above mentioned documents the bidder must submit the following additional documents with the bid,
 - a) An undertaking using 'Form-MA' (Manufacturer's Authorisation), Section-4 (Bidding Form).
 - b) Documentary evidence from manufacturer establishing that the bidder is an authorized channel partner.

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

0.	Form 1: Document Check List		21
1	Letter of Technical Bid		
2	Letter of Price Bid		23
3	Price Schedules		
	Schedule No. 1 – Supply of Goo Schedule No. 2 - Related Servic Schedule No. 3 - Grand Summa	es (Freight & Insurance)	25 27 28
4	Form of Bid Security		
5	Contract Execution Schedule		
6	Bidders Qualification		
	6.1 Form ELI - 1: Bidder's Info	ormation Sheet	
	6.2 Form LIT - Pending Litiga	ation	
	6.3 Form FIN - 1: Financial Si	ituation	
	6.4 Form FIN - 2: Average An	nual Turnover	
	6.5 Form FIN – 3: Financial F	Resources	
	6.6 Form EXP – 1: General E	Experience	
		xperience	
7	Manufacturer's Authorization		

<u>Form – 1</u> Document checklist

SL. No.	Document to be submitted	Submitted(Yes/No)	Name of uploaded pdf
1.	Letter of technical bid		
2.	Notarised Power of attorney for the person signing the tender		
3.	Bank Gurantee for EMD		
4.	Bidders company/firm registration certificate/certificate of incorporation		
5.	Manufacturer's authorization (Form MA) (Applicable for bidder who is not manufacturer of offered product)		
6.	GST registration		
7.	Filled up Form ELI-1		
8.	Filled up Form LIT		
9.	Filled up Form FIN-1		
10.	Filled up Form FIN-2		
11.	Filled up Form FIN-3		
12.	Filled up Form FIN-4		
13.	Audited Balance sheet for last three years		
14.	Bank solvency certificate/ other supporting document		
15.	Filled up Form EXP-1		
16.	Filled up Form EXP-2		
17.	Order/Contract copies establishing supplying offered product in past		
18.	Performance certificate of offered product		
19.	Document establishing manufacturing unit details		
20.	GTP and drawings		
21.	Type test reports		
22.	Completion schedule bar chart		
23.	Additional documents if any		

Note: Bidders are requested to submit all required documents in e-tender portal and physical copies of i) Letter of technical bid, ii) EMD and iii) Power of Attorney(notarized) for bid signatory to Tender inviting authority.

1 Letter of Technical Bid

[Bidder's Letterhead]

Date:	
Bid Identification No (s):	
:	
:	
:	
Invitation for Bid No.:	

To:....

We, the 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 and deliver, in conformity with the Bidding Document the following Goods and Related 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

ame
the capacity of
gned
uly authorized to sign the Bid for and on behalf of
ate

2 Letter of Price Bid (NOT REQUIRED FOR E-TENDERING)

[Bidder's Letterhead]

	Date:
	Bid Identification No:
	Invitation for Bid No.:
То:	
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 and deliver in conformity with the Bidding Document the following Goods and Related Services:;
(iii).	The total price of our Bid is the sum of:,
(iv).	Discount offered (if any) for (i) Supply (Schedule 1)%, and (ii) Related Services (Schedule 2, F& 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	э
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 are divided into separate Schedules as follows:

Schedule No. 1:	Supply of Goods
Schedule No. 2:	Related Services (Freight & Insurance)
Schedule No. 3:	Grand Summary

- 2. The entered rates and prices shall be deemed to cover the full scope as specified in the bidding document, 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

- **1.** Prices shall be excluding GST.
- 2. Prices shall be filled in indelible ink/ on-line and any alterations necessary due to errors, etc., shall be initialed by the Bidder if asked for hardcopy.
- 3. Bid prices shall be quoted on-line in the manner indicated in Schedules.
- 4. 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.
- 5. Prices given in the Schedules against each item shall be for the scope covered by that item as detailed in Section 6 (Purchaser's Requirements) or elsewhere in the Bidding Document.

NOTE: For E-Tendering these forms are indicative only. All prices to be filled in the price schedule provided in the e-tendering portal only.

Measuring SI. Description Qty Unit Total Unit Total Total Unit No. **Prices** Price GST GST Price without @18% includina GST GST 8= 4 x 7 2 3 4 5 $6 = 4 \times 5$ 7 9=4 x (5 + 7) 1 1 Destination Substation: Agia 220/132/33 kV 1.1 Supply of 1.1KV grade XLPE insulated with stranded electrolytic grade Copper Control Cables as per Specifications: 1325 (i) 27 C, 2.5 sqmm Μ (ii) 10 C, 2.5 sqmm М 7643 (iii) 7 C, 2.5 sqmm Μ 346 4403 (iv) 5 C, 2.5 sqmm М 2057 (v) 4 C, 2.5 sgmm М 2 Destination Substation: Boko 220/132/33 kV 2.1 Supply of 1.1KV grade XLPE insulated with stranded electrolytic grade Copper Control Cables as per Specifications: 730 (i) 27 C, 2.5 sqmm М 580 (ii) 19 C, 2.5 sqmm Μ (iii) 10 C, 2.5 sqmm Μ 780 (iv) 5 C, 2.5 sqmm М 5755 5915 (v) 4C, 2.5 sqmm Μ 3 Destination Substation: RANGIA 220/132/33 kV 3.1 Supply of 1.1KV grade XLPE insulated with stranded electrolytic grade Copper Control Cables as per Specifications: (i) 27 C, 2.5 sqmm Μ 1400 1000 (ii) 19 C, 2.5 sgmm М 1000 (iii) 14 C, 2.5 sqmm Μ 3000 (iv) 4 C, 2.5 sqmm Μ Destination 4 Substation: SISHUGRAM 132/33 kV 4.1 Supply of 1.1KV grade XLPE insulated with stranded electrolytic grade Copper Control Cables as

Schedule No. 1 – Supply of Goods *PACKAGE-A*

SI. No.	Description	Measuring Unit	Qty	Unit Prices	Total Price without GST	Unit GST @18%	Total GST	Total Price including GST
1	2	3	4	5	6 = 4 x 5	7	8= 4 x 7	9=4 x (5 + 7)
	per Specifications:							
	(i) 27 C, 2.5 sqmm	М	690					
	(ii) 19 C, 2.5 sqmm	М	420					
	(iii) 10 C, 2.5 sqmm	М	2937					
	(iv) 4 C, 2.5 sqmm	М	150					
	4.2 Supply of 1.1KV grade XLPE insulated with stranded electrolytic grade Copper Power Cables as per Specifications:							
	(i) 4 C, 6 sqmm	М	1283					
	L of Column 6 and 8 to be ca Summary	rried forward	to Schee	dule No. 3				

Name of the Bidder :....

Signature of the Bidder:

- 1. All amounts shall be in Rupees
- 2. Prices shall be exclusive of taxes

	PACKAGE-A					
ltem	Description	Measuring Unit	Qty.	Unit Price	Total Price	
1	2	3	4	5	6= 4x5	
1	Destination Substation: Agia 220/132/33 kV		-			
	1.1 Supply of 1.1KV grade XLPE insulated with					
	stranded electrolytic grade Copper Control Cables					
	as per Specifications:					
	(i) 27 C, 2.5 sqmm	М	1325			
	(ii) 10 C, 2.5 sqmm	М	7643			
	(iii) 7 C, 2.5 sqmm	М	346			
	(iv) 5 C, 2.5 sqmm	М	4403			
	(v) 4 C, 2.5 sqmm	М	2057			
2	Destination Substation: Boko 220/132/33 kV					
	2.1 Supply of 1.1KV grade XLPE insulated with					
	stranded electrolytic grade Copper Control Cables					
	as per Specifications:					
	(i) 27 C, 2.5 sqmm	М	730			
	(ii) 19 C, 2.5 sqmm	М	580			
	(iii) 10 C, 2.5 sqmm	М	780			
	(iv) 5 C, 2.5 sqmm	М	5755			
	(v) 4C, 2.5 sqmm	М	5915			
3	Destination Substation: Rangia 220/132/33 kV		•			
	3.1 Supply of 1.1KV grade XLPE insulated with					
	stranded electrolytic grade Copper Control Cables					
	as per Specifications:					
	(i) 27 C, 2.5 sqmm	М	1400			
	(ii) 19 C, 2.5 sqmm	М	1000			
	(iii) 14 C, 2.5 sqmm	М	1000			
	(iv) 4 C, 2.5 sqmm	М	3000			
4	Destination Substation: Sishugram 132/33 kV		1			
	4.1 Supply of 1.1KV grade XLPE insulated with					
	stranded electrolytic grade Copper Control Cables					
	as per Specifications:					
	(i) 27 C, 2.5 sqmm	М	690			
	(ii) 19 C, 2.5 sqmm	М	420			
	(iii) 10 C, 2.5 sqmm	М	2937			
	(iv) 4 C, 2.5 sqmm	М	150			
	4.2 Supply of 1.1KV grade XLPE insulated with		l			
	stranded electrolytic grade Copper Power Cables as					
	per Specifications:					
	(i) 4 C, 6 sqmm	М	1283			
	TOTAL (Columns 6 to be carried forward to Schedule		Summar	·v)		
			Janna]/		

Schedule No. 2 - Related Services (Freight & Insurance) PACKAGE-A

Name of the Bidder :....

Signature of the Bidder.....

- 1. All amounts shall be in Rupees
- 2. Prices shall be exclusive of taxes

Schedule No. 3 - Grand Summary

Package	Schedule No.	Column No.	Title	TOTAL (in Rs)
Package - A	1	6	Supply of Goods (Total price without GST)	
	1	7	Supply of Goods (Total GST)	
	2	6	Related Services (Freight & Insurance)	
GRAND TOTAL to be carried forward to Letter of Price Bid (Package-A)				

Name of Bidder:

Signature of the Bidder:

¹All amounts shall be in Rupees.

4 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......

Beneficiary: Name and Address of Purchaser

Date:

Bid Security No.:

We have been informed that *name of the Bidder*. (Hereinafter called "the Bidder") has submitted to you its bid dated (Hereinafter called "the Bid") for the execution of *Name & Identification No of Bid* under Invitation for Bids No. ("the IFB").

Furthermore, we understand that, according to your conditions, bids must be supported by a bid guarantee.

- (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 Purchaser 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.

This guarantee will expire: (a) if the Bidder is the successful Bidder, upon our receipt of copies of the Contract Agreement signed by the Bidder and the performance security issued to you upon the instruction of the Bidder; and (b) if the Bidder is not the successful Bidder, upon the earlier of (i) our receipt of a copy your notification to the Bidder of the name of the successful Bidder; or (ii) twenty-eight days after the expiration of the Bidder's bid.

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

5 Contract Execution Schedule

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

6 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.

6.1	Form	ELI - 1:	: Bidder's	Information	Sheet
-----	------	----------	------------	-------------	-------

	Bidder's Information			
Bidder's legal name				
Bidder's country of constitution				
Bidder's year of constitution				
Bidder's legal address				
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 entity/firm, documents, in accordance with ITB 1.1.2.1.				
2. In case of single Company, documents, in accordance with ITB 1.1.2.2.				

6.2 Form LIT - Pending Litigation

Each Bidder must fill in this form

	Pending Litigation				
L IN Qi	INo pending litigation in accordance with Criteria 2.1.3 of Appendix 2 of ITB (Evaluation and Qualification Criteria)				
D Pe Qi	ending litigation in accordance with Criteria 2.1.3 of Appendix 2 of ITE ualification Criteria)	B (Evaluation an	d		
Year	Matter in Dispute	Value of Pending Claim in Rupees	Value of Pending Claim as a Percentage of Net Worth		

6.3 Form FIN - 1: Financial Situation

Each Bidder must fill in this form

Financial Data for Previous 3 Years [Rupees]				
Year 1:	Year 2:	Year 3:		

Information from Balance Sheet

Total Assets		
Total Liabilities		
Net Worth		
Current Assets		
Current Liabilities		

Information from Income Statement

Total Revenues		
Profits Before 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.
 - All such documents reflect the financial situation of the Bidder or partner to a JV, and not sister or parent companies.
 - Historic financial statements must be audited by a certified accountant.
 - Historic financial statements must be complete, including all notes to the financial statements.
 - Historic financial statements must correspond to accounting periods already completed and audited (no statements for partial periods shall be requested or accepted).

6.4 Form FIN - 2: Average Annual Turnover

Each Bidder 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 in terms of the amounts billed to clients for each year for contracts in progress or completed.

6.5 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 cash flow demands of the subject contract or contracts as indicated in **Appendix 2 of ITB** (Evaluation and Qualification Criteria) with necessary supporting documents.

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

6.6 Form EXP – 1: General Experience

Each Bidder must fill in this form

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

6.7 Form EXP – 2: Specific Experience

Fill up one (1) form per contract.

Contract of Similar Size and Nature				
Contract No of	Contract Identification			
Award Date		Completion Date		
Role in Contract	Contractor	☐ Subcontractor		
Total Contract Amount		(Rupees)		
Purchaser's Name Address Telephone/Fax Number E-mail				
Description of the similarity in accordance with Criteria 2.4.2 /2.5 of Section 3				
1. Brief Specification of Goods supplied				
2. Date of commissioning.				
Attached are copies of the following original documents.				
1. Type Test Certificates. (Not older than five years on the date of Technical Bid opening)				
2. Recent performance certification	2. Recent performance certificates (Not older than five years on the date of Technical Bid opening)			
3. Copy of the Contract Document.				

7 Manufacturer's Authorization

[The Bidder, in pursuant to ECQ Clause 2.1.2 (if applicable) shall require the Manufacturer 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. Please refer to notes at bottom]

(Manufacturer'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 Purchaser]

WE [insert: name of Manufacturer] who are established and reputable manufacturers of [insert: name and/or description of the Goods] 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, manufactured by us, and to subsequently negotiate and sign the Contract:

- 1. -----
- 2. -----

We hereby extend our full guarantee and warranty in accordance with *Clause 5.11.0* of the Special Conditions of Contract, for the above specified Goods supporting the Supply of specified Goods and fulfilling the Related Services 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 will furnish the Performance Guarantee in accordance with *SCC Clause 5.9.2*. Further, 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 related services and 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 Purchaser under the Contract.

For and on behalf of the Manufacturer

Signed: _____

Date:

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).

38

Date:

Place:

Notes:

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 sign on behalf of the Manufacturer** (to be attached with this MA) 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.

Section - 3

Purchaser's Requirements

Assam Electricity Grid Corp. Ltd.

Section 3 - Purchaser's Requirements

This Section contains the Technical Requirements and supplementary information that describe the Goods and Related Services

Table of Contents

3.1.0	SCOPE	42
3.2.0	SERVICE CONDITIONS	42
3.3.0	TYPE TEST REPORTS	42
3.4.0	GUARANTEED TECHNICAL PARTICULARS	43
3.5.0	MATERIAL HANDLING AND STORAGE	43
3.6.0	TECHNICAL SPECIFICATION OF XLPE INSULATED COPPER POWER & CONTROL CABLES	43
	Annexure-1 Technical Data Format for 1.1KV, XLPE Insulated, Copper Cable	51
	Annexure-2 Guaranteed and Other Technical Particulars (Power Cables)	54
	Annexure-3 Guaranteed and Other Technical Particulars (Control Cables)	56

Section 3

Purchaser's Requirements

3.1.0 SCOPE

- **3.1.1.** The brief description of scope covered under this Bidding Document is furnished below:
 - a) Design, manufacture and testing at manufacturer's works of 1.1 KV grade XLPE insulated Power Cables with stranded electrolytic grade Copper conductors.
 - **b)** Design, manufacture and testing at manufacturer's works of 1.1 KV grade XLPE insulated Control Cables with staranded electrolytic grade Copper conductors.
 - c) Loading at manufacturer's works, transportation and delivery at respective substation sites, including unloading at destination sites.
- **3.1.2.** It is also responsibility of the Contractor to obtain any road permits and any other permits or licenses as may be required to execute the works.

3.2.0 SERVICE CONDITIONS

3.2.1. The materials supplied shall be suitable for operation under the following climatic and other conditions:

a)	Peak ambient day temperature in still air	: 45°C
b)	Minimum night temperatures	: 0°C
c)	Ground temperatures	: 40°C
c)	Reference ambient day temperature	: 45°C
d)	Relative Humidity a) Maximum	: 100 %
	b) Minimum	: 10 %
e)	Altitude	: Below1000 M above MSL
f)	Maximum wind pressure	: As per IS: 802 latest code.
g)	Seismic Intensity	: ZONE-V as per IS 1893.

3.3.0 TYPE TEST REPORTS

- **3.3.1.** Equipment, which have never been tested for critical performance, shall not be accepted. In such cases, a promise or agreement by a bidder to have the equipment tested after award of a contract is not acceptable.
- **3.3.2.** All Bids must be accompanied by the full Type Test Certificates of equipment offered. Such type test certificates shall be acceptable only if: -
 - (a) Tests are conducted in an independent and well known testing laboratory, or
 - (b) Tests are conducted in manufacturer's own laboratory. In this case (i) the laboratory must have ISO 9000 (or its equivalent) series certification; and (ii) tests have been witnessed by technically qualified representatives of earlier clients or purchaser.
- **3.3.3.** Test reports to be acceptable must be related directly to the materials offered. Test reports for higher class of items are acceptable with commitment to perform the type tests free of any charge on the particular items after the award of contract.
- 3.3.4. Type Test Reports older than five (5) years on the date of Technical bid opening shall not be accepted. The validity of Type Test report of Power and Control cables shall be as per CEA's "Guideline for validity period of Type Tests conducted on major electrical equipment in power transmission system", file no. CEA-PS-14-80/1/2019-PSETD Division-Part (2).

3.4.0 GUARANTEED TECHNICAL PARTICULARS

- **3.4.1.** The Guaranteed Technical Particulars of the equipment shall be furnished by the Bidders in the prescribed Schedules of this Section with the Technical Bid. The Bidder shall also furnish any other information's as in their opinion is needed to give full description and details to judge the item(s) offered by them.
- **3.4.2.** The data furnished in Guaranteed Technical Particulars should be the minimum or maximum value (as per the requirement of the specification) required. A Bidder may guarantee a value more stringent than the specification requirement. However, for testing purpose or from performance point of view, the material shall be considered performed successfully if it achieves the minimum/maximum value required as per the technical specification. No preference what so ever shall be given to the bidder offering better/more stringent values than those required as per specification except where stated otherwise.

3.5.0 MATERIAL HANDLING AND STORAGE

- **3.5.1** All the supplies under the Contract as well as Employer supplied items (if any) arriving at site shall be promptly received, unloaded and transported and stored in the stores by the Contractor.
- **3.5.2** Contractor shall be responsible for examining all the shipment and notify the Employer immediately of any damage, shortage, discrepancy etc. for the purpose of Employer's information only. The Contractor shall submit to the Employer every week a report detailing all the receipts during the week. However, the Contractor shall be solely responsible for any shortages or damages in transit, handling and/or in storage and erection at site. Any demurrage, and other such charges claimed by the transporters, railways etc., shall be to the account of the Contractor.
- **3.5.3** The Contractor shall maintain an accurate and exhaustive record-detailing out the list of all items received by him for the purpose of erection and keep such record open for the inspection of the Employer.
- **3.5.4** All items shall be handled very carefully to prevent any damage or loss. The materials stored shall be properly protected to prevent damage. The materials from the store shall be moved to the actual location at the appropriate time so as to avoid damage of such materials at Site.
- **3.5.5** All the materials stored in the open or dusty location must be covered with suitable weather-proof and flame proof covering material wherever applicable.
- **3.5.6** The Contractor shall be responsible for making suitable indoor storage facilities, to store all items/materials, which require indoor storage.
- **3.5.7** The Contractor shall have total responsibility for all equipment and materials in his custody, stored, loose, semi-assembled and/or erected by him at site. The contractor shall make suitable security arrangements including employment of security personnel to ensure the protection of all materials, equipment and works from theft, fire, pilferage and any other damages and loss.

3.6.0 TECHNICAL SPECIFICATION OF XLPE INSULATED COPPER POWER & CONTROL CABLES

- **3.6.1.** This technical specification intends to cover the following:
 - Technical specifications for design, engineering, manufacturing, inspection, testing at manufacturer's works, packaging and delivery by road (properly packed in non-returnable steel drums), various sizes of copper conductor, XLPE insulated, voltage upto and including 1100 Volts, extruded PVC inner sheathed, extruded FRLS PVC outer sheathed, GI round wire armoured cables, suitable for solidly grounded system. The cables shall confirm to IS 7098-Part 1 with latest amendments. For cable list referTable-1.
 - 2. Technical specifications for design, engineering, manufacturing, inspection, testing at manufacturer's works, packaging and delivery by road (properly packed in non-returnable steel drums), 6.35/11 kV (Uo/U) Voltage Grade, 3-Core, 185 Sq. mm Stranded Compacted Circular Shaped Aluminium Conductor of H4 Grade, shielded with extruded Semi-conducting compound, XLPE insulated, PVC sheathed, GI Round wire armoured Power and Control Cables for effectively grounded system. The cable shall confirm to the latest revisions of IS: 7098 (Part –2). For cable list refer Table-1.

Note:

- Tenders will only be considered from the cable manufacturers and any one supplier to whom manufacturer can authorize. The bidder shall have adequate experience of at least 5 years in manufacturing of LT/MV & HT cables.
- 2. Copper samples from the finished cable drums shall be tested at any 3rd party NABL accredited lab to ensure its purity.
- 3. The following document shall be attached with technical part of the bid:
 - i. Duly filled & Signed copy of Annexure-1,2 and 3
 - ii. Deviation sheet, if any

|--|

SI. no	Power Cable	
1	4C X 6 sqmm	
2	2CX4 sqmm	
	Control Cable	
3	2C, 2.5 sq mm	
4	4C, 2.5 sq mm	
5	5C, 2.5 sq mm	
6	7C, 2.5 sq mm	
7	10 C, 2.5 sq mm	
8	14 C, 2.5 sqmm	
9	19 C,2.5 sqmm	
10	27C,2.5 sqmm	

3.6.2. Technical Specifications for 1.1 kV grade, Copper conductor, Power and Control cables

This section covers the technical specifications for design, engineering, manufacturing, inspection, testing at manufacturer's works, packaging and delivery by road (properly packed in non-returnable steel drums), 1.1KV grade, Multi-stranded Copper conductor, XLPE insulated, extruded PVC inner sheathed, GI round-wire armoured, extruded FRLS PVC ST2 outer sheathed. Power Cables and Control Cables for effectively grounded system, conforming to the latest revisions of IS: 7098 (Part –I), 1988 & as per the technical specifications attached herewith.

3.6.3 STANDARDS

The design, manufacture and testing of the cable shall comply with the latest editions/amendments of the following Indian Standards, unless otherwise specified. Equipments complying with equivalent standards shall also be acceptable.

a.	IS-7098, 1998 (Part-I)	PVC	s linked po sheathed o ges upto 11	cables fo		sulated
b.	IS-3961	: Reco Cable	mmended es	current	t ratings	for
C.	IS 8130-1984	•		-	conductors and flexible	for
d.	IS-3975, 1999		Carbon gal ^ı ed wires & ta ıbles			
e.	IS-4759	: Spec	cifications	for	Hot	dipped

		galvanized coating on round steel Wires
f.	IS-5831	: PVC insulation and sheath of electric
		cables.
g.	IS-10418	: Drums for electric cables.
h.	IS-10810	: Method of test for cables.

3.6.4. SERVICE CONDITION

Service Condition shall be as per General Technical Requirements (GTR).

3.6.5. DESIGN AND CONSTRUCTION PERTICULARS

3.6.5.1. General

The cables supplied under this specification shall be adequate insulated to operate continuously at the specified voltage with a high degree of safety and reliability throughout the life of the cables. The sheathing material shall be high quality PVC based compound. The construction of cable shall be as per IS: 7098 (Part I) – 1988.

Cable shall be designed and manufactured to prevent damage during transportation, installation & operation under all climatic & operating condition

3.6.5.2. Technical parameters

i.	Quantity	Refer Table-1		
ii.	Packaging	Steel drum packaging, each		
		having single length cable \geq 500		
		meters		
iii.	Cable Type	2XWY (refer Table-1 for details)		
iv.	No. of Cores	Shall be decided during detailed		
		engineering (Cable sizing calculation)		
٧.	Voltage Level	1.1Kv		
vi.	System Grounding	Solidly Grounded		
vii.	Nominal System voltage	400V ±10%		
viii.	Nominal System Frequency	50 Hz		
ix.	Maximum conductor temperature at rated	90 deg C		
	current			
Х.	Maximum conductor temperature at	250 deg C		
	Short-circuit			
xi.	Conductor Conductor Material	H4-Grade Aluminium of purity > 99.6%		
		Electrolytic grade Copper, Purity >		
		99.97%		
xii.	Conductor type	Stranded with number of strands as		
		per IS 8130 (Part-I) 1984		
xiii.	Insulating material	Cross-Linked-Polyethylene (XLPE)		
		Compound		
xiv.	Core Identification Strips	Red, Yellow, Blue & Black (for neutral)		
XV.	Material of Inner Sheath	FRLS, PVC ST-2 Compound		

3.6.6. Conductor

3.6.6.1. COPPER

The conductors shall be made from high conductivity copper rods complying with IS: 613-1964. The conductor material used shall be electrolytic grade with high purity. *Two sample conductors randomly selected from finished lot of cables, shall be tested for its purity at any* 3rd *party NABL accredited lab.*

3.6.6.2. Cable Joints

Joints shall be permitted in the individual wires of which the conductor is formed, but no joint shall be within 300 mm of any other joint within the same layer. The joints shall be made by resistance butt welding, fusion welding, cold pressure welding, electric welding, gas welding, brazing or silver soldering. No joint is allowed in the conductor after stranding. A maximum of two joint shall be allowed in any strand forming complete length of the cable.

The conductors shall conform to appropriate dimensions, resistance and number of wires in the conductor (number of strands) as given in IS 8130 (Part I): 1984.

3.6.7. Insulation

The insulating material for power and control cables shall be extruded cross linked polyethylene (XLPE) compound as per IS-7098(Part-I)-1988. The minimum thickness of insulation shall not be less than the values specified in Table-2 of IS-7098 (Part-I)-1988. No negative tolerance shall be applicable for the thickness. The insulation of the cable shall be designed and manufactured for the specified system voltage. The manufacturing process shall ensure that insulation shall be free from voids. The insulation shall withstand mechanical and thermal stress under steady state and transient operating conditions. The cores shall be identified as per the following colour scheme:

3-Core - Red, Yellow & Blue 3 ½ or 4-Core - Red, Yellow, Blue & Black

3.6.8. Inner Sheath

The inner sheath shall be extruded FRLS PVC, Type ST2, compatible with thermal rating of insulation conforming to IS-6380-1984. The sheath shall have adequate thickness, mechanical strength and elasticity, as specified in IS 5831. The material shall be soft thermoplastic type, applied by extrusion method. The thickness of the inner sheath shall be as per IS: 7098 (Part I) and the color of the inner sheath shall be so formed that it fits closely on the laid up cores and could be easily removed without damaging insulation. One or more layer of proofed plastic tape shall be provided over the laid-up core before extrusion.

3.6.9. Armouring

The armouring arranged over the inner sheath shall consist of one layer of galvanized round steel wires for all sizes of cable. The armour round wire used on the cable shall conform to IS: 3975 for all requirements. The direction of lay of armour shall be opposite to that of the cores. The zinc coating on the galvanized steel strip shall comply with relevant standards.

The joints in armour wires/strips shall be made by brazing or welding and the surface irregularities shall be removed. A joint in any wire/strip shall be at least 300 mm away from the nearest joint in any other wire/strip in the completed cable.

3.6.10. Outer Sheath

Extruded outer sheath shall be provided over the armouring. The material used for sheathing shall be FRLS PVC sheath, Type ST-2 base compound conforming to IS 1554/ IS 5831 for power and control cable. The outer sheath shall be so formed that it fits closely on the laid-up armour and could be easily removed without damaging the intermediate sheath and insulation. The colour of the outer sheath

shall be black. The thickness of outer sheath shall be in accordance with the IS 1554 (Part-I)-1988. Suitable additives shall be added to prevent attack by rodents and termites. All serving must be given anti-termite treatment.

Cables shall have suitable fillers laid up with the conductor to provide a substantially circular cross section before the sheath is applied. Fillers shall be suitable for the temperature of the cable and compatible with the insulating material. The material shall be of the best quality and workmanship. The fillers and sheath material shall be non-hygroscopic. All materials shall be new, unused and of the finest quality.

3.7.0 TESTS

- **3.7.1.** All the tests specified below shall be carried out in accordance with the Indian Standards by the manufacturer in the presence of Purchaser's representative. If the cable fails to pass the test specified, the Purchaser shall have the option to reject it. Shipping release shall be obtained from the Purchaser's representative. The Purchaser, however reserves the right to waive off the inspection.
- **3.7.2.** The tests at works shall include electrical, mechanical and hydraulic tests in accordance with the appropriate clauses of Statutory Regulation, relevant codes and standards, in addition any test called for by the Purchaser or his representative to ensure that the equipment being supplied fulfils the requirement of the specification.
- **3.7.3.** For test not covered by any code or specifically mentioned in this specification, the test procedures are to be agreed with the Purchaser.

3.7.4. Pre-Dispatch Inspection

The manufacturer shall be given at least 15 days advance notice prior to the commencement of testing, so that Purchaser's representative can plan to witness the tests.

- **3.7.5.** All the tests indicated in the test clause of this specification shall be carried out in the presence of Purchaser's representative by the manufacturer and shall provide all the facilities and equipment for testing.
- **3.7.6.** Six copies of the Test Certificate shall be furnished to the Purchaser for approval prior to dispatch of cables from factory.
- **3.7.7.** Visual check to conform the details given in this specification is to be done. In addition to the above, the general workmanship of the cable drums and cables laid in drums shall be checked.
- **3.7.8.** Manufacturer shall have proper test set up for testing all the routine tests & type tests on finished cables as per IEC.
- **3.7.9.** List of type tests mentioned in the tender specifications shall be conducted on four drum irrespective of type test certificates given or not.

3.7.10. Type Test

Type tests on four randomly selected cable drums will have to be conducted in the presence of the department's representative. The test samples will be taken from finished cables. This test shall be in accordance to IS: 7098, Part-1,1988.

- **a**. Test on Conductor
 - > Annealing test for copper conductors
 - > Tensile test for aluminium conductor
 - > Wrapping test for aluminium conductor
 - Conductor Resistance Test

- b. Test on Insulation
 - > Physical dimension measurement
 - > Tensile strength and elongation at break
 - Hot set test
 - Shrinkage test
 - > Ageing in air oven
 - Water absorption test
- c. Test on round Armour
 - > Physical dimension measurement
 - > Tensile strength
 - Elongation at break
 - > Torsion test for round wires
 - > Winding test for firmed wire
 - > Mass of zinc coating.
 - Uniformity of zinc coating
 - > Resistivity measurement, Resistance test for armour
- d. Test on Sheath
 - > Physical dimension measurement
 - > Tensile strength & Elongation at break test
 - > Ageing in air oven
 - Loss of mass in air oven
 - Shrinkage test
 - Hot deformation test
 - Heat shock test
 - Thermal stability test
- e. Insulation Resistance Test
- f. High Voltage Test at room temperature
- g. Volume resistivity at room temperature & at 90° C. (IS-10810-Part 43)
- h. Flammability test
- i. Test requirement of FRLS inner and outer sheath

The inner and outer sheath of cables shall meet the following test requirements related to flame retardant, low smoke emission, low acid and toxic gas emission. The BIDDERs shall have proper test apparatus to conduct all the relevant tests as per the applicable standards:

- Flame retardant test on single cable.
 - Oxygen Index Test

The critical oxygen index value shall be minimum 29 when tested at 27+2°C as per ASTMD-2863

> Temperature index test

Temperature index value shall be minimum 250°C at oxygen index of 21 when tested as per NES 715.

- Flammability test
- Smoke Density Test

The cables shall satisfy the tests conducted to evaluate the percentage obscuration by smoke in an optical system placed in the path of the smoke. The maximum smoke density rating shall not be more than 60% when tested as per ASTM-D-2843.

> Acid Gas Generation test (halogen acid gas evolution)

The hydrochloric acid generation when tested as per IEC 754-1 shall be less than 20% by weight.

- > Test for specific optical density of smoke
- > Anti termite and rodent property test

The sequence of electric tests shall be as per the relevant Indian/International standards. The Bidder shall submit the sequence of tests for the approval of the purchaser before conducting the tests. A copy of the adopted standard shall also be supplied.

3.7.11. Routine Test (On each drum)

The following routine tests shall be carried out by the Manufacturer on each and every length of the cable in the presence of Purchaser's representative at manufacturer's works.

- a. Resistance test for conductors
- b. Insulation resistance test
- c. High voltage test

3.7.12. Conductor purity test

Two samples of aluminium and copper shall be taken from any of the finished set of cables at random and the sample shall be tested for its purity at a NABL accredited lab.

Qualifying Criteria:

The test results should be within limits as per IS 7098. All the routine tests as per IS 7098 / IEC shall be conducted and passed as per the limits given in the standards. All the bought out certificates will be verified and the test results shall be as per respective standards.

3.8.0. IDENTIFICATION

The following details shall be marked sequentially for each meter run length of the cable by nonerasable embossing on the outer sheath:

- a. Reference to Indian Standard
- b. Name of the manufacturer/ Trade Name
- c. Name of the project:
- d. Configuration of the cable: viz. Voltage grade, no. of Core, Sq. mm, A2XWY/2XWY/YWY / YY as applicable
- e. Year of manufacturing
- f. Sequential marking of running meter length

The running length of the cable shall be identified at regular intervals of one meter (Increasing order from inner end to outer end of the cable)

3.9.0 PACKAGING

- Each drum shall consist of single length cable \geq 500 metres.
- The cable shall be wound on *non-returnable steel drums* of suitable size, packed and marked.
- Packing shall be sturdy to protect the cable from any injury during transportation, handling and storage. The cut ends of the cable shall be sealed by means of nonhygroscopic sealing material preferably Heat shrinkable end caps.
- One end of the cable shall be brought out of the drum and suitably clamped to the drum flange with proper mechanical protection. Location of the other end may be marked on the drum.

- The cable shall be placed on drums in such a manner that it will be protected from injury during transit. Each end of the cable shall be firmly and properly secured to the drum. No undue stress shall appear on cables when laid on drums.
- The cable drum shall carry the following information stencilled on a metallic label, securely attached to each end of the drum:
 - i. Reference to the Indian standard
 - ii. Manufacturer's name, brand or trade mark
 - iii. Type of cable and voltage grade
 - iv. No. of cores
 - v. Nominal cross-sectional area of conductor
 - vi. Cable code
 - vii. Length of cable on drum
 - viii. No. of lengths on reel, drum or coil (if more than one)
 - ix. Gross weight
 - x. Country of manufacture
 - xi. Year of manufacture
 - xii. Direction of rotation of drum (an arrow)
 - xiii. ISI certification mark

3.10.0 PREFERRED MAKE

POLYCAB/KEI/KEC or reputed brand possessing system certification of ISO 9001:2008, ISO14001:2004, OHSAS18001:2007 & EN 16001-2009 and product certifications IS: 7098 (Part-I), CE, UL etc. Quotations without these certification details will not be considered for technical evaluation.

Preferred make of bought out material:

- a. Aluminium for Conductor
- b. Copper for Conductor
- c. XLPE compound of Insulator
- : Hindalco/Balco/Nalco or better
- : Hindustan Copper/Hindalco or better
- : Dow/Borealis or better

3.11.0. GUARANTEE

All the cables shall be guaranteed against faulty material, defective design & poor workmanship for a period of 60 months from the date of commissioning. The materials becoming defective during the guarantee period shall be replaced free of cost and the defects arising out of the works shall be rectified free of charge without delay.

Annexure - 1

Technical Data Format for 1.1KV, XLPE Insulated, Copper Cable

The tenderer shall furnish all technical details as called for in the following format for all sizes of cables failing which the tender shall be considered as incomplete. *The details shall be furnished separately for all the cables.*

SI. No.	Particulars	Details
Α	Cores	
1	No. of cores	
2	Nom Area of conductor in sq mm.	
3	Voltage Grade	
В	Conductor	
1	Standard Applicable	
2	Material Copper Grade	
3	Purity	
4	Nominal Cross Sectional Area	
5	Form of conductor/circular shaped	
6	No. of strands	
7	Nominal dia of each strand	
8	Temperature co-efficient of resistance at 20 degree celsius	
С	Insulation	
1	Standard Applicable	
2	Material (Mention Type)	
3	XLPE is cured by steam process or Gas process?	
4	Minimum Average Thickness	
5	Tolerance on the smallest of the measured values of thickness	
	of Insulation	
6	Minimum volume resistivity at 27 deg cel	
7	Minimum volume resistivity at 70 deg cel	
8	Colour Scheme for identification of cores	
9	Average Dielectric Strength	
D	Inner Sheath	
1	Standard Applicable	
2	Material for inner sheath	
3	Minimum thickness of inner sheath	
4	Whether extruded	
E	Armour	

1	Standard Applicable	
2	Shape	
3	Size	
4	Material for Armour	
F	Outer Sheath/Overall Covering	
1	Standard Applicable	
2	Material (type)	
3	Whether extruded	
4	Minimum average thickness	
5	Whether anti-termite treatment has been given in the outer	
	sheath	
6	Whether flame retardant low smoke compound added in the	
	outer sheath	
G	Electrical Properties	
1	Maximum DC Resistance of conductor at 20 deg Celsius in	
	ohms/km	
2	Maximum DC Resistance of amour at 20 deg Celsius in	
	ohms/km	
3	Maximum Permissible conductor temperature	
	Under continuous full load	
	Under transient conditions	
4	Loss Tangent at normal frequency	
5	Reactance at maximum operating temperature 50 Hz (ohm/km)	
6	Capacitance at maximum operating temperature 50 Hz	
	(ohm/km)	
7	Total Impedance at maximum operating temperature 50 Hz	
	(ohm/km)	
8	Recommended continuous current rating	
	In Ground at 30 deg C Ground Temperature (A)	
	In Trench/Ducts at 40 deg C (A)	
	In Air at 40 deg C ambient Temperature (A)	
9	Short Ckt Current Rating for 1 sec duration (in KA)	
	Conductor	
	Armour	
10	Minimum volume Resistivity of insulation	
	At 27 °C in Ohm cm	
	At Max operating temperature in Ohm-cm	
11	Approximate AC resistance at max. Operating temperature	
	Phase	
	Neutral	

Н	Mechanical Data	
1	Overall Dia of the cable	
2	Dia of the cable under the sheath	
3	Diameter under armour	
4	Diameter over the stranded cores	
5	Wight of cable per km.	
6	Drum length	
7	Tolerance on drum length	
8	Total weight of the drum	
9	Dimension of the drum	
10	Recommended minimum installation radius/ bending radius	
11	Maximum safe pulling force	
12	Whether identification as per clause of the specification is being provided	
13	Whether packing has been done as per clause of the specification	

Annexure – 2

Guaranteed and Other Technical Particulars

(Bidder shall furnish this Annexure duly filled up with the Technical Bid) 1.1 kV GRADE XLPE INSULATED POWER CABLES

SN	Description	Particulars
1	Name & add. of manufacturer	
2	Cable Sizes	
3	Manufacturer's type designation	
4	Applicable standard	
5	Rated Voltage(volts)	
6	Type & Category	
7	Suitable for earthed or unearthed system	
8	Continuous current rating when laid in air in a ambient temp. of 50°C and for maximum conductor temp. of 70 °C of PVC Cables (Amps)	
9	Rating factors applicable to the current ratings for various conditions of installation:	
10	Short circuit Capacity	
	a) Short Circuit Amp. (rms) KA for 1 sec duration	
	b) Conductor temp. allowed for the short circuit duty (deg C.)	
11	Conductor	
	a) Material	
	b) Grade	
	c) Cross Section area (Sq.mm.)	
	d) Number of wires (No.)	
	e) Form of Conductor	
	f) Direction of lay of stranded layers	
12	Conductor resistance (DC) at 20°C per km-maximum (Ohms)	
13	Insulation	
	a) Composition of insulation	
	b) Nominal thickness of insulation(mm)	
	c) Minimum thickness of insulation	
14	Inner Sheath	
	a) Material	
	b) Calculated diameter over the laid up cores,(mm)	

	c) Thickness of Sheath (minimum)mm				
15	Armour				
	a) Type and material of armour				
	b) Direction of armouring				
	c) Calculated diameter of cable over inner sheath (under				
	armour), mm				
	d) Nominal diameter of round armour wire/strip				
	e) Number of armour wires/strips				
	f) DC resistance at 20°C (Ω/Km)				
16	Outer Sheath				
	a) Material (PVC Type)				
	b) Calculated diameter under the sheath				
	c) Min.thickness of sheath(mm)				
	d) Guaranteed value of minimum oxygen index of outer				
	sheath at 27∘C				
	e) Guranteed value of minimum temperature index at 21				
	oxygen index				
	f) Colour of sheath				
17	a) Overall diameter of cable				
	b) Tolerance on overall diameter (mm)				
18	Cable Drums				
	a) Max./ Standard length per drum for each size of cable (single length) with ±5% Tolerance (mtrs)				
	b) Non-standard drum lengths				
	c) Type & Standard for sealing of cable ends				
19	Whether progressive sequential marking on outer sheath				
20	provided Identification of cores				
20					
	a) colour of cores				
	b) Numbering				
21	Whether Cables offered are ISI marked				
22	Whether Cables offered are suitable for laying as per IS 1255				

Annexure – 3

Guaranteed and Other Technical Particulars

(Bidder shall furnish this Annexure duly filled up with the Technical Bid) 1.1 kV GRADE XLPE INSULATED CONTROL CABLES

SN	Description	Particulars	
1	Name & Add. of manufacturer		
2	Cable Sizes		
3	Manufacturer's type designation		
4	Rated Voltage(volts)		
5	Continuous current rating when laid in air in a ambient temp. of 50°C and for maximum conductor temp. of 70°C of PVC Cables (Amps)		
6	Rating factors applicable to the current ratings for various conditions of installation:		
7	Short circuit Capacity		
8	a) Short Circuit Amp. (rms)KA for 1 sec-for information only b) Conductor temp. allowed for the short circuit duty (deg C.)		
9	Conductor		
	a) Material		
	b) Grade		
	c) Cross Section area (Sq.mm.) d) Number of wires (No.)		
	e) Form of Conductor		
	f) Direction of lay of stranded layers		
10	Conductor resistance (DC) at 20 °C per km (Ohms)		
11	Insulation		
	a) Composition of insulation		
	b) Nominal thickness of insulation(mm)		
	c) Minimum thickness of insulation		
2	Inner Sheath		
	a) Material		
	b) Calculated diameter over the laid-up cores(mm)		
	c) Thickness of Sheath (minimum)mm		
13	Armour		
	a) Type and material of armour		

	b) Direction of armouring	
	c) Calculated diameter of cable over inner sheath (under armour), mm	
	d) Nominal diameter of round armour wire / dimensions of armour strip	
	e) Number of armour wires	
	f) short circuit capacity of the armour and duration	
	g) DC resistance at 20°C (Ω /Km) & Resistivity of armour	
14	Outer Sheath	
	a) Material (PVC Type)	
	b) Calculated diameter under the sheath	
	c) Min.thickness of sheath(mm)	
	d) Guaranteed value of minimum oxygen index of outer sheath	
	 e) Guranteed value of minimum temperature index at 21 oxygen index 	
	f) Colour of sheath	
15	a) Overall diameter of cable	-
	b) Tolerance on overall diameter (mm)	
16	Cable Drums	
	a) Max./ Standard length per drum for each size of cable (single length) with ±5% Tolerance (mtrs)	
	b) Non standard drum lengths	
	c) Type & Standard for sealing of cable ends	
17	Whether progressive sequential marking on outer sheath provided	
18	Identification of cores	
	a) Colour of cores	
	b) Numbering	
19	Whether Cables offered are ISI marked	
20	Whether Cables offered are suitable for laying as per IS 1255	

Section - 4

General Conditions of Supply and Erection of AEGCL

This Section 'General Conditions of Supply and Erection of AEGCL' is supplied separately and supplementary to Section -5 'Special Conditions of Contract' of this document. Whenever there is a conflict, the provisions in SCC or the other Sections of this document shall prevail over those in the 'General Conditions of Supply and Erection of AEGCL'.

Section 5 - Special Conditions of Contract

This Section 'SCC' is supplementary to Section -4 'General Conditions ofSupply and Erection of AEGCL'. Whenever there is a conflict, the provisions in this Section shall prevail over those in the 'General Conditions of Supply and Erection of AEGCL'.

Table of Clauses

DEFINITION OF TERMS	60
CONTRACT DOCUMENTS	60
LEGAL JURISDITCTION	60
LANGUAGE	60
SCOPE OF SUPPLY	
DELIVERY SCHEDULE	61
TERMS OF PAYMENT	61
PERFORMANCE SECURITY DEPOSIT	62
WARRANTY	62
COPY RIGHT ETC	63
QUANTITY VARIATION	63
INSPECTION AND TESTING	63
INSURANCE	64
FORCE MAJEURE	64
EXTENSION OF TIME FOR COMPLETION	64
LIQUIDATED DAMAGE	65
CONTRACTUAL FAILURE	65
ARBITRATION	65
	DEFINITION OF TERMS CONTRACT DOCUMENTS LEGAL JURISDITCTION LANGUAGE SCOPE OF SUPPLY DELIVERY SCHEDULE CONTRACT PRICE TERMS OF PAYMENT PERFORMANCE SECURITY DEPOSIT WARRANTY COPY RIGHT ETC QUANTITY VARIATION INSPECTION AND TESTING INSURANCE FORCE MAJEURE EXTENSION OF TIME FOR COMPLETION LIQUIDATED DAMAGE CONTRACTUAL FAILURE ARBITRATION

Section - 5 Special Conditions of Contract

5.1.0 DEFINITION OF TERMS

"Contract" means the Contract Agreement entered into between the Purchaser and the Supplier, together with the Contract Documents referred to therein; they shall constitute the Contract, and the term "the Contract" shall in all such documents be construed accordingly.

"Contract Documents" means the documents listed in Article 1.1 (Contract Document) of the Contract Agreement (including any amendments thereto).

"Contract Price" means the price payable to the Supplier as specified in the Agreement, subject to such additions and adjustments thereto or deductions therefrom, as may be made pursuant to the Contract.

"Day" means calendar day

"Year" means 365 days.

"Month" means calendar month.

"Party" means the "Purchaser" or the "Supplier", as the context requires.

"Purchaser" means the Assam Electricity Grid Corporation Limited (in short AEGCL) and its assignees.

The "Supplier" shall mean the tenderer / bidder whose tender/ bid has been accepted by the "Purchaser" and shall include the bidder's legal representatives, successors and assignees.

"Goods" means all of the commodities, raw material, machinery and equipment, and/or other materials that the Supplier is required to supply to the Purchaser under the Contract.

"Delivery" means the transfer of the Goods from the Supplier to the Purchaser in accordance with the terms and conditions set forth in the Contract.

"Completion" means the fulfilment of the Related Services by the Supplier in accordance with the terms and conditions set forth in the Contract.

"Related Services" means the services incidental to the supply of the goods, such as insurance, installation, training and initial maintenance and other similar obligations of the Supplier under the Contract.

The "Specification" shall mean the "Purchaser's Requirements".

"Supplier" means the natural person, a company/firm, or a combination of these, whose bid to perform the Contract has been accepted by the Purchaser and is named as such in the Agreement, and includes the legal successors or permitted assigns of the Supplier.

5.2.0 CONTRACT DOCUMENTS

5.2.1. Subject to Article 1.2 (Order of Precedence) of the Contract Agreement, all documents forming part of the Contract (and all parts thereof) are intended to be correlative, complementary and mutually explanatory. The Contract shall be read as a whole.

5.3.0 LEGAL JURISDITCTION

5.3.1. For any litigation arising out of the contract which cannot be resolve through mutual agreement or through Arbitration the honorable Guwahati High Court will have sole jurisdiction of all settlement.

5.4.0 LANGUAGE

5.4.1. The ruling language of the Contract shall be English.

5.5.0 SCOPE OF SUPPLY

5.5.1. The Goods and Related Services to be supplied shall be as specified in Schedule No. 1 and Schedule No. 2 of Section -2, Bidding Forms.

60

5.5.2. Unless otherwise stipulated in expressly limited in the *Purchaser's Requirements*, the Scope of Supply shall include all such items not specifically mentioned in the Contract but that can be reasonably inferred from the Contract as being required for attaining Delivery and Completion of the Goods and Related Services as if such items were expressly mentioned in the Contract.

5.6.0 DELIVERY SCHEDULE

- **5.6.1.** For the purpose of determining the completion time of the Contract, the date of issue of LoA shall be taken as Commencement Date of the contract.
- 5.6.2. The Delivery of the Goods and Completion of the Related Services shall be in accordance with the Delivery and Completion Schedule specified in the Article 3 of the Contract Agreement (Contract Forms) or within such extended time to which the Supplier shall be entitled under SCC Clause 5.16.0 hereof.

5.7.0 CONTRACT PRICE

- 5.7.1. The Contract Price shall be as specified in Article 2 (Contract Price) of the Contract Agreement.
- **5.7.2.** Unless an escalation clause is provided for in the *Article 2 (Contract Price)*, the Contract Price shall be a firm shall not subject to any alteration, except in the event of a Change in the Works or as otherwise provided in the Contract.

5.8.0 TERMS OF PAYMENT

- **5.8.1.** The Contract Price shall be paid as specified in subsequent sub-clauses, if not provided in Contract Forms, Section-6.
- 5.8.2. Payment against Goods and F&I (Price Schedule 1& 2) shall be made as follows: -

Progressive payments for supply items: (Only SUPPLY)

- (a) Within 60 (sixty) days from the date of submission of the invoice against supply, 80% (eighty percent) payment of the total supply amount would be made along with 100% GST on receipt and acceptance of materials in full and good condition (Subject to availability of fund).
- (b) In total 5 (five) Nos. of progressive supply invoice/ bill would be entertained.
- (c) For payment of 80% of the total supply amount, maximum 4 (four) Nos. of progressive supply invoices/ bills would be entertained.
- (d) Remaining 1 (one) No. of supply invoice/ bill of 20% balance supply amount would be entertained on completion of supply in full and good condition.

5.8.3. Documents to be submitted for separate supply and erection work with invoice:

- (a) Unconditional acceptance of the Letter of Award and signed Contract Agreement, by the contractor for supply.
- (b) Detailed Supply Plan approved by AEGCL/Project Execution Chart/Pert chart approved by AEGCL.
- (c) Documentary evidence of dispatch (R/R or receipt of L/R) (For Supply only)
- (d) Contractor's detailed invoice & packing list identifying contents of each shipment/supply.
- i. (For Supply only)
- (e) Copy of certificate in respect of payments of State/ Central taxes, duties, levies, etc. have been made against supply of equipment/ materials through contractors/ sub-vendors under the contract, if applicable.
- (f) Certified copy of Insurance Policy/ Insurance Certificate.
- (g) Manufacturer's/ Contractor's Guarantee Certificate of Quality.
- (h) Material Dispatch Clearance Certificate (MDCC)/ Dispatch Instructions (DI) for dispatch of materials from the manufacturer's works. MDCC/DI shall be issued by authorised Officer of AEGCL. (For Supply only)
- (i) Manufacturer's/ Supplier's copy of challan.(for Supply only)
- (j) Copy of testing/ inspection of equipment/ material clearance certificate issued by AEGCL.
- (k) Copy of Goods Receipt Sheet (GRS)/ Materials Received Voucher (MRV)/ Materials Handing Over Voucher (MHOV).(For Supply only)
- (I) Joint Measurement Sheet.(For erection only)

- (m) Labour License, insurance, etc.- (for erection only)
- (n) Payments would be made subject to fulfillment of the following conditions
 - i. Advance copy of invoices/ bills in duplicate with documents/ information as stated under clause (a) to (m) are to be furnished sufficiently in advance.
 - ii. Any demurrage charges on account of late intimation and/or delivery of documents by the Bank is to be borne by the supplier.
 - iii. The supplier should intimate the dispatch of each and every consignment to the Purchaser and the Consignee.
 - iv. All Bank charges are to be borne by the supplier.
 - v. Payment through Bank for supply of equipment/ materials, dispatched by Rail would be allowed if required, however the equipment/ materials have to reach at destination/ project site in full and good condition and additional expenditure in any form for this is to be borne by the supplier. A prior approval from appropriate authority of the AEGCL is to be taken in this respect.
 - vi. Payment through Bank in respect of material/ equipment dispatched by road transport would be allowed if required, provided that the transport agency is approved by the Banking Association and prior approval thereof is given by the AEGCL's appropriate authority.

5.8.4 ADVANCE PAYMENT

No advance payment is applicable for this contract.

5.8.5 Fund Availability

Payment shall be made subject to availability of fund against this specific project.

5.9.0 PERFORMANCE SECURITY DEPOSIT

- 5.9.1. Subject to Clause 5.9.2 & 5.9.3 the contractor shall have to deposit to the extent of 10% (ten percent) of the total value of the contract order as performance security (Bank Guarantee), within ten (10) days of receipt of notification of award/LOI and before signing of the Contract Agreement, duly pledged in favor of the Purchaser and such security deposits shall be valid up to 60(sixty) days beyond the warranty period.
- **5.9.2.** If required, the supplier on his own has to renew the BG atleast 1(one) month before the date of expiry of the BG; failing which the BG shall be revoked by AEGCL within the claim period without any prior intimation to the contractor.
- **5.9.3.** If the supplier fails or neglects to observe, perform any of his obligations under the contract, it will be lawful for the "Purchaser" to forfeit either in full or in part at his absolute discretion, the security deposit furnished by the supplier.
- **5.9.4.** No interest shall be payable on such deposits.

5.10.0 WARRANTY

- **5.10.1.** The Supplier/Manufacturer warrants that all the Goods are new, unused, and of the most recent or current models, and that they incorporate all recent improvements in design and materials, unless provided otherwise in the Contract.
- **5.10.2.** The Supplier/Manufacturer further warrants that the Goods shall be free from defects arising from any act or omission of the Supplier or arising from design, materials, and workmanship, under normal use in the conditions prevailing in the country of final destination.
- **5.10.3.** The warranty shall remain valid for *sixty (60) months* after the Goods, or any portion thereof as the case may be, have been delivered to and accepted at the final destination indicated in the Purchaser's Requirement.
- **5.10.4.** If during the Period Warranty any defect should be found, the Purchaser shall give Notice to the Supplier/Manufacture stating the nature of any such defects together with all available evidence thereof, promptly following the discovery thereof. The Purchaser shall afford all reasonable opportunity for the Supplier/Manufacturer to inspect such defects.

5.10.5. If having been notified, the Supplier/Manufacturer fails to remedy the defect within a period of 15 (fifteen) days, the Purchaser may, following notice to the Supplier/Manufacturer, proceed to do such work, and the reasonable costs incurred by the Purchaser in connection therewith shall be paid to the Purchaser by the Supplier or may be deducted by the Purchaser from any monies due the Supplier or claimed under the Performance Security.

5.11.0 COPY RIGHT ETC

5.11.1. The Supplier shall indemnify the purchaser against all claims actions, suits and proceedings for the infringement or alleged infringement of any patent, design or copyright protected either in the country of origin or in India by the use of any equipment supplied by the Supplier but such indemnity shall not cost any use of the equipment other than for the purposes indicated by or reasonably to be inferred from the specification.

5.12.0 QUANTITY VARIATION

5.12.1. "Purchaser" shall have the right to increase the ordered quantity by 20% within 50 days of the period of completion and the same shall be carried out at the same rates /prices and terms and conditions stipulated in the order except in regard to completion schedule, which shall be mutually agreed upon in case of enhancement of the ordered quantity.

5.13.0 INSPECTION AND TESTING

- **5.13.1.** The Supplier shall at its own expense and at no cost to the Purchaser carry out all such tests and/or inspections of the Goods and Related Services as are specified in Sections 3, Purchaser's Requirements.
- **5.13.2.** The inspections and tests may generally be conducted on the premises of the Supplier/Manufacture, at point of delivery. Subject to *Sub-Clause 5.13.3*, The Supplier shall furnish, all reasonable facilities and assistance, including access to drawings and production data to the inspectors at no charge to the Purchaser.
- **5.13.3.** The Purchaser or its designated representative shall be entitled to attend the tests and/or inspections referred to in *SCC Sub-Clause 5.13.2*, provided that the Purchaser bear all of its own costs and expenses incurred in connection with such attendance including, but not limited to, all traveling and board and lodging expenses.
- **5.13.4.** Whenever the Supplier is ready to carry out any such test and/or inspection, the Supplier shall give a reasonable advance notice (not less than 30 days) of such test and/or inspection and of the place and time thereof to the Purchaser. The Supplier shall obtain from any relevant third party or manufacturer any necessary permission or consent to enable the Purchaser or its designated representative to attend the test and/or inspection.
- **5.13.5.** The Supplier/manufacture shall provide the Purchaser with a certified report of the results of any such test and/or inspection.
- 5.13.6. The Purchaser may reject any Goods or any part thereof that fail to pass any test and/or inspection or do not conform to the specifications. The Supplier shall either rectify or replace such rejected Goods or parts thereof or make alterations necessary to meet the specifications at no cost to the Purchaser, and shall repeat the test and/or inspection, at no cost to the Purchaser, upon giving a notice pursuant to SCC Sub-Clause 5.13.4
- **5.13.7.** If it is agreed between the Purchaser and the Supplier that the Purchasershall not attend thetest and/or inspection, then the Supplier may proceed with the test and/or inspection, and should provide the Purchaser with a certified report of the results thereof.
- 5.13.8. The Supplier agrees that neither the execution of a test and/or inspection of the Goods or any part thereof, nor the attendance by the Purchaser or its representative, nor the issue of any report pursuant to SCC Sub-Clause 5.13.5 & 5.13.7, shall release the Supplier from any warranties or other obligations under the Contract.

5.14.0 INSURANCE

- **5.14.1.** The "Supplier" shall, have, unless, otherwise specified by the Purchaser, insure the materials through their underwrites at their cost and shall keep it insured against any loss/ damaged/ pilferage in transit, destruction or damage by fire/ flood, without exposure to vagaries of weather or through riot, civil commotion, war or rebellion, for the full value of the materials until the materials are received at the purchaser's destination store.
- **5.14.2.** The "Supplier" shall be responsible for safe arrival at destination, unloading and receipt of the materials by the consignee. The Purchaser will discharge consignee's responsibilities only and shall not be responsible for any damage/ loss/ pilferage/ non-delivery by the carriers.
- **5.14.3.** In case of any loss/ damage/ pilferage/ non-delivery/ short delivery by carriers etc.; the Supplier shall replace free of cost missing / damaged / lost materials within 30(thirty) days from the receipt of report thereof from the consignee(s) without waiting for settlement of their claims with their carriers / under-writers. Normally, such reports from the consignee(s) to the supplier shall be initiated within a period of 30(thirty) days from the date of receipt of each consignment by him /them.
- **5.14.4.** If it is considered necessary that the damage equipment either in part or in full to be sent back to the manufacturer's works for repair, the manufacturers/ suppliers will furnish the Bank Guarantee for the full value of equipment needing repairs and such Bank Guarantee shall remain valid till such time, the equipment are repaired and returned to the consignee in good condition. The to and fro freight, handling and insurance charges in such cases will be borne by the Supplier.
- **5.14.5.** Unless, otherwise mutually agreed upon, in case of failure by the Supplier to replenish /make good of the loss /damage /short supplied quantities, within the stipulated period, the Purchaser reserves the right to forfeit the security deposit and/ or adjust any outstanding payment to the "Supplier" with the Purchaser or take any other appropriate action.

5.15.0 FORCE MAJEURE

- **5.15.1.** "Force Majeure" shall mean any event beyond the reasonable control of the Purchaser or of the Supplier, as the case may be, and which is unavoidable notwithstanding the reasonable care of the party affected, and shall include, without limitation, the following:
 - (a) war, hostilities or warlike operations whether a state of war be declared or not, invasion, act of foreign enemy and civil war
 - (b) rebellion, revolution, insurrection, mutiny, usurpation of civil or military government, conspiracy, riot, civil commotion and terrorist acts
 - (c) confiscation, nationalization, mobilization, commandeering or requisition by or under the order of any government or de jure or de facto authority or ruler or any other act or failure to act of any local state or national government authority
 - (d) strike, sabotage, lockout, embargo, import restriction, port congestion, lack of usual means of public transportation and communication, industrial dispute, shipwreck, shortage or restriction of power supply, epidemics, quarantine and plague
 - (e) earthquake, landslide, volcanic activity, fire, flood or inundation, tidal wave, typhoon or cyclone, hurricane, storm, lightning, or other inclement weather condition, nuclear and pressure waves or other natural or physical disaster
 - (f) shortage of labor, materials or utilities where caused by circumstances that are themselves Force Majeure.
- **5.15.2.** If either party is prevented, hindered or delayed from or in performing any of its obligations under the Contract by an event of Force Majeure, then it shall notify the other in writing of the occurrence of such event and the circumstances thereof within fourteen (14) days after the occurrence of such event.
- **5.15.3.** The party who has given such notice shall be excused from the performance or punctual performance of its obligations under the Contract for so long as the relevant event of Force Majeure continues and to the extent that such party's performance is prevented, hindered or delayed. The Time for Completion shall be extended in accordance with *SCC Clause 5.16.0*.

5.16.0 EXTENSION OF TIME FOR COMPLETION

- **5.16.1.** The Time(s) for Completion specified in the Article 3 of the Contract Agreement (Contract Forms) shall be extended if the Supplier is delayed or impeded in the performance of any of its obligations under the Contract by reason of any of the following:
 - (a) any Change in the scope of works by the Purchaser; which justifies extension of completion time as provided in **SCC Clause 5.12.0**; and
 - (b) any occurrence of Force Majeure as provided in SCC Clause 5.15.0.
- **5.16.2.** Except where otherwise specifically provided in the Contract, the Supplier shall submit to the Purchaser's Representative a notice of a claim for an extension of the Time for Completion, together with particulars of the event or circumstance justifying such extension as soon as reasonably practicable after the commencement of such event or circumstance. As soon as reasonably practicable after receipt of such notice and supporting particulars of the claim, the Purchaser and the Supplier shall agree upon the period of such extension. In the event that the Supplier does not accept the Purchaser's estimate of a fair and reasonable time extension, the Supplier shall be entitled to refer the matter to a Dispute Board, pursuant to **SCC Sub-Clause 5.19.0**.

5.17.0 LIQUIDATED DAMAGE

- **5.17.1.** The Supplier guarantees that it shall attain Completion of the Works within the Time for Completion specified in the Contract Agreementpursuant to **SCC Sub-Clause 5.6.2**, or within such extended time to which the Supplier shall be entitled under **SCC Clause 5.16.0** hereof.
- 5.17.2. If the Supplier fails to attain Completion of the Works within the Time for Completion or any extension thereof under SCC Clause 5.16.0, the Supplier shall pay to the Purchaser liquidated damages at the rate of ½ % (half percent) of the total Contract Price per week or part thereof delay. The aggregate amount of such liquidated damages shall in no event exceed 10% (ten percent) of the total contract price.

However, the payment of liquidated damages shall not in any way relieve the Supplier from any of its obligations to complete the Works or from any other obligations and liabilities of the Supplier under the Contract.

- **5.17.3.** Once the aggregated "Liquidated damage" reaches10% of the total contract price, the Purchaser may consider following actions:
 - (a) Procure the undelivered material/ equipment and/or complete the balance works from elsewhere giving notice to the supplier and to recover any extra expenditure incurred thereby for having to procure these materials and works at higher price, at the risk and responsibility of the Supplier; or
 - (b) Cancel the contract wholly or in part and to complete the works at the full risk and cost of the Supplier and forfeit the security deposit.
 - (c) Declare it as a "Contractual Failure" and act in accordance with SCC Clause 5.18.0.

5.18.0 CONTRACTUAL FAILURE

5.18.1. In the event of contractual failure of any respect on the part of the Supplier, the Purchaser shall be entitled to operate security deposit or any deposit or any payment due to supplier irrespective of whether his default relates to the particular orders or not towards the Purchaser's claim for damages arising out of the failure. In addition, the Purchaser may black-list or bans the "Supplier" or pending enquiry, suspend him or take any other steps considered suitable.

5.19.0 ARBITRATION

5.19.1. If at any time, any question, disputes or differences whatsoever shall rise between the Purchaser and the Supplier, upon or in relation to or in connection with the contract, either party may forthwith give notice to the other in writing of the existence of such question of dispute or difference and the same shall be referred to the adjudication of three Arbitrators, one to be nominated by the Purchaser the other by the Supplier and the third by the President of the Institution of Engineers, India/ Retired or Sitting Judge not below the status of a retired Judge of High Court of India. If either of the parties fail to appoint its arbitrators within 60(sixty) days after receipt of notice of the appointment of arbitrators then the President of the Institution of Engineers /retired or sitting Judge of India, as the case may be, shall have the power at request of either of

the parties, to appoint an Arbitrator. A certified copy of the "President" making such an appointment shall be furnished to both parties.

5.19.2. The arbitration shall be conducted as per provisions of the Indian Arbitration Act, shall be held at Guwahati or any other place as may be decided by the Purchaser. The decision of the majority of Arbitrators shall be final & binding upon the parties and the expenses of the arbitration shall be paid as may be determined by the Arbitrator. However, any dispute arising out of this contract will first be discussed and settled bilaterally between Purchaser and the Supplier.

Section - 6

Contract Forms

(This Section contains the Letter of Acceptance, the Contract Agreement and Appendices to the Contract Agreement which, once completed, will form the Contract along with the Section 4 and Section 5. The Bidder should note that this Section shall be completed fully at the time of Contract signing)

Section 6 - Contract Forms

This Section contains the Letter of Acceptance, the Contract Agreement and Appendices to the Contract Agreement which, once completed, will form the Contract along with the Section 4 and Section 5. The Bidder should note that this Section shall be completed fully at the time of Contract signing.

Table of Forms

1.	Notification of Award	
2.	Contract Agreement	70
Арре	pendix 1 – Terms and Procedure of Payment	73
Арре	pendix 2 - Time Schedule	74
Арре	pendix 3 - Form of Performance Security	75
Арре	pendix 4 – Price Schedules	76
Appe	pendix 5 – Guaranteed and other Technical Particulars	77

1. Notification of Award

[AEGCL's letter head]

Letter of Acceptance Supply of Goods and Related Services

[date]

To: [Name and address of the Supplier]

This is to notify you that your Bid dated [date] for execution of the [name of the Contract and identification number, as given in the Contract Data] for the Contract Price in the aggregate of [amounts in numbers and words] [name of currency] (as per Price Schedule-1), as corrected and modified in accordance with the Instructions to Bidders is hereby accepted, and it is decided to award on you the 'Supply and Delivery Contract' covering inter-alia Ex-works supply and Delivery of all Goods including Related Services.

You are requested to furnish the Performance Security within seven (7) days in accordance with the Conditions of Contract, using for that purpose one of the Performance Security Forms included in Section 8 (Contract Forms) of the Bidding Document

[Authorized Signature] [Name and Title of Signatory] Assam Electricity Grid Corporation Limited

Attachment: Contract Agreement

2. Contract Agreement

THIS AGREEMENT made the _____ day of _____, ____,

BETWEEN

Assam Electricity Grid Corporation Limited (herein after referred to as AEGCL), a corporation incorporated under the laws of Company Act, 1956 and having its registered office at First Floor, BijuliBhawan, Paltanbazar, Guwahati-781001, Assam and [name of Supplier], a firm/company incorporated under the laws of Company Act, 1956 and having its principal place of business at [address of Supplier] (hereinafter called "the Supplier"). [in case of JV insert name and address of the Lead Partner as well as other Partners]

WHEREAS AEGCL desires to engage the Supplier to the 'Supply and Related Service Contract' covering "Supply of Power & Control cables of 1.1KV Class for various sub-stations in Assam under PSDF" with all accessories and delivery to various Substation Sites of AEGCL and Related Services, as detailed in the Contract Document, and the Supplier has agreed to such engagement upon and subject to the terms and conditions hereinafter appearing.

NOW IT IS HEREBY AGREED as follows:

Article 1 Contract Documents	1.1	Contract Documents (Reference SCC Clause 5.2.0) The following documents shall constitute the Contract between the Purchaser and the Supplier, and each shall be read and construed as an integral part of the Contract:		
		 (a) This Contract Agreement and the Appendices hereto (b) Letter of Price Bid and Price Schedules submitted by the Supplier (c) Letter of Technical Bid and Technical Proposal submitted by the Supplier (d) Special Conditions of Contract (e) General Conditions of Supply and Erection. (f) Specification (Purchaser's Requirements) (g) Other completed Bidding Forms submitted with the Letters of Technical and Price Bids (h) Guaranteed and other Technical Particulars (as submitted with the Bid). (i) Any other documents (if necessary) shall be added here 		
	1.2	Order of Precedence (Reference SCC Clause 5.2.0) In the event of any ambiguity or conflict between the Contract Documents listed above, the order of precedence shall be the order in which the Contract Documents are listed in Article 1.1 (Contract Documents) above.		
	1.3	Definitions (Reference SCC Clause 5.1.0) Capitalized words and phrases used herein shall have the same meanings as are ascribed to them in the SCC.		
Article 2 Contract Price and Terms of Payment	2.1	Contract Price (Reference SCC Clause 5.7.0) The Purchaser hereby agrees to pay to the Supplier the Contract Price consideration of the performance by the Supplier of its obligations hereun The Contract Price shall [amounts in rupees in words], [amou in figures] as specified in Price Schedule No. 3 (Grand Summary).		
		The Contract Price is FIXED for entire period of the Contract.		

2.2 **Terms of Payment** (Reference SCC Clause 5.8.0) The terms and procedures of payment according to which the Purchaser will pay

70

the Supplier are given in the Appendix (Terms and Procedures of Payment) hereto.

- Article 3
 Commencement Date
 and Completion Time
 3.1 Commencement Date (Reference SCC Clause 5.6.1) The Commencement Date upon which the period until the Time for Completion of the total scope under the Contract shall be counted from is the date when the LOA is issued.
 3.2 Completion Time (Reference SCC Clause 5.6.2) The whole scope under this Contract shall be completed within two (2) months
- Article 4. Appendices 5.1 The Appendices listed in the attached List of Appendices shall be deemed to form an integral part of this Contract Agreement.

from Contract Commencement Date with following schedule:

5.2 Reference in the Contract to any Appendix shall mean the Appendices attached hereto, and the Contract shall be read and construed accordingly.

IN WITNESS WHEREOF the Purchaser and the Supplier have caused this Agreement to be duly executed by their duly authorized representatives the day and year first above written.

Signed by, for and on behalf of the Purchaser

[Signature]

[Title]

in the presence of

[Signature]

[Title]

Signed by, for and on behalf of the Supplier

[Signature] [Title]

in the presence of

[Signature] [Title]

APPENDICES

- Appendix 1 Terms and Procedures of Payment
- Appendix 2 Time Schedule
- Appendix 3 Performance Security.
- Appendix 4– Price Schedules.
- Appendix 5– Guaranteed and Other Technical Particulars.

Appendix 1 – Terms and Procedure of Payment

The Purchaser shall pay the Supplier In accordance with the provisions of SCC Clause 5.8.0 (Terms of Payment).

Appendix 2 - Time Schedule

(Bidders shall furnish with bids a construction schedule in form of bar chart. The time schedule should match with the completion time mentioned elsewhere in the Bidding Document)

Appendix 3 - Form of Performance Security

Bank Guarantee

(To be stamped in accordance with Stamp Act)

To:

_____ [name of Purchaser] ______ [address of Purchaser]

WHEREAS		[name and address	of Supplier/Manufacturer] has
undertaken, in pursuance of Contract No.	dated	to execute	., .
	[name of Si	ıpplier/Manufacturer	and brief description of Scope]

(hereinafter called "the Contract");

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

AND WHEREAS we have agreed to give the Supplier/Manufacturer such a Bank Guarantee;

NOW THEREFORE we hereby affirm that we are the Guarantor and responsible *to* you, on behalf of the Supplier/Manufacturer, up to a total of ______ [amount of Guarantee]¹ ______ [in words], such sum being payable inthe currencies in which the Contract Price is payable, and we undertake to pay you, upon your first written demand and without cavil or argument, any sum orsums within the limits of ______ [amount of Guarantee] as aforesaid without your needing to prove or to show grounds or reasons for your demand for the sum specified therein.

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

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

This guarantee shall be valid until the date, 30 days beyond the Warranty Period as per the Contract.

of the Guaranto
Name of Bank
Address
Date

1	An amount is to be inserted b	y the Guarantor, represe	enting the percentage of	f the Contract Price sp	pecified in the Contract.

Appendix 4–Price Schedules

Appendix 5–Guaranteed and other Technical Particulars