

# **ASSAM ELECTRICITY GRID CORPORATION LIMITED**

Regd. Office: 1st floor, Bijulee Bhawan, Paltan Bazar, Guwahati-781001

CIN: U40101 AS2003SGC007238

Phone: 0361-2739520/Fax: 0361-2739513 [web: www.aegcl.co.in](http://www.aegcl.co.in)



**Bidding Document**

**For**

**SUPPLY OF 3 (THREE) NOS. OF 132 KV LA WITH TERMINAL  
CONNECTORS ETC. AS APPLICABLE AS PER SPECIFICATION  
AGAINST 132 KV HAILAKANDI GSS**

**DEPUTY GENERAL MANAGER  
SILCHAR T&T CIRCLE  
AEGCL, SILCHAR-788015**

<b>Tender Cost: ₹ 500.00</b>
<b>EMD: ₹ 4,300.00</b>

For & on behalf of the **Managing Director, AEGCL, the Deputy General Manager, Silchar T&T Circle, AEGCL, Silchar**, invites tenders in prescribed form, from reputed Firms/Contractors/Manufacturers with sound technical and financial capabilities for the following work. A single stage two envelope procedure (**Techno-Commercial and Price Bid**) will be adopted for this tender.

Sl. No.	Name of work	Estimated Cost in INR	Time of Completion In Days	Bidding Address
1	Supply of 3 (Three) nos. of 132 kV LA with terminal connectors etc. as applicable as per Specification against 132 kV Hailakandi GSS	2,12,619.48/-	150 days from the date of issue of Supply order	O/o The DGM, Silchar T&T Circle, AEGCL, Silchar, Meherpur, Silchar-15

**1.0 Cost of Bidding Document:**

Bidder has to pay Non-Refundable tender document cost of **Rs.500.00 (Rupees Five Hundred)** only in the form of **A/C payee Demand draft (Non-refundable)** pledged in favour of **“Managing Director, AEGCL, Paltan Bazar, Guwahati-01”**, payable at Guwahati.

**2.0 Bidding Address:**

Tender papers can be purchased on application in plain paper from the **Deputy General Manager, Silchar T&T Circle, AEGCL, Silchar**.

**3.0 Key Dates: -**

- |                                        |                          |
|----------------------------------------|--------------------------|
| a) Bid Document available in Website:  | 11:00 hrs. of 12.01.2024 |
| b) Bid Submission Start Time & date:   | 11:00 hrs. of 12.01.2024 |
| c) Bid Submission end time & date:     | 14:00 hrs. of 01.02.2024 |
| d) Techno-Commercial Bid Opening time: | 11:30 hrs. of 02.02.2024 |

**4.0 Bidding Procedure :**

- a) All Tenders shall have to be submitted in prescribed forms attached herewith eventually to be drawn up in the rules of AEGCL.
- b) Two different envelopes to be used as follows:-
  - Envelope-1:** Bid document signed by the bidder on all pages, Tender fee, Earnest Money, Techno-commercial data of the Bidder, GTP and other mandatory documents must be enclosed.
  - Envelope-2 :** Price Bid
- c) All tenders shall have to be submitted under **sealed & signed** covers super-scribing the **Tender Notice No.** and **Name of the Work** completely and clearly on the top of the corner.
- d) All tenders shall have to be submitted on or before the last date and time of submission of tenders either by post or in person.
- e) If Bidders desire to submit their Bid by post, at their own expenses, it should be posted well in advance so as to ensure that their tenders reach the office of the tendering address on or before the specified date and time of submission of tender. AEGCL will not take any responsibility for loss, damage, tempering or delay of tenders sent by post.
- f) Bidder submitting Bid in person should submit their Bid in the tender box during the working hours on or before the last date and time of submission of tender.
- g) Tender will be rejected if submitted beyond the aforesaid time and date.
- h) AEGCL has the right to cancel the tender at any moment, without assigning any reason thereof. Bidder will not be entitled to claim any expenses and AEGCL will not be responsible for any costs or expenses incurred on the preparation and submission of the Bids.

**5.0 Validity of Bids and Bids Prices:**

- 5.1 Bids shall remain valid for a period of **180 days** after the bid submission deadline date prescribed by AEGCL. In exceptional circumstances, prior to the expiration of the bid validity period, AEGCL 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 shall also be extended for a corresponding period.

- 5.2 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.

## **6.0 Bid Security:**

- 6.1 All bids must be accompanied by a bid security amounting to **Rs. 4,300.00 (Rupees Four Thousand and Three Hundred)** only in the form of **Demand Draft** from any Nationalized Bank **payable at Guwahati** in favour **“Managing Director, AEGCL, Paltan Bazar, Guwahati-01”**.
- 6.2 Any bid not complying with the terms and conditions then his bid shall be rejected by the Employer as non-responsive.
- 6.3 The earnest money of the successful Bidder shall be returned when the successful Bidder has signed the Contract and furnished the required performance security.
- 6.4 The earnest money of the unsuccessful Bidders shall be returned as promptly as possible when the successful Bidder has signed the Contract.
- 6.5 The earnest money may be forfeited:  
a) If a Bidder withdraws its bid during the period of bid validity specified by the Bidder.  
b) If the successful Bidder fails to Sign the Contract with in the specified period.
- 6.6 **The Bid Security of a JV shall be in the name of the JV that submits the bid.**

## **7.0 Format and Signing of Bid:**

- 7.1 The Bidder shall prepare one original copy of the Technical Bid and one original copy of the Price Bid comprising the Bid and clearly mark it —ORIGINAL - TECHNICAL BID and —ORIGINAL - PRICE BID.  
In addition, the Bidder shall submit three copies of the bid, in the number specified and clearly mark each of them —COPY. In the event of any discrepancy between the original and the copies, the original shall prevail.
- 7.2 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 Bid Document and shall be attached to the bid. The name and position held by each person signing the authorization must be typed or printed below the signature. All pages of the bid where entries or amendments have been made shall be signed or initialed by the person signing the bid.
- 7.3 A bid submitted by a JV shall be signed so as to be legally binding on all partners.
- 7.4 Any interlineations, erasures, or overwriting shall be valid only if they are signed or initialed by the person signing the bid.

## **8.0 Eligible Bidders:**

- 8.1 A Bidder may be a private entity or a government-owned entity or any combination of such entities with the intent to enter into an agreement supported by a letter of intent or under an existing agreement in the form of a joint venture, consortium, or association (JV). In the case of a JV:  
a) all partners shall be jointly and severally liable, and  
b) the JV shall nominate a Representative who shall have the authority to conduct all business for and on behalf of any and all the partners of the JV during the bidding process and, in the event the JV is awarded the Contract, during contract execution.
- 8.2 A Bidder, and all partners constituting the Bidder, shall have Indian nationality. A Bidder shall be deemed to have the nationality of a country if the Bidder is a national or is constituted, incorporated, or registered and operates in conformity with the provisions of the laws of Republic Of India. This criterion shall also apply to the determination of the nationality of proposed subcontractors or suppliers for any part of the Contract including related services.
- 8.3 AEGCL considers a **conflict of interest** to be a situation in which a party has interests that could improperly influence that party's performance of official duties or responsibilities, contractual obligations, or compliance with applicable laws and regulations, and that such conflict of interest may contribute to or constitute a prohibited practice under Anticorruption Policy of Government of India and Government Of Assam. In pursuance Anticorruption Policy's requirement that Employer as well as bidders, suppliers, and contractors observe the highest standard of ethics. AEGCL will take appropriate actions if it determines that a conflict of interest has flawed the integrity of any procurement process.  
Consequently, all Bidders found to have a conflict of interest shall be disqualified. A Bidder may be considered to be in a conflict of interest with one or more parties in this bidding process if, including but not limited to:  
(a) they have controlling partners in common; or

- (b) they receive or have received any direct or indirect subsidy from any of them; or
- (c) they have the same legal representative for purposes of this bid; or
- (d) they have a relationship with each other, directly or through common third parties, that puts them in a position to have access to information about or influence on the bid of another Bidder, or influence the decisions of the Employer regarding this bidding process; or
- (e) a Bidder participates in more than one bid in this bidding process. Participation by a Bidder in more than one Bid will result in the disqualification of all Bids in which it is involved. However, this does not limit the inclusion of the same subcontractor, not otherwise participating as a Bidder, in more than one bid; or
- (f) a Bidder or any of its affiliates participated as a consultant in the preparation of the design or technical specifications of the plant and services that are the subject of the bid.

- 8.4 A firm that is under a declaration of ineligibility by the AEGCL or any Government Entity or PSU at the date of the deadline for bid submission or thereafter i.e. on or before contract signing date shall be disqualified.
- 8.5 Bidders shall provide such evidence of their continued eligibility satisfactory to the AEGCL, as the Employer shall reasonably request.

## 9.0 **Financial Capability:**

- 9.1 Bidder will require to submit along with the bid the **audited balance sheets, IT return and other legal financial statements** acceptable to AEGCL, 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, an Applicant's net worth calculated as the difference between total assets and total liabilities should be positive.
- 9.2 **Average Annual Turnover:** Minimum average annual turnover **INR 63,785.84** calculated as total certified payments received for contracts in progress or completed, within the last 3 (Three) Years.

## 10.0 **Work Experience:**

- 10.1 The Bidder should have successfully completed similar works within last 5 (Five) Financial years. Documentary evidence such as Work Order, Completion Certificate, etc. should be submitted as per below mentioned criteria:
- (a) **Three (3) similar** completed works costing not less than **Rs.85,047.79**
  - (b) **Two (2) similar** completed works costing not less than **Rs. 1,06,309.74**
  - (c) **One (1) similar** completed works costing not less than **Rs. 1,70,095.58**
- 10.2 The Bidder must have experience of executing work of similar nature previously. The bidder must submit experience and completion certificate for scrutiny by AEGCL.

## 11.0 **Evaluation Criteria:**

- 11.1 **Evaluation will be done on the basis of *Bid Clause* No. 8.0 : Eligible Bidders, Cl. No. 9.0 : Financial Capability, Cl. No. 10.0 : Work Experience and in accordance with the Annexure I to be duly filled in, signed and submitted by the bidder.**
- 11.2 Price Bid of only **Responsive and Qualified Techno-Commercial Bidders** will be opened.
- 11.3 **Price Bid Envelope of the Non-responsive Techno Commercial Bidders will be returned** to the respective bidders against submission of a written request by the bidder.

## 12.0 **Correction of Errors in the Price Bid:**

- 12.1 **Arithmetical Error**, if observed while in Price Bid evaluation, same will only be corrected.
- 12.2 Arithmetic Errors in the Price Bid will be rectified on the following basis:
- (a) If there is a discrepancy between the unit rate and the total cost that is obtained by multiplying the unit rate and quantity, the unit rate shall prevail and the total cost will be corrected unless in the opinion of AEGCL there is an obvious misplacement of the decimal point in the unit rate, in which case the total cost as quoted will govern and the unit rate corrected. If there is a discrepancy between the total bid amount and the sum of total costs, the sum of total costs shall prevail and the total bid amount will be corrected.
  - (b) The amount stated in the Price Bid will be adjusted by AEGCL in accordance with the above procedure for the correctness of errors and shall be considered as binding upon the bidder. If the bidder does not accept the corrected amount of bid, its bid will be rejected, and the bid security may be forfeited.
- 12.3 **Any post bid correction request will NOT BE ENTERTAINED.**

### 13.0 **Bid Evaluation Process for Abnormally Low Bids (ALB):**

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

(a) **Identification:** For the Identification of the Abnormally Low Bids, two approaches as applicable shall be adopted :-

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

(ii) **Relative approach:**-When there are at least 5(five) nos. of substantially responsive bids and the lowest bid price is 20% or more below AEGCL's cost estimate. In this approach, first the Average bid price is determined and then by deducting the standard deviation from the Average bid price, potentially ALB may be determined.

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

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

- i. Identify ALB as per the steps mentioned in Clause No. (a). (i) and (a). (ii), whichever is applicable.
- ii. To seek and analyses the clarifications from the abnormally low Bidder in terms of resource inputs and pricing, including overheads, contingencies and profit margins. In that respect, the committee may refer to guideline of World Bank, AIIB, ADB etc. prescribed for ALB.
- iii. To decide whether to accept or reject the bid.

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

- i. If any abnormally low bid is accepted with additional performance security, it is to be noted that the total performance security should not exceed 20% of the total contract value.
- ii. The additional performance security shall be treated as part of the original performance security and shall be valid for a period similar to that applicable for defect liability period of the contract.
- iii. Non submission of the additional performance security shall constitute sufficient ground for rejection of the bid and similar assessment shall then be initiated for next ranked bidder if that bidder is also identified as ALB.

### 14.0 **Late Bid:**

14.1 Any bid submitted *after the due date and time* will be rejected without any prejudice.

14.2 AEGCL will not be responsible for any Postal and/or Courier Delay in delivering the bid. The same received after the scheduled closing date and time will be rejected without any prejudice.

14.3 Bidding through **EMAIL WILL NOT BE ACCEPTED.**

### 15.0 **Clarification on Bid Documents and Contacting AEGCL:**

15.1 A prospective Bidder requiring any clarification of the Bidding Document shall contact the AEGCL in writing at the AEGCL's address (**O/o the Deputy General Manager, Silchar T&T Circle, AEGCL, Silchar-788015**) and raise his enquiries prior to 7 (seven) days of closing of the bid. The Employer will respond to any request for clarification, provided that such request is received no later than seven (7) days prior to the deadline for submission of bids. The AEGCL's response shall be in writing with copies to all Bidders who have acquired the Bidding Document including a description of the inquiry but without identifying its source. Should AEGCL deem it necessary to amend the Bidding Document as a result of a request for clarification, it shall do so.

15.2 The Bidder is advised to visit and examine the site where the work is to be Carried out and its surroundings and obtain for itself on its own responsibility all information that may be necessary for preparing the bid and entering into a contract for the provision of plant and services. The costs of visiting the site shall be at the Bidder's own expense.

15.3 The Bidder and any of its personnel or agents will be granted permission by the Employer to enter upon its premises and lands for the purpose of such visit, but only upon the express condition that the Bidder, its personnel, and agents will release and indemnify the Employer and its personnel and agents from and against all liability in respect thereof, and will be responsible for death or personal injury, loss of or damage to property, and any other loss, damage, costs, and expenses incurred as a result of the inspection.

## **16.0 Amendment of Bidding Document:**

- 16.1 At any time prior to the deadline for submission of bids, the Employer may amend the Bidding Document by issuing addenda.
- 16.2 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 AEGCL.
- 16.3 To give prospective Bidders reasonable time in which to take an addendum into account in preparing their bids, AEGCL may, at its discretion, extend the deadline for the submission of bids.

## **17.0 Preparation of Bids by the Bidders:**

- 17.1 **Cost of bidding:** The Bidder shall bear all costs associated with the preparation and submission of its Bid, and AEGCL shall not be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process.
- 17.2 **Language of Bid:** The Bid, as well as all correspondence and documents relating to the bid exchanged by the Bidder and AEGCL, shall be written in the English language.

## **18.0 Bid Prices and Discounts:**

- 18.1 Bidders shall quote price inclusive of GST and all other applicable taxes. No extra calculation for discounts or other taxes will be done during evaluation.
- 18.2 Unless otherwise specified in the Bid Document and/or AEGCL's Requirements, bidders shall quote for the entire plant and services on a —single responsibility basis such that the total bid price covers all the Contractor's obligations mentioned in or to be reasonably inferred from the bidding document in respect of the including procurement and subcontracting (if any), delivery, construction, installation and completion of the Work. This includes all requirements under the Contractor's responsibilities for completing the work and where so required by the bidding document, the acquisition of all permits, approvals and licenses, etc.; the operation, maintenance and training services and such other items and services as may be specified in the Bidding Document, all in accordance with the requirements of the General Conditions. Items against which no price is entered by the Bidder will not be paid for by the Employer when executed and shall be deemed to be covered by the prices for other items.
- 18.3 Bidders are required to quote the price for the commercial, contractual and technical obligations outlined in the bidding document.
- 18.4 Sales Tax, GST and all other taxes (as applicable) payable on the work should be indicated separately. In case of failure to indicate so AEGCL will consider such taxes are included in the Offered Price.
- 18.5 Since the work being "work contract" which is one and individual and which involves no separate contract for the sale of materials, the contractor shall have not be entitled to get any VAT and or any other taxes, levies reimbursed from the AEGCL for the supply of the materials.
- 18.6 Taxes like work contract, income tax etc. which need to be deducted at source as per the prevailing law of the land, will be deducted at source.
- 18.7 **The Prices shall be FIXED and FIRM:**  
The Bided Price should on Fixed Price basis, prices quoted by the Bidder shall be fixed during the Bidder's performance of the contract and not subject to variation on any account. A bid submitted with an adjustable price quotation will be treated as non-responsive and rejected.

## **19.0 Mandatory Documents:**

- (i) Bidders(s) knowledge from actual personal investigation of the resources of the region or District (S) in which he/they offers the work.
- (ii) The Bidder shall furnish copy of their **PAN Card**. In case the bidder is a partnership Firm, the **PAN** card must be in the name of firm.
- (iii) In case the bidder is a partnership Firm, the **work experience, solvency and turn over** shall be in the name of **partnership Firm** only.
- (iv) **GST registration No.**
- (v) **Registered Power of attorney, if any.**
- (vi) **IT Return for last three Years.**
- (vii) **Audited Balance Sheet for last three years.**
- (viii) **Bank Solvency certificate.**
- (ix) **GTP of the equipment to be supplied.**
- (x) **Manufacturer's authorization.**

20.0 **TECHNICAL REQUIREMENTS**

20.1 **Intent of specification**

This section of the specification deals with the technical information & criteria for “**Supply of 3 (Three) nos. of 132 kV LA with terminal connectors etc. as applicable as per Specification against 132 kV Hailakandi GSS**”. The Contractor's proposal shall be based on the use of materials complying fully with the requirements specified herein.

20.2 **Scope of Works :-**

- a) The scope of work involves “**Supply of 3 (Three) nos. of 132 kV LA with terminal connectors etc. as applicable as per Specification against 132 kV Hailakandi GSS**”.
- b) Freight and Transit insurance, storage at site and site insurance of all materials at site shall be in the scope of the contractor.

20.3 **Supplier to Inform himself fully:-**

- The supplier should ensure that he has examined the specifications and schedules as brought out in this section as well as other sections of the Bidding Document and has satisfied himself as to all the conditions and circumstances affecting the contract price and fixed his price according to his own views on these matters and acknowledge that no additional allowances except as otherwise provided therein will be levied.
- The Purchaser shall not be responsible for any misunderstanding or incorrect information obtained by the contractor other than information given in writing by the Purchaser.

20.4 **Service Conditions:-**

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

Peak ambient day temperature in still air	: 45 <sup>0</sup> C
Minimum night temperatures	: 0 <sup>0</sup> C
Reference ambient day temperature	: 45 <sup>0</sup> C
Maximum Relative Humidity	: 100%
Minimum Relative Humidity	: 10%
Altitude	: Below 1000 M above MSL
Maximum Wind Pressure	: As per IS:802 latest code
Seismic Intensity	: ZONE-V as per IS 1893

20.5 **Conformity with Indian Electricity Rules & Other Local Regulations:-**

- The Supplier shall note that all substation works shall comply with the latest provisions of Indian Electricity Rules and with any other regulations. Local authorities concerned in the administration of the rules and regulations relating to such works shall be consulted, if necessary, about the rules and regulations that may be applicable.
- All registration and statutory inspection fees, if any, in respect of his work pursuant to this Contract shall be to the account of the contractor.

20.6 **Standards:-**

- The equipment covered under this Bidding Document shall, unless otherwise stated be designed, constructed and tested in accordance with the latest revisions of relevant Indian Standards and shall conform to the regulations of local statutory authorities.
- In case of any conflict between the standards and this specification, this specification shall govern.
- Equipment conforming to other International or authoritative Standards which ensure equivalent or better performance than that specified above shall be accepted. In that case relevant extracts of the same shall be forwarded with the bid.

20.7 **Engineering Data:-**

- The furnishing of engineering data by the supplier shall be in accordance with the Bidding Document. The review of these data by the Purchaser will cover only general conformance of the data to the specifications and not a thorough review of all dimensions, quantities and details of the materials, or items indicated or the accuracy of the information submitted. This review by the Purchaser shall not be considered by the

supplier as limiting any of his responsibilities and liabilities for mistakes and deviations from the requirements, specified under these specifications.

- All engineering data submitted by the supplier after review by the Purchaser shall or part of the contract document.

#### **20.8 Drawings and Documents for approval:-**

- The supplier shall submit all drawings and documents of all equipment to be supplied include drawings of foundation, steel structure and any other drawings that may be required for successful completion of the project and get it approved by the Purchaser.
- In addition, the following sub clauses shall also apply in respect of Contract Drawings.
- All drawings submitted by the Supplier including those submitted at the time of Bid shall be with sufficient detail to indicate the type, size, arrangement, dimensions, material description, bill of materials, weight of each component break-up for packing and shipment, fixing arrangement required, the dimensions required for installation and any other information specifically requested in these specifications.
- Each drawing submitted by the Supplier shall be clearly marked with the name of the Purchaser, the specification title, the specification number and the name of the project. All titles, noting, markings and writings on the drawing shall be in English. All the dimensions should be to the scale and in S.I. units.
- The drawing submitted for approval to the Purchaser shall be in quadruplicate. One print of such drawings shall be returned to the supplier by the Purchaser marked “approved/approved with corrections”. The Supplier shall there upon furnish the Purchaser additional prints as may be required along with one reproducible in original of the drawings after incorporating all corrections.

#### **20.9 Final Drawings and Documents:-**

The successful supplier shall require providing following documents and drawings for each bay constructed in printed form:

- a) Instruction manuals of all equipment in 3 (Three) copies.  
This instruction manual shall generally consist of*
  - *Operation Manuals*
  - *Maintenance Manuals and*
  - *Spare Parts Bulletins*
- b) Copies of routine test reports (in triplicate) of relevant equipment.*
- c) Final guaranteed and other technical particulars of relevant equipment.*

In addition to the above, the contractor shall provide **5 (Five) sets** of all drawings and documents to Purchaser in printed form for his reference and record.

#### **20.10 Quality assurance, Inspection & Testing:-**

To ensure that the supply of manufactured equipment(s) and services under the scope of this contract whether manufactured or performed within the contractor’s works or at his subcontractor’s premises or at site or at any other place of work are in accordance with the specifications, the contractor shall adopt suitable quality assurance programme to control such activities at all points necessary. Such programme shall be outlined by the contractor and shall be finally accepted by the Purchaser after discussions before award of contract. A quality assurance programme of the contractor shall generally cover but not limited to the following:

- His organization structure for the management and implementation of the proposed quality assurance programme.
- Documentation control system.
- Qualification data for contractor’s key personnel
- The procedure for purchase of materials, parts components and selection of subcontractor’s services including vendor analysis, source inspection, incoming raw material inspection, verification of material purchases, etc.
- System for shop manufacturing including process controls and fabrication and assembly controls.
- Control of non-conforming items and system for corrective action
- Control of calibration and testing of measuring and testing equipment
- Inspection and test procedure for manufacture
- System for indication and appraisal of inspection status
- System for quality audits
- System for authorizing release of manufactured product to the Purchaser
- System of maintenance of records
- System for handling storage and delivery



- A quality plan detailing out the specific quality control procedure adopted for controlling the quality characteristics relevant to each item of supply. The quality plan shall be mutually discussed and approved by the Purchaser after incorporating necessary corrections by the contractor as may be required.

#### **20.11 Quality Assurance Documents:-**

- The contractor shall be required to submit all the quality assurance documents as stipulated in the quality plan at the time of Purchaser's inspection of equipment/material.
- The Purchaser or his duly authorized representatives reserves the right to carry out quality audit and quality surveillance of the systems and procedures of the contractors/his vendors quality management and control activities.

#### **20.12 Employer's Supervision:-**

- To eliminate delays and avoid disputes and litigation it is agreed between the parties to the Contract that all matters and questions shall be resolved in accordance with the provisions of this document.
- The manufacturing of the product shall be carried out in accordance with the specifications. The scope of the duties of the Employer, pursuant to the contract, will include but not be limited to the following.
  - a) Interpretation of all the terms and conditions of these Documents and Specifications.
  - b) Review and interpretation of all the Contractors drawings, engineering data etc.
  - c) Witness or authorize his representative to witness tests at the manufacturer's works or at site, or at any place where work is performed under the contract.
  - d) Inspect, accept or reject any equipment, material and work under the Contract, in accordance with the Specifications.
  - e) Issue certificate of acceptance and/or progressive payment and final payment certificate.
  - f) Review and suggest modification and improvement in completion schedules from time to time,
  - g) Supervise the Quality Assurance Programme implementation at all stages of the works.

#### **20.13 Inspection and Inspection Certificate:-**

- The Employer, his duly authorized representative and/or outside inspection agency acting on behalf of the Employer shall have, at all reasonable times, access to the premises and works of the Contractor and their sub-contractor(s)/sub-vendors and shall have the right, at the reasonable times, to inspect and examine the materials and workmanship of the product during its manufacture.
- All routine and acceptance tests whether at the premises or works of the Contractor or of any Sub Contractor, the Contractor except where otherwise specified shall carry out such tests free of charge. Items such as labours, materials, electricity, fuel, water, stores apparatus and instruments as may be reasonably demanded by the Employer/inspector or his authorized representative to carry out effectively such tests in accordance with the Contract shall be provided by the Contractor free of charge.
- If desired by the Employer, the Contractor shall also carry out type tests as per applicable Standards for which Employer shall bear the expenses except in cases where such tests have to be carried out. The Contractor is required to quote unit rates of type test charges in a separate Schedule (if such schedule is provided in the Bidding Document). However, these type test charges shall not be taken into account in comparing Price Bid.
- The inspection by Employer and issue of Inspection Certificate thereon shall in no way limit the liabilities and responsibilities of the Contractor in respect of the agreed Quality Assurance Programme forming a part of the Contract.

#### **20.14 Classification of Tests:-**

The type, acceptance and routine tests and tests during manufacture to be carried-out on the material and equipment shall mean as follows:

- a) **Type Tests:** - Type Tests shall mean those tests, which are to be carried out to prove the process of manufacture and general conformity of the material to this Specification. These tests shall be carried out on samples prior to commencement of commercial production against the order. The Bidder shall indicate his schedule for carrying out these tests.
  - b) **Acceptance Tests:** - Acceptance Tests shall mean those tests, which are to be carried out on samples taken from each lot offered for pre-dispatch inspection, for the purposes of acceptance of that lot.
  - c) **Routine Tests:** - Routine Tests shall mean those tests, which are to be carried out on the material to check requirements, which are likely to vary during production.
  - d) **Tests during Manufacture:** - Tests during manufacture shall mean those tests, which are to be carried out during the process of manufacture and end inspection by the Contractor to ensure the desired quality of the end product to be supplied by him.
- The norms and procedure of sampling for these tests will be as per the Quality Assurance Programme to be mutually agreed to by the Contractor and the Employer.

- The standards and norms to which these tests will be carried out are specified in subsequent Sections of this Specification. Where a particular test is a specific requirement of this Specification, the norms and procedure of the test shall be as specified or as mutually agreed to between the Contractor and the Employer in the Quality Assurance Programme.
- For all type and acceptance tests, the acceptance values shall be the values specified in this Specification or guaranteed by the Bidder or applicable Standards, as applicable.

#### **20.15 Type Test Reports:-**

- Materials, 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.
- All Bids must be accompanied by the Type Test Certificates of materials offered. Such type test certificates shall be acceptable only if:
  - i) Tests are conducted in an independent testing laboratory with NABL accreditation/CPRI,
  - ii) Tests are conducted in manufacturer's own laboratory.
 In this case
  - (a) The laboratory must have NABL accreditation; and
  - (b) Tests have been witnessed by technically qualified representatives of earlier clients or purchaser.
- Test reports to be acceptable must be related directly to the equipment offered i.e. it is fully identical in design, rating and construction with the equipment for which the type test certificates have been submitted. Test reports for higher class (by capacity/voltage etc.) of equipment are acceptable with commitment to perform the type tests free of any charge on the particular equipment after the award of contract.
- Type Test Reports older than five (5) years on the date of Technical bid opening shall not be accepted.

#### **20.16 Guaranteed Technical Particulars:-**

- The Guaranteed Technical Particulars of the various items shall be furnished by the Bidders with the Technical Bid in the prescribed Schedules attached in this bidding document. 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.
- 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 whatsoever shall be given to the bidder offering better/more stringent values than those required as per specification except where stated otherwise.

#### **20.17 Materials Handling and Storage:-**

- 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.
- 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.
- 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.
- 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.
- All the materials stored in the open or dusty location must be covered with suitable weather-proof and flameproof covering material wherever applicable.
- The Contractor shall be responsible for making suitable indoor storage facilities, to store all items/materials, which require indoor storage.
- 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.

## **21.0 SPECIFICATION:-**

### **21.1 TECHNICAL SPECIFICATION OF 132 KV LIGHTNING ARRESTER:-**

#### **21.1.1 SCOPE:-**

- This Section covers the specifications for design, manufacture, testing at manufacturers works before dispatch, subsequent dispatch of 132kV,10 kA, Station class heavy duty, gapless metal (zinc) oxide Lightning Arrestors complete with fittings & accessories such as surge monitor, terminal connectors etc. including mounting structures as applicable.
- Loading at manufacturer's works, transportation and delivery at respective substation site including unloading at destination site.
- Erection, Testing and Commissioning of Lightning Arresters.

#### **21.1.2 STANDARDS:-**

- The design, manufacture and performance of Lightning Arrestors shall comply with IS: 3070 Part-3 unless otherwise specifically specified in this Specification.

#### **21.1.3 GENERAL REQUIREMENT:-**

- The Lightning Arrestors shall draw negligible current at operating voltage and at the same time offer least resistance during the flow of surge current.
- The Lightning Arrestors shall consist of non-linear resistor elements placed in series and housed in electrical grade porcelain housing/silicon polymeric of specified creepage distance.
- The non-linear blocks shall be of sintered metal oxide material. These shall be provided in such away as to obtain robust construction, with excellent mechanical and electrical properties even after repeated operations.
- The assembly shall be hermetically sealed with suitable rubber gaskets with effective sealing system arrangement to prevent ingress of moisture.
- The Lightning Arrestors shall be provided with line and earth terminals of suitable size. The ground side terminal of Lightning Arrestors shall be connected with 25x6 mm galvanized strip, one end connected to the Lightning Arrestors and second end to a separate ground electrode. The bidder shall also recommend the procedure which shall be followed in providing the earthing/system to the Lightning Arrestors.
- The Lightning Arrestors shall not operate under power frequency and temporary over voltage conditions but under surge conditions, the Lightning Arrestors shall change over to the conducting mode.
- The Lightning Arrestors shall be suitable for circuit breaker performing 0-0.3sec.-CO-3min-CO- duty in the system.
- Lightning Arrestors shall have a suitable pressure relief system to avoid damage to the porcelain/ silicon polymeric housing and providing path for flow of rated fault currents in the event of arrester failure.
- The reference current of the arrester shall be high enough to eliminate the influence of grading and stray capacitance on the measured reference voltage.
- The Lightning Arrestors shall be thermally stable and the bidder shall furnish a copy of thermal stability test with the bid.
- The arrester shall be capable of handling terminal energy for high surges, external pollution and transient over voltage and have low losses at operating voltages.

#### **21.1.4 ARRESTOR HOUSING:-**

- The arrester housing shall be made up of **polymer** for **132kV systems** and shall be homogenous, free from laminations, cavities and other flaws of imperfections that might affect the mechanical and dielectric quality. The housing shall be of uniform brown colour, free from blisters, burrs and other similar defects.
- Arrestors shall be complete with insulating bases, fasteners for stacking units together, surge counters with leakage current meters and terminal connectors.
- The **housing shall be so coordinated that external flashover shall not occur due to application of** any impulse or switching surge voltage up to the maximum design value for arrester. The arrestors shall not fail due to contamination. The arrester housings shall be designed for pressure relief class as given in Technical Parameters of the specification.
- Sealed housings shall exhibit no measurable leakage.

#### **21.1.5 FITTINGS & ACCESSORIES:-**

- The Lightning Arrestors shall be complete with insulating bases, fasteners for stacking units together, surge counters with leakage current meters and terminal connectors.

- The terminals shall be non-magnetic, corrosion proof, robust and of adequate size and shall be so located that incoming and outgoing connections are made with minimum possible bends. The top metal cap and base of Lightning Arrestors shall be galvanized. The line terminal shall have a built in clamping device which can be adjusted for both horizontal and vertical takeoff.
- Grading corona control rings if necessary, shall be provided on each complete arrestor pole for proper stress distribution.

#### **21.1.6 SURGE MONITOR:-**

- A self-contained discharge counter suitably enclosed for outdoor use and requiring no auxiliary or battery supply for operation shall be provided for each single pole unit. Leakage current meter with suitable scale range to measure leakage current of Lightning Arrestors shall also be supplied within the same enclosure. The number of operations performed by the arrestor shall be recorded by a suitable cyclometric counter and surge monitor shall be provided with an inspection window. There shall be a provision for putting ammeter to record the current/alarm contacts in the control room if the leakage current exceeds the permitted value. Similar provision shall be considered for surge counter also.
- Surge monitor shall be mounted on the support structure at a suitable height so that the reading can be taken from ground level through the inspection window and length of connecting leads up to grounding point and bends are minimum.
- **The surge counter shall be provided with a potential free contact rated for 220/110 Volt (DC) which shall close whenever a surge is recorded by the surge monitor. Necessary arrangement shall be provided for extending the contact information to Substation Automation System.**

### **21.2 TESTS:-**

#### **21.2.1 Test on Lightning Arrestors**

- The Lightning Arrestors offered shall be type tested and shall be subjected to routine and acceptance tests in accordance with IS: 3070 (Part-3). In addition, the suitability of the Lightning Arrestors shall also be established for the following:
  - a) Residual voltage test
  - b) Reference voltage test
  - c) Leakage current at M.C.O.V
  - d) P.D. test
  - e) Sealing test
  - f) Thermal stability test
  - g) Aging and Energy capability test
  - h) Watt loss test
- Each metal oxide block shall be tested for guaranteed specific energy capability in addition to routine/acceptance test as per IEC/IS.
- The Lightning Arrestors housing shall also be type tested and shall be subjected to routine and acceptance tests in accordance with IS: 2071.

#### **21.2.2 Galvanization Test**

All Ferrous parts exposed to atmospheric condition shall have passed the type tests and be subjected to routine and acceptance tests in accordance with IS: 2633 & IS 6745.

### **21.3 NAME PLATES:-**

- The name plate attached to the arrestor shall carry the following information:
  - I. Rated Voltage
  - II. Continuous Operation Voltage
  - III. Normal discharge current
  - IV. Pressure relief rated current
  - V. Manufacturers Trade Mark
  - VI. Name of Sub-station
  - VII. Year of Manufacturer
  - VIII. Name of the manufacture
  - IX. Purchase Order Number along with date

### **21.4 PRE-COMMISSIONING TESTS:-**

- Contractor shall carry out following tests as pre-commissioning tests. Contractor shall also perform any additional test based on specialties of the items as per the field instructions in the equipment Supplier or Employer without any extra cost to the Employer. The Contractor shall arrange all instruments required

for conducting these tests along with calibration certificates and shall furnish the list of instruments to the Employer for approval.

- i. Operation check of LA counters.
- ii. Insulation resistance measurement.
- iii. Capacitance and Tan delta measurement of individual stacks.
- iv. Third harmonic resistive current measurement (to be conducted after Energisation.)

21.5 **TYPE AND RATING:-**

<u>Sl. No.</u>	<u>Particulars</u>	<u>Voltage class 132 kV</u>
1	Rated voltage of arrester, kV	120
2	Rated frequency, Hz	50
3	Nominal discharge current of arrester, kA	10
4	Maximum residual voltage at nominal discharge current, kV (peak)	395
5	Maximum steep current impulse residual voltage at kV (kVP)	440
6	One minute power frequency withstand voltage of arrester insulation, kV (rms)	275
7	1.2 / 50 $\mu$ second impulse withstand voltage of arrester insulation, kV (peak)	650
8	Line discharge class	3
9	<b>Insulator Housing</b>	
	a) Power frequency withstand test voltage (wet) (kV rms)	275
	b) Lightning impulse withstand tests voltage(KVp)	650
	c) Pressure Relief Class	40
	d) Creepage distance not less than (mm)	3625

22.0 **Liquidated Damage:**

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

22.1 Recover an amount at the rate of 1% (One percent) of the Contract Price per week or part thereof of delay, subject to maximum of 10% (Ten percent) of the contract price as liquidated damage to AEGCL.  
However, the payment of liquidated damages shall not in any way relieve the Contractor from any of its obligations to complete the works or from any other obligations and liabilities of the Contractor under the Contract.

22.2 To complete the balance work giving notice to the Contractor/Firm and to recover any extra expenditure incurred thereby for having to complete the work at a higher price at the risk and responsibility of the Contractor/Firm.

23.0 **Warranty:**

- 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.
- 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. The supplier will provide warranty for the works executed by them.
- If during the Period Warranty any defect is 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.
- 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 amount due the Supplier or claimed under the Performance Security.
- The term period of warranty shall mean the period of **18 (Eighteen) months from the date of Supply**

of **Materials**. The successful bidder should warrant the free replacement of any damaged/malfunctioning equipment and its accessories during the warranty period.

## **24.0 Payment terms:**

- **No advance payment** shall be made in this contract.
- No claim for interest shall be entertained by AEGCL.
- The price is firm and no price variation shall be applicable.
- First & Final bill for the supply will be entertained only after **100%** completion of the work.
- Payment will be made by **DGM, Silchar (T&T) Circle, AEGCL, Meherpur, Silchar**. The Bidder / Firm will have to be submitted the following Net Banking details.
  - (a) Banker's Name & Branch
  - (b) Account No
  - (c) Banker's address
  - (d) Banker's IFSC Code

## **25.0 Contract Agreement:**

An agreement shall have to be drawn on non-judicial stamp of appropriate value with the Department by the selected Contractor in **AEGCL's General Conditions of Supply and Erection 2009** of contract within **15 (fifteen) days** from the date of issue of the **LOI/Work Order**.

## **26.0 Performance security deposit:**

- The successful bidder shall have to deposit through a **Bank Guarantee** from a Nationalized or scheduled Bank of RBI in AEGCL's standard proforma on non-judicial stamp of appropriate value for an amount equivalent to **10% (ten percent)** of the total value of the order as performance security, immediately within **10 (ten) days** from the issue of the letter of intent/detailed orders (as the case may be), duly pledged in favour of "**Managing Director, AEGCL, Paltan Bazar, Guwahati-01**", payable at **Guwahati**, and such security deposit shall be **valid up to 30 (Thirty) days** beyond the **warranty period of 18 (Eighteen) months**. The **Bank Guarantee (BG)** should be submitted to the **O/o the Deputy General Manager, Silchar T&T Circle, AEGCL, Silchar-788015** by the successful Bidder.
- Please note that, if the selected Bidder / Firm fail to furnish the requisite performance security in the form of **Bank Guarantee**, an amount equivalent to **10%** of the Contract Price shall be retained as Security Deposits which shall be retained up to **18 (Eighteen) months** from the date of Supply. .
- If the bidder / firm fails or neglects to observe and perform any of his obligations under the contract, Purchaser (AEGCL) shall have the right to forfeit either in full or in part at his absolute discretion, the security deposit furnished by the Contractor/Firm.
- No interest shall be payable on such deposits.

## **27.0 Force Majeure Condition:**

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

## **28.0 Settlement of Dispute and Arbitration:**

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

## **29.0 Insurance :**

- 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.
- 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.
- 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.

- 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.
- 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.

### **30.0 Right to Reject:**

AEGCL reserves the right to reject any or all the bids without assigning any reason thereof and the AEGCL further reserves the right to split up the work order in favour of more than one Contractor. The AEGCL also reserves the right to reject the lowest or any other price without assigning any reason.

**The clauses which are not appearing in this document (bid) will be as per The General Condition of Supply and Erection 2009 of AEGCL. The General Condition of Supply and Erection 2009 of AEGCL is available in the AEGCL's website [www.aegcl.co.in](http://www.aegcl.co.in) under Acts, Rules and Policies Tab.**

**Appendix-1**

**Letter of Technical Bid**

[Bidder's Letter head]

Date: \_\_\_\_\_

Tender No.: \_\_\_\_\_

Invitation for Bid No: \_\_\_\_\_

To: \_\_\_\_\_

We, the undersigned, declare that:

- (a) We have examined and have no reservations to the Bidding Document, including Addenda No.:  
\_\_\_\_\_.
- (b) We offer to supply in conformity with the Bidding Document and in accordance with the completion/delivery schedule specified in the bid document, the following Goods and Related Services:  
\_\_\_\_\_.
- (c) Our Bid shall be valid for a period of \_\_\_\_\_ days from the date fixed for the bid submission deadline in accordance with the Bidding Document, and it shall remain binding upon us and may be accepted at any time before the expiration of that period;
- (d) If our Bid is accepted, we commit to obtain a Performance Security in the amount of \_\_\_\_\_ percent of the Contract Price for the due performance of the Contract;
- (e) We are not participating, as Bidders, in more than one Bid in this bidding process;
- (f) 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.
- (g) Our firm, its affiliates or subsidiaries, including any Subcontractors or Suppliers for any part of the contract, has not been declared ineligible by AEGCL, APDCL or APGCL under the Employer's country laws or official regulations
- (h) We understand that you are not bound to accept the lowest evaluated bid or any other bid that you may receive.

Name \_\_\_\_\_

In the capacity of \_\_\_\_\_

Signed \_\_\_\_\_

Duly authorized to sign the Bid for and on behalf of \_\_\_\_\_

Date \_\_\_\_\_



**Price Proposal Submission Sheet**

Date: \_\_\_\_\_

Tender No.: \_\_\_\_\_

Invitation for Bid No: \_\_\_\_\_

To: \_\_\_\_\_

We, the undersigned, declare that:

- (a) We have examined and have no reservations to the Bidding Document, including Addenda No.:  
\_\_\_\_\_
- (b) We offer to supply in conformity with the Bidding Document and in accordance with the completion/delivery schedule specified Schedule of Supply & Erection, the following Goods and Related Services: \_\_\_\_\_
- (c) The total price of our Bid, excluding any discounts offered in item (d) below is:  
\_\_\_\_\_
- (d) The discounts offered and the methodology for their application are:  
\_\_\_\_\_
- (e) The following commissions, gratuities, or fees have been paid or are to be paid with respect to the bidding process or execution of the Contract:

Name of Recipient	Address	Reason	Amount

(If none has been paid or is to be paid, indicate “none.”)

Name \_\_\_\_\_

In the capacity of \_\_\_\_\_

Signed \_\_\_\_\_

Duly authorized to sign the Bid for and on behalf of \_\_\_\_\_

Date \_\_\_\_\_

**Bidding Forms**

**Name of work:** \_\_\_\_\_

**Bid Identification No:** \_\_\_\_\_

**General**

- (i) Name of the Firm/Contractor: \_\_\_\_\_
- (ii) Full Address: \_\_\_\_\_
- (iii) Constitution of the Firm: \_\_\_\_\_
- (iv) Whether Partnership or any type: \_\_\_\_\_

**A) Experience**

- (i) No of years the Firm/Contractor has been in operation under its present name.
- (ii) Details of work executed/being executed by the tenderer in the last three years.
- (iii) Testimonials from Clients Company on various works executed for the last three years.

(Details of works executed/under execution in the last three years including another department)

Sl. No.	Name of work & W/O No.	Worked Done Under	Value of Work	Specified date of completion	Present status/completed on

**B) Financial Position**

- (i) Financial Turnover during the last three years (copies of Audited Annual report, Accounts or a statement duly certified by a chartered accountant and Income Tax return.

Year	Turn over

Any other details that the tenderer may like to furnish to substantiate their financial and technical ability to undertake this work and complete the same within stipulated period of completion.

**Full Name of the Bidder/Firm:** -.....

**Signature of the Bidder/Firm** .....

**Postal Address** .....

**Phone/Mobile No.** .....

**E-mail Id:** - .....

**PRICE BID**

(To be submitted in the Part-II, ‘Price bid’ in sealed envelope in quadruplicate)

**Name of the Bidder:**

**NIT No.** AEGCL/STTC/Tech-12/2023-24/08

**Dated:** 11.01.2024

**Name of the work:** Supply of 3 (Three) nos. of 132 kV LA with terminal connectors etc. as applicable as per Specification against 132 kV Hailakandi GSS.

Sl. No.	Item Description	Measuring Unit	Quantity	Unit Price in ₹	Total Price in ₹
1	Supply of 3 (Three) nos. of 132 kV Lightning Arrester with insulating base, surge monitor along with connection wire and terminal connectors and all fittings and accessories as per Specifications against 132 kV Hailakandi GSS	Nos.	3		
	Total Amount				
	Add GST				
	Grand Total				

**Rupees in words** \_\_\_\_\_

**Full Name of the Bidder/Firm:** - .....

**Signature of the Bidder/Firm:-** .....

**Postal Address:** - .....

**Phone/Mobile No.:-** .....

**E-mail Id:** - .....

**ANNEXURE – I**

***Following information is to be furnished in the ‘Technical and Commercial bid’ as first page.***

(Please tick mark where necessary.)

1)	Earnest money (EMD)	:Submitted/Not submitted
	a) Amount of EMD	:Rs.
	b) Submitted in the form of Bank Guarantee /Demand Draft	: Yes/No.
2)	Validity of the offer	: ..... days from the date of opening of ‘Technical & Commercial Bid’ & ‘Price bid’.
3)	Nature of price offered	
	a) ‘FIRM’ Price	: Yes/No
4)	Terms of payment (Whether agreeable to accept payment as specified in <b>Clause-24.0</b> )	: Yes/No
5)	Date of completion of supply (Please specify the date of completion of supply as per specification)	: Yes/No
6)	‘Security and performance guarantee’ (Whether agreeable to accept as specified in <b>Clause no-26.0</b> )	: Yes/No
7)	List of orders executed for similar works furnished	: Yes/No
8)	Performance certificate from the Govt./Govt. undertaking furnished	: Yes/No
9)	Deviation from the specifications	
	a) Technical	: Yes/No
	b) Commercial	: Yes/No
10)	Information in respect of technical capability is furnished	: Yes/No
11)	Information in respect of Financial capability certificate from the Banker is furnished	: Yes/No
13)	PAN card as per <b>Cl. No.19.0 (ii)</b>	: Yes/No
14)	GST registration no. as per <b>Cl. No. 19.0 (iv)</b>	: Yes/No
15)	Registered Power of Attorney as per <b>Cl. no. 19.0 (v)</b> enclosed.	: Yes/No

**Full Name of the Bidder/Firm: -.....**

**Signature of the Bidder/Firm .....**

**Postal Address .....**

**Phone/ Mobile No. ....**

**E-mail Id:- .....**

## **ANNEXURE – II**

### **GUARANTEED AND OTHER TECHNICAL PARTICULARS**

*(To be filled in by Bidder and shall be furnished with the Technical Bid)*

Sl. No.	Description	Unit	Particular
1	Name & Address of Supplier & Manufacturer		
	➤ Lightning Arrester		
	➤ Surge Monitor		
	➤ Line Dis-connector		
	➤ Metal Oxide Block		
	➤ Terminal Clamp		
2	Manufacturer's Type & Designation		
3	Name & address of collaborator, if any		
4	<b><u>Lightning Arrester :-</u></b>		
	a) Voltage rating(KV rms)		
	b) Continuous Operating Voltage(KV rms)		
	(i) Continuous Operating Voltage(KV rms)		
	(ii) Leakage current at continuous operation voltage		
	(iii) Partial discharge at 1.05 COV (PC)		
	(iv) Permitted leakage current of arrester beyond which arrester is faulty:		
5	Frequency(Hz)		
6	Nominal discharge current (waveshape–8/20 microsecond) (KA)		
7	Pressure relief rated current(KA rms)		
8	Steep current protection level at 10KA		
	a) Lighting impulse protection level at 5 KA and 10KA(KVP)		
	b) Switching impulse protection level with 40x80 micro-sec. Wave at 500/1000A		
9	Long duration current impulse with stand capacity and virtual duration		
10	Line discharge class		
11	Thermal runaway limit of arrester		
12	Energy capability(kJ/KV)		
13	Pressure relief rating		
14	Dry arcing distance		
15	Reference current and reference voltage		
16	<b><u>Arrester housing :-</u></b>		
	a) Power frequency one minute wet withstand voltage(kV rms)		
	b) Lighting impulse dry withstand voltage(KVP)		
	c) Creepage distance		
	d) Protected		
	e) Total		
	f) Short circuit withstand capacity		
	g) Bending moment (mm)		

17	<b><u>Dis-connector :-</u></b>		
	a) Constructional Details		
	b) Other information as applicable to Lightning Arrester		
18	<b><u>Surge monitor :-</u></b>		
	a) Constructional details		
	b) Degree of protection		
19	Suitable for hotline washing		
20	Dimension & weight		
21	G A drawing indicating height of complete unit from base to line, minimum recommended center to center spacing, clearance form ground equipment at various heights of arrester, earthing arrester, earthing arrangement on earthed site of arrester etc.		
22	Details of packing		
23	Licence number and date for using ISI certification mark if any		
24	<b><u>Ammeter for discharge current :-</u></b>		
	a) Type& Make		
	b) Accuracy		
	c) Range(mA)		
25	Residual voltage		
26	Follow current		
27	Any other information		