

ASSAM ELECTRICITY GRID CORPORATION LIMITED

OFFICE OF THE DEPUTY GENERAL MANAGER

T&T CIRCLE, DIBRUGARH



TENDER DOCUMENT

NOTICE INVITING TENDER NO: AEGCL/DGM/TTC/DBR /TC-02/2025/3603, Dated: 31/07/2025

Bidding Document For

Procurement of 1 No. of 33kV Circuit Breaker (SF₆) for 33KV Tinsukia-Rupai feeder by replacing the defective circuit Breaker at 132kV Rupai GSS.

Tender cost amounting to
Deposited in the form of
Vide

.....
.....

Issued to
Address

.....
.....

Signature of Contractor/Firm

Musumee Bose

Deputy General Manager
T&T Circle, AEGCL,
Dibrugarh.

Tender fee: Rs. 1000.00
EMD: Rs 10,000/-

SECTION - 1 INSTRUCTION TO BIDDER

1.1.0 SCOPE OF BID:

1.1.1. The **Deputy General Manager, T&T Circle, AEGCL, Dibrugarh** on behalf of **Assam Electricity Grid Corporation Ltd**, hereinafter referred to as AEGCL or Purchaser invites sealed 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.

- a) **NAME OF WORK:** Procurement of 1 No. of 33kV Circuit Breaker (SF₆) for 33KV Tinsukia-Rupai feeder by replacing the defective circuit Breaker at 132kV Rupai GSS.
- b) **ESTIMATED VALUE FOR THE WORK:** Rs. **4,84,980.00** (Rupees Four Lakhs Eighty Four Thousand Nine Hundred and Eighty) only **including taxes and F&I.**
- c) **Fund:** O&M HQ (UAR) for FY 2025-26
- d) **Key Dates: Refer to NIT.**
- e) Bidding address:
O/o The Deputy General
Manager, T&T Circle, AEGCL,
Niz Kadamoni, Dibrugarh-786001, Assam.Dibrugarh-786001
Email address: dgmmtc.dibrugarh@aegcl.co.
- f) Interested bidders may purchase the tender documents from the office of **The Deputy General Manager, T&T Circle, AEGCL, Niz Kadamoni Dibrugarh during office hours.** Bidders may obtain further information from the office of the Deputy General Manager, T&T Circle, AEGCL Niz Kadamoni, Dibrugarh-786001, Assam.
- g) **Cost of Bidding:** The bidder shall bear all costs associated with the preparation and submission of its bid and AEGCL will in no case be responsible or liable for those costs. **The cost of the tender paper is Rs. 1000/- (Rupees One Thousand) only to be pledged in favour of “AEGCL, Guwahati” (in the form of A/C payee DD/Bankers Cheque).**

1.2.0 BIDDING PROCEDURE:-

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

1.3.0 SCOPE OF WORK:

1.3.1 The brief description of the scope of work covered under this bidding document is furnished below:

- a. Design, manufacture and supply of **reputed make** of 1 (one) nos. of 33kV, 25kA, 1250A, Gang Operated Sf6 Circuit Breaker including all accessories & terminal connectors but without mounting structure for 132/33kV Rupai GSS as per bid specification and price schedule.
- b. Loading at manufacturer's works, transportation and delivery at the substation site, including unloading at destination site.
- c. Freight & Transit Insurance, storage at site and site insurance of all materials at site shall be in the scope of the contractor.
- d. Arrangements of any permits required for transportation and movement of supplied materials. However, AEGCL shall assist as far as practicable in the process.
- e. Dismantling of the existing defective breaker installed against 33kV Tinsukia Rupai feeder and erection of the newly supplied Sf6 breaker at 132kV Rupai GSS, AEGCL.

- 1.3.2 The Bill of Quantities for indicative purposes is furnished in Price Schedules.
- 1.3.3 The bidder on its own responsibility may visit and examine the Site of Works and its surroundings and obtain information that may be necessary for preparing the bid. Any permits or licenses that may be required to execute the works should also be obtained by the contractor.
- 1.3.4 The items mentioned in these Annexure shall only be used while quoting the bid prices. Any other items not specifically mentioned in the specification but which are required for installation, testing, commissioning and satisfactory operation of the equipment as per Indian Standards/IE Rules/IE Act and concerned authority regulations are deemed to be included in the scope of the specification and no deviation in this regard shall be accepted.
- 1.3.5 **No modifications/additions/ deletions shall be made by the bidder to the items and quantities given in these schedules.**
- 1.3.6 The successful bidder has to complete the works within **6 (six) months** from either the date of acceptance of this LOA or from the date of signing of the contract document or 15 days from the date of issue of the Work Order (which ever is earlier). Bidders should note that time is the essence of this bid.

1.4.0 ELIGIBILITY CRITERIA OF THE BIDDER:

- 1.4.1 A Bidder may be a private entity or a government-owned entity or any combination of such entity 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.
- 1.4.2 In case of a **Joint Venture (JV)**:
- When the bidder is a Joint Venture (JV) of two or more firms as partners, all partners shall be jointly and severally liable. The JV shall legally authorize one of the partners as the lead partner for the purpose of submitting the bid, incur liabilities; receive payments and instructions on behalf of the others. A copy of the notarized JV agreement, executed on non-Judicial stamp paper, shall be submitted with the bid. However, in case of successful bid, the agreement shall be signed by all the partners, so as to be legally binding on all the partners. All the partners of the Joint Venture shall be jointly and severally liable for the execution of the contract in accordance with the contract terms
- 1.4.3 A 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.
- 1.4.4 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.
- 1.4.5 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. Bidders shall provide such evidence of their continued eligibility satisfactory to the AEGCL, as the Employer shall reasonably request.

1.5.0 FINANCIAL CAPABILITY

- 1.5.1 Bidder will require to submit along with the bid the audited balance sheets 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. Wherever necessary the Employer may make enquiries with Bidder's bankers.
- 1.5.2 Average Annual Turnover: Minimum average annual turnover at least 30% of the estimated cost calculated as total certified payments received for contracts in progress or completed, within the last 3 (Three) Years.
- 1.5.3 Financial Resources: Bidder needs to demonstrate access to, or availability of, financial resources such as liquid assets, unencumbered real assets, lines of credit, and other financial means, other than any contractual advance payments to meet:
- (1) the cash-flow requirement of atleast 70% of the work value and
 - (2) the overall cash flow requirements for this contract and its current works commitment.
- 1.5.4 Bidder must keep GST liabilities up to date and non-payment of GST liabilities and non-filing of relevant GST return more than 3 (three) months shall be reckoned as GST defaulter and this may be considered a cause for disqualification of a bidder and the bid may be rejected.

1.6.0 EQUIPMENT CAPABILITIES

- 1.6.1 The bidder should have assured access to supply of equipment as per bid and shall demonstrate that he or his supplier has capable of, manufacture & supply of such material. Bidders are required to demonstrate that based on known commitments the materials will be available for use in the proposed contract.
- 1.6.2 **Bidder may be manufacturer of the offered products or a firm/company having authorisation from a manufacturer. In case the bidder is not a manufacturer of the offered products, bidder must submit manufacturer's authorisation using for that purpose Form-MA provided in Section-3 Bidding forms.** Offered product's manufacturer must have least Five years of experience in design, manufacture and supply of 33kV or above rating Sf6 Circuit Breaker. The offered product's manufacturer must have supplied such equipment which are in successful operation for atleast three years. Bidder shall submit copy of orders and performance certificates to establish its eligibility.

1.7.0 EXPERIENCE:

- 1.7.1 Experience in similar nature of works under contracts in the role of manufacturers, contractor, subcontractor, or management contractor for at least the last 7 (seven) years prior to the bid submission deadline.
- 1.7.2 Participation as manufacturer/ contractor Experience having successfully completed similar works during last 7 years ending last day of the month previous to the one in which applications are invited should be either of the following:
- (a) Three (3) similar completed works costing not less than 40% of total estimated cost.
 - (b) Two (2) similar completed works costing not less than 50% of total estimated cost.
 - (c) One (1) similar completed works costing not less than 80% of total estimated cost.
- 1.7.3 The Bidder must have experience of executing work of similar nature previously in any Govt. organization/ PSU. The bidder must submit experience and completion certificate for scrutiny by AEGCL. Each of such project/ works should consist of completion certificate.

1.8.0 LITIGATION HISTORY

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

1.9.0 DOCUMENTS COMPRISING THE BID

- 1.9.1 The bid submitted by the bidder shall comprise two envelopes submitted simultaneously, one containing only the technical proposal and the other the price proposal.
- 1.9.2 **The Technical Bid submitted by bidders shall contain the following:**
- a) Bid Submission Sheet
 - b) Documentary evidence to establish that the Bidder meet the qualifying requirements in accordance with Clause 1.5.0.
 - c) Documents to be furnished as per Clause 1.9.3
 - d) The Bid Guarantee (Bid Security) in accordance with Clause 1.20.0 & its sub-clauses of this Section.
 - e) All Bidding Schedules properly filled up including Price Bid Schedules.
 - f) All other information and documents such as Guaranteed and Technical Particulars, type test reports, drawings, technical leaflets etc. as required in the Technical Specification.
- 1.9.3 **To establish its eligibility and qualifications to perform the contract, the bidder shall provide along with the above-mentioned documents the following additional documents (mandatory) on qualifying requirements such as:**
- a) *Copies of original documents defining the constitution or legal status, place of registration, and principal place of business, written power of attorney of the signatory of the Bid to commit the Bidder.*
 - b) *Copies of valid Trade License issued by competent authority in the State of Assam or in the State where the bidder's business is registered.*
 - c) *Copies of PAN, GST Registration Certificate as per Goods & Services Tax laws.*
 - d) *Total monetary value of similar work performed by the bidder in each of the last three years.*
 - e) *Experience in works of a similar nature and volume for each of the last seven years, and details of works under way or contractually committed in AEGCL or any other Govt. entity/PSU who may be contacted for further information on those contracts.*
 - f) *Qualifications and experience of key site management and technical personnel proposed for the Contract.*

- g) *Reports on the financial standing of the Bidder, such as profit and loss statements and audited annual accounts certified by CA of the company for the last three years including IT return duly acknowledged by the tax department for the last three years.*
- h) *Evidence of adequacy of working capital for this contract (access to line (s) of credit and availability of other financial resources).*
- i) *Information regarding any litigation, current or during the last five years, in which the Bidder is involved, the parties concerned, and disputed amount.*

1.9.2 Even though the bidders meet the above qualifying criteria, they are subject to be disqualified if they have made misleading or false representations in the forms, statements and attachments submitted in proof of the qualification requirements.

1.9.3 Notwithstanding anything stated herein above, AEGCL reserves the right to assess the capacity and capability of the bidder to execute the work, should the circumstance warrant such assessment in the overall interest of AEGCL.

1.10.0 DOCUMENTS ESTABLISHING CONFORMITY OF THE GOODS AND SERVICES

1.10.1 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.

1.11.0 SITE VISIT

The interested bidders are advised to visit any grid substation of AEGCL and examine the site of works and its surroundings and obtain for itself on its own responsibility all information that may be necessary for preparing the bid. The costs of visiting the Site shall be at the bidder's own expense.

1.12.0 CLARIFICATION ON BIDDING DOCUMENTS:-

1.12.1 A prospective bidder requiring any clarification of the bidding documents may notify AEGCL in writing at the following address-
Deputy General Manager, T&T Circle, AEGCL, Dibrugarh-786001

AEGCL will respond to any request for clarification which it receives earlier than 7 (**seven**) days prior to the deadline for submission of bids.

1.12.2 Verbal clarification and information given by AEGCL or its employee(s) or representative (s) shall not in any way be binding on AEGCL.

1.13.0 AMENDMENT OF BIDDING DOCUMENTS

1.13.1 At any time prior to the deadline for submission of bids, the AEGCL may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective bidder, modify the bidding documents by issuing addenda.

1.13.2 Any addendum thus issued shall be part of the bidding documents pursuant to Sub-Clause, and shall be communicated in writing or by fax to all purchasers of the bidding documents. Prospective bidders shall acknowledge receipt of each addendum by fax to AEGCL.

1.14.0 LANGUAGE OF BID

1.14.1 The bid, and all correspondence and documents related to the bid, exchanged between the bidder and AEGCL shall be written in the English language. Supporting documents and printed literature furnished by the bidder shall also be in English language.

1.15.0 BID FORM AND PRICE SCHEDULES

1.15.1 The Bidder shall complete the Bid Form and the appropriate Price Schedules furnished in the bidding documents in the manner and detail indicated therein.

1.16.0 BID PRICES

- 1.16.1 Bidders shall give a breakdown of the prices in the manner and detail called for in the **Schedules of Prices**.
- 1.16.2 In the Schedules, Bidders shall give the required details and a breakdown of their prices, including all taxes, duties, levies, and charges payable as of twenty eight (28) days prior to the deadline for submission of bids, as follows:
- (a) Plant and equipment (**Schedules of Prices**) shall be quoted on an EXW (ex-factory, ex-works, ex-warehouse or off-the-shelf, as applicable). All taxes and duties taxes as applicable and freight and insurance shall be indicated separately.
- 1.16.3 Price Adjustment: Prices quoted by the Bidder shall be FIRM during performance of the contract. Duties and Taxes shall be adjusted, except there is variation due to changes in legislation of the Country.

1.17.0 INSURANCE

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

1.18.0 BID VALIDITY

- 1.18.1 Bids shall remain valid for a period of **180 (One Eighty)** days after the date of opening of Technical Bids.
- 1.18.2 In exceptional circumstances, prior to expiry of the original bid validity period, AEGCL may request that the bidders extend the period of validity for a specified additional period. The request and the responses thereto shall be made in writing. A bidder may refuse the request without forfeiting its bid security. A bidder agreeing to the request will not be required or permitted to modify its bid, but will be required to extend the validity of its bid security for the period of the extension, and in compliance with Clause 1.19.0 in all respects.

1.19.0 BID SECURITY (EARNEST MONEY)

- 1.19.1 **The Bidder shall furnish, as part of its bid with the Technical Proposal, a bid security in the amount of Rs. 10,000.00 (Rupees Ten Thousand) only.**
- 1.19.2 For participation in the bidding procedure, participants must compulsorily pay the Bid Security / Earnest Money Deposit in the form of DD/Fixed Deposit/bank Guarantee/Banker's Cheque in favour of '**AEGCL, Guwahati**'. The bid security shall remain valid for 30 days beyond the original validity period for the bid, and beyond any period of extension subsequently requested.
- 1.19.3 Any bid not accompanied by an acceptable bid security shall be rejected as non-responsive.
- 1.19.4 The bid securities of unsuccessful bidders will be returned as promptly as possible, against written request from the unsuccessful bidders.
- 1.19.5 The bid security of the successful bidder will be returned when the bidder has signed the Contract Agreement and furnished the required performance security.
- 1.19.6 The bid security may be forfeited
- (a) if the bidder withdraws its bid, except as provided in Sub-Clause 1.24.1;
- (b) if the bidder does not accept the correction of its bid price, pursuant to Sub-Clause 1.24. or
- (c) in the case of a successful bidder, if it fails within the specified time limit to
- (i) sign the Contract Agreement,
- (ii) furnish the required performance security.
- 1.19.7 No interest shall be payable by AEGCL on the above bid guarantee.

1.20.0 ALTERNATIVE PROPOSALS BY BIDDERS

- 1.20.1 Bidders shall submit offers, which comply with the Bidding Documents, including the basic AEGCL's Requirements as indicated in the bidding documents. Alternatives will not be considered. The attention of bidders is drawn to the provisions of Clause 1.29.0 regarding the rejection of bids which are not substantially responsive to the requirements of the bidding documents.

1.21.0 FORMAT AND SIGNING OF BID

- 1.21.1 The bidder shall prepare one original and two copies of the bid proposal, clearly marking each one as: "ORIGINAL- BID PROPOSAL, etc as appropriate. In the event of discrepancy between the original and any copy, the original shall prevail.
- 1.21.2 The original and all copies of the bid shall be typed or written in indelible ink (in the case of copies, Photostats are also acceptable) and shall be signed by a person or persons duly authorized to sign on behalf of the bidder. All pages of the bid where entries or

Bidder's Signature & Seal

amendments have been made shall be initiated by the person or persons signing the bid.

1.21.3 The bid shall contain no alterations, omissions or additions, except those to comply with instructions issued by AEGCL, or as necessary to correct errors made by the bidder, in which case such corrections shall be initiated by the person or persons signing the bid.

1.21.4 The Bidders must submit the Bid Guarantee in separate sealed envelope, super-scribed as under:

“BID GUARANTEE (Name of the Package)”

1.21.5 The Bid must contain the name, residence and place of business of the person or persons making the Bid and must be signed and sealed by the Bidder with his usual signature. The names of all persons signing should also be typed or printed below the signature.

1.21.6 Bids by Corporation / Company must be signed with the legal name of the Corporation/Company by the President, Managing Director or by the Secretary or other person or persons authorized to Bid on behalf of such Corporation/Company in the matter.

1.21.7 A Bid by a person who affixes to his signature the word ‘President’, ‘Managing Director’, ‘Secretary’, ‘Agent’, or other designation without disclosing his principal will be rejected.

1.21.8 Satisfactory evidence of authority of the person signing on behalf of the Bidder shall be furnished with the Bid.

1.21.9 The Bidder’s name stated on the proposal shall be exact legal name of the firm

1.21.10 Bids not conforming to the above requirements of signing may be disqualified.

1.21.11 If the outer envelope is not sealed and not marked as above, AEGCL will assume no responsibility for the misplacement or premature opening of the bid.

1.21.12 The Bid must be accompanied with requisite BID SECURITY in a separate sealed cover.

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

1.22.0 DEADLINE FOR SUBMISSION OF BIDS

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

1.22.2 AEGCL may, at its discretion, extend the deadline for submission of bids by issuing an addendum in accordance with Clause 1.13.0, in which case all rights and obligations of AEGCL and the bidders previously subject to the original deadline will thereafter be subject to the deadlines extended.

1.23.0 LATE BIDS

1.23.1 Any bid received by AEGCL after the deadline for submission of bids prescribed in Clause 1.22.0 will be rejected and returned unopened to the bidder.

1.24.0 WITHDRAWAL OF BIDS

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

1.24.2 The bidder's withdrawal notice shall be prepared, sealed, marked and delivered with the envelopes additionally marked "WITHDRAWAL".

1.24.3 Withdrawal of a bid during the interval between the deadline for submission of bids and the expiration of the period of bid validity specified in Sub-Clause 1.18.0 may result in the forfeiture of the bid security pursuant to Sub-Clause 1.19.6.

1.25.0 OPENING OF BIDS

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

Deputy General Manager.
T&T Circle, AEGCL, Dibrugarh-
786001

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

- 1.25.2 Envelopes marked "WITHDRAWAL" shall be opened and read out first. Bids for which an acceptable notice of withdrawal has been submitted pursuant to Clause 1.24.0 shall not be opened.

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

1.26.0 PROCESS TO BE CONFIDENTIAL

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

1.27.0 PRELIMINARY EXAMINATION OF BIDS AND DETERMINATION OF RESPONSIVENESS

- 1.27.1 Prior to the detailed evaluation of bids, AEGCL will examine the bids to determine whether they are complete and all documents as per Clause 1.9.0 are provided or not, whether the documents have been properly signed, whether the required security is included, and whether the bids are generally in order and provides any clarifications and/or substantiation that AEGCL may require pursuant to Clause 1.27.0.

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

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

1.28.0 CLARIFICATION OF BID PROPOSALS AND CONTACTING AEGCL

- 1.28.1 To assist in the examination, evaluation and comparison of Bids, AEGCL may, at its discretion, ask any bidder for clarification of its bid. The request for clarification and the response shall be in writing or by mail, but no change in the price or substance of the bid shall be sought, offered or permitted except as required to confirm the correction of arithmetic errors discovered by AEGCL in the evaluation of the bids in accordance with Clause 1.28.0.

- 1.28.2 Subject to Sub-Clause 1.28.1, no bidder shall contact AEGCL on any matter relating to its bid from the time of opening

Bids to the time the contract is awarded. If the bidder wishes to bring additional information to the notice of AEGCL, it should do so in writing.

- 1.28.3 Any effort by the bidder to influence AEGCL in AEGCL's evaluation of price proposals, bid comparison or contract award decisions may result in the rejection of the bidder's bid.

1.29.0 CORRECTION OF ERRORS

- 1.29.1 Price Proposals determined to be substantially responsive will be checked by AEGCL for any arithmetic errors. Arithmetic errors will be rectified on the following basis. If there is a discrepancy between the unit rate and the total cost that is obtained by multiplying the unit rate and quantity, the unit rate shall prevail and the total cost will be corrected unless in the opinion of AEGCL there is an obvious misplacement of the decimal point in the unit rate, in which case the total cost as quoted will govern and the unit rate corrected. If there is a discrepancy between the total bid amount and the sum of total costs, the sum of the total costs shall prevail and the total bid amount will be corrected.

- 1.29.2 The amount stated in the Form of Bid for Price Proposal will be adjusted by AEGCL in accordance with the above procedure for the correction of errors and, shall be considered as binding upon the bidder. If the bidder does not accept the corrected amount of bid, its bid will be rejected, and the bid security may be forfeited in accordance with Sub-Clause 1.19.6 (b).

1.30.0 EVALUATION AND COMPARISON OF BID PROPOSALS

- 1.30.1 AEGCL will evaluate and compare only the bids determined to be substantially responsive in accordance with Clause 1.27.0.

1.30.2 For equipment and materials, the comparison shall be of the ex-factory price of equipment and materials offered (such price to include all costs as well as duties and taxes paid or payable on components and raw material incorporated); plus the cost of transportation, local taxes and duties, civil works, installation and other services required under the contract with due corrections as per Clause 1.29.0, AEGCL's comparison will also include the costs if any, resulting from application of the evaluation procedures described in Sub-Clause 1.30.4.

1.30.3 AEGCL will carry out a detailed evaluation of the bids in order to determine whether the bidders are qualified and whether the technical aspects are substantially responsive to the requirements set forth in the bidding documents. In order to reach such a determination, AEGCL will examine the information supplied by the Bidders and other requirements in the bidding documents, taking into account the following factors:

(a) Qualification

(i) the determination will take into account the Bidder's financial and technical capabilities and past performance; it will be based upon an examination of the documentary evidence of the Bidder's qualifications submitted by the Bidder, pursuant to Clause 1.5.0 as well as such other information as AEGCL deems necessary and appropriate; and

(ii) an affirmative determination will be a prerequisite for AEGCL to continue with the evaluation of the proposal; a negative determination will result in rejection of the Bidder's bid.

(b) Technical

(i) overall completeness and compliance with AEGCL's Requirements; the technical merits of materials and equipments offered and deviations from AEGCL's Requirements; suitability of the facilities offered in relation to the environmental and climatic conditions prevailing at the site; quality, function and operation of any process control concept included in the bid;

(c) Commercial

(i) Deviations and omissions from the contractual and commercial conditions as identified in the Bid.

(ii) compliance with the time schedule called for in the Bidding Document and evidenced as needed in a milestone schedule provided in the bid; and

(iii) the functional guarantees of the facilities offered against the specified performance criteria of the plant and equipment.

1.30.4 Pursuant to Sub-Clause 1.30.4, the following evaluation methods will be followed:

(a) **Time Schedule:** The plant and equipment covered by this bidding are required to be shipped, installed and the facilities completed within the period specified in Sub-Clause

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

(b) Deviations from the Bidding Document:

Bidders shall base their Bid price on the terms & conditions specified in the Bidding Documents. Bids with material deviations and omissions shall be rejected.

(c) Functional Guarantee of the facilities:

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

1.30.5 Bid Evaluation Process for Abnormally Low Bids:

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

(a) Identification:

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

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

- ii. **Relative Approach** is a statical comparison method which will be applied when there are more than five nos. of substantially responsive bids. A potential ALB is identified where the low Bid is more than one standard deviation below the average of substantially responsive bids received.
In this approach first the Average bid price is determined and then by deducting the standard deviation from the average bid price, potentially ALB may be determined.

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

- i. Identify ALB as per the step mentioned in Clause No.(a).(i) and 10.b).(ii) whichever is applicable.
- ii. Clarify and analyse the bidders resource inputs and pricing, including overheads, contingencies and profit margins. In that respect committee may seek the reference of the guidelines of World Bank, AIIB, ADB etc.
- iii. Decide whether to accept or reject the tender.

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

- i. If any abnormally low bid is accepted under point no. (b) (iii), after taking of additional performance security as per the assessment of the committee, however the total performance security should not have to exceed 20% of the total contract value.
- ii. The additional performance security shall be treated as part of the original performance security and shall be valid for a period coextensive with the applicable defect liability period of the contract.
- iii. Non submission of the additional performance security shall constitute sufficient ground to rejection of the bid and similar assessment shall be initiated for the next ranked bidder identified as ALB.

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

1.31.0 AWARD

1.31.1 AEGCL will award the Contract to the bidder whose bid has been determined to be substantially responsive to the bidding documents provided that such bidder has been determined to be qualified in accordance with the provisions of the Bid.

1.32.0 EMPLOYER'S RIGHT TO ACCEPT ANY BID AND TO REJECT ANY OR ALL BIDS

1.32.1 Notwithstanding Clause 1.31.0, AEGCL reserves the right to accept or reject any bid, and to annul the bidding process and reject all bids, at any time prior to award of Contract, without thereby incurring any liability to the affected bidder or bidders or any obligation to inform the affected bidder or bidders of the grounds for AEGCL's action. AEGCL is not bound to accept the offer of the lowest bidder.

1.33.0 NOTIFICATION OF AWARD

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

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

1.34.0 SIGNING OF CONTRACT AGREEMENT

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

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

1.35.0 WARRANTY

1.35.1 The contractor warrants that all 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 term period of warranty shall mean the period of 18 months from the date of the materials are received at site in good and acceptable condition. If during the period of warranty, any defect is found, the Contractor shall rectify all defects in design, materials and workmanship that may develop under normal use of the equipment upon written notice from the Purchaser who shall indicate in what respects the equipment is faulty. The rectification / free replacement must be carried out within a reasonable time period and at free of cost.

1.35.2 The offered products and its components must adhere to the latest relevant IEC, IS standards.

Bidder's Signature & Seal

- 1.35.3 The dispatch clearance of materials will be issued from AEGCL after ONLINE/OFFLINE inspection.
- 1.35.4 In the event of any emergency, where in the judgment of AEGCL, delay would cause serious loss or damages, repairs or adjustment may be made by the engineer or a third party chosen by the engineer without advance notice to the contractor and the cost of such work shall be paid by the contractor. In the event such action is taken by the engineer, the contractor will be notified promptly and he shall assist wherever possible in making necessary corrections. This shall not relieve the contractor of his liabilities under the terms and conditions of the contract.
- 1.35.5 If it becomes necessary for the contractor to replace or renew any defective portions of the works, the provision of this clause shall apply to portion of the works so replaced or renewed until the expiry of twelve (12) months from the date of such replacement or renewal.
- 1.35.6 The repaired or new parts will be furnished and erected free of cost by the contractor. If any repair is carried out on his behalf at the site, the contractor shall bear the cost of such repairs.
- 1.35.7 The acceptance of the equipment by the Employer shall in no way relieve the contractor of his obligation under this clause.
- 1.35.8 In the case of those defective parts, which are not repairable at site but are essential for the commercial operation of the equipment, the contractor and the engineer shall mutually agree to a programme of replacement or renewal, which will minimize interruption to the maximum extent in the operation of the equipment.

1.36.0 PERFORMANCE SECURITY (Contract Performance Guarantee)

- 1.36.1 As a Contract Performance Security, the successful Bidder, to whom the work is awarded, shall be required to furnish a Performance Guarantee from a Nationalized Bank, in the form attached with the Bidding Document (Section –5) in favour of the AEGCL. The guarantee amount shall be equal to ten percent (10%) of the Contract Price and it shall guarantee the faithful performance of the contract in accordance with the terms and conditions specified in these documents and specifications. The guarantee shall be valid up to 90 (ninety) days after the end of Warranty Period.
- 1.36.2 In case the bidder fails to submit the Performance Security in the form of Bank Guarantee, an amount equivalent to 10% of the Contract Price shall be retained as Security Deposits which shall be retained up to 90 (ninety) days after the end of Warranty Period
- 1.36.3 The performance guarantee shall cover additionally the following guarantees to the owner:
- a) The successful Bidder guarantees the successful and satisfactory operation of the equipment furnished and erected under the contract, as per the specifications and documents.
 - b) The successful Bidder further guarantees that the equipment/material provided and installed by him shall be free from all defects in design, material and workmanship and shall upon written notice from the Owner fully remedy must be guaranteed.
- 1.36.4. The Contract performance Guarantee will be returned to the Contractor without any interest at the end of warranty period and written request from the contractor.

1.37.0 TERMS OF PAYMENT

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

- i. No advance payment shall be made in this contract.
 - ii. No claim for interest shall be entertained by AEGCL
 - iii. The price is firm and no price variation shall be applicable.
 - iv. First and final bill shall be admissible on completion of the work in all aspects and acceptance of materials in full and good condition.
 - v. Final bill must contain the original site register.
 - vi. Payment shall be released subject to receipt of specific fund. The Bidder / Firm will have to be submitted the following Net Banking details.
- a) Banker's Name & Branch
 - b) Account No
 - c) Banker's address
 - d) Banker's IFSC Code
 - e) Banker's RTGS Code

1.38.0 CORRUPT OR FRAUDULENT PRACTICES

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

- (a) defines, for the purposes of this provision, the terms set forth below as follows:
- (i) "corrupt practice" means behavior on the part of officials in the public or private sectors by which they improperly and unlawfully enrich themselves and/or those close to them, or induce others to do so, by misusing the position in which they are placed, and it includes the offering, giving, receiving or soliciting of anything of value to influence the action of any such official in the procurement process or in contract execution; and
 - (ii) "fraudulent practice" means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the Borrower, and includes collusive practice among bidders (prior to or after bid submission) designed to establish bid prices at artificial non-competitive levels and to deprive the Borrower of the benefits of free and open competition;
- (b) will reject a proposal for award if it determines that the bidder recommended for award has engaged in corrupt or fraudulent practices in competing for the contract in question;
- (c) will declare a firm ineligible, either indefinitely or for a stated period of time, to be awarded a contract by AEGCL if it at any time determines that the firm has engaged in corrupt or fraudulent practices in competing for, or in executing, a contract.

1.39.0 PENALTY FOR DELAYED EXECUTION

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

1.40.0 FORCE MAJEURE

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

1.41.0 SETTLEMENT OF THE DISPUTE & ARBITRATION

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

SECTION-2

TECHNICAL SPECIFICATION OF CIRCUIT BREAKERS

3.1.0 SCOPE

- 3.1.1 The intention of this Section of the Specification is to cover design, manufacture, testing at manufacturer's works of Circuit Breakers with all fittings and accessories including mounting structures as applicable
- 3.1.2 Loading at manufacturer's works, transportation and delivery at respective substation sites, including unloading at destination sites.
- 3.1.3 Erection, Testing and Commissioning of Circuit Breakers.

3.2.0 GENERAL REQUIREMENTS

- 3.2.1 The circuit breaker shall be of three phase unit (gang operated), outdoor, single pressure puffer type. The operating mechanism shall be electrically and mechanically trip/free with anti-pumping facility suitable for remote electrical closing, tripping as well as local Operation facility as specified.
- 3.2.2 The circuit breaker shall be so designed to withstand the effects of temperature, wind load, short circuit conditions and other adverse conditions.

- 3.2.3 The circuit breaker shall be capable of switching transformer-magnetizing currents and shall be restrike- free.
- 3.2.4 All similar parts, particularly removable ones, shall be interchangeable with one another.
- 3.2.5 All cable ferrules, lugs, tags, etc. required for cabling from equipment control cabinet/operating mechanism to the central control cabinet of the breaker shall be supplied loose as per approved schematics.
- 3.2.6 The SF6 breaker shall be designed to ensure that condensation of moisture is controlled by proper selection of organic insulating materials having low moisture absorbing characteristics.
 - 3.2.6.1 The support structure of circuit breaker shall be hot dip galvanised. Sufficient galvanising thickness shall be achieved with 615 gm/m². All other parts shall be painted as per painting specification enclosed separately.

3.3.0 OPERATING MECHANISM

- 3.3.1 A power spring operated mechanism for closing and tripping shall be provided in the breaker control cabinet. This device shall be so interlocked that while it is under maintenance, the breaker cannot be operated from remote. A slow acting, manually operated device shall be provided for inspection and maintenance purposes.
- 3.3.2 Circuit breaker operating mechanism shall be capable of storing energy for atleast two complete closing and tripping operations.
- 3.3.3 Each mechanism shall have an operation counter.
- 3.3.4 The operating mechanism shall be mounted and enclosed in a weather proof, vermin-proof, sheet steel cabinet conforming to IP: 55 degree of protection. Sheet steel thickness shall be as specified in data sheet. The cabinet shall also house relays, control and auxiliary equipment of each breaker and provision for terminating all control, alarm and auxiliary circuits. It shall be provided with hinged doors with provision for locking and removable gland plates to be drilled at site. Inspection window shall be provided for observation of the instruments without opening the cabinet. It shall be mounted so as to provide convenient access from ground level.
- 3.3.5 The cabinet shall be fitted with a thermostatically controlled anti-condensation heater, a 15A, 1 phase, 5 pin socket outlet with switch and a cubicle illuminating lamp suitable for operation on 240 V AC 50Hz supply.
- 3.3.6 Circuit breakers shall feature high repeatability of absolute closing time over a wide range of parameters (ambient temperature, pneumatic pressure, control voltages, etc).
- 3.3.7 Main poles shall operate simultaneously. There shall be no objectionable rebound and the mechanism shall not require any critical adjustment. It shall be strong, rigid, positive and fast in operation.
- 3.3.8 Disagreement circuit shall be provided which shall detect pole position discrepancy.
- 3.3.9 The design of the circuit breaker shall be such that contacts will not close automatically upon loss of gas/ air pressure.
- 3.3.10 Closing release shall be capable of operating within the range of the rated voltage as specified in the data sheet. Shunt trip shall operate satisfactorily under all operating conditions of the circuit breaker up to the rated breaking capacity of the circuit breaker within the range of the rated voltages specified in the Data sheet.
- 3.3.11 Working parts of the mechanism shall be of corrosion resisting material. Bearings which require grease shall be equipped with pressure type grease fittings. Bearing pin, bolts, nuts and other parts shall be adequately pinned or locked to prevent loosening or changing adjustment with repeated operation of the breaker.

- 3.3.12 All controls, gauges, relays, valves, hard drawn copper piping and all other accessories as necessary shall be provided including the following:
- 3.3.12.1 Low pressure alarm and lock out relay with adjustable pressure setting suitable for operation on DC system.
- 3.3.12.2 A no-volt relay for remote indication of power failure for compressor motor/ Spring Charge motor.
- 3.3.13 As long as power is available to the motor, continuous sequence of closing and opening operations shall be possible.
- 3.3.14 After failure of power supply to the motor, at least one open-close-open operation of the circuit breaker shall be possible.
- 3.3.15 Motor rating shall be such that it requires only about 30 seconds for full charging of the closing spring.
- 3.3.16 Closing action of the circuit breaker shall compress the opening spring ready for tripping.
- 3.3.17 During closing, springs are discharged and after closing of breaker, springs shall automatically be charged for the next operation. Facility for manual charging of closing springs shall be provided. Mechanical interlocks shall be provided in the operating mechanism to prevent discharging of closing springs when the breaker is already in the closed position.

3.4.0 OPERATING MECHANISM CONTROL

- 3.4.1 The breaker shall normally be operated by remote electrical control. Two electrically independent trip circuit including two trip coils per pole shall be provided. However, provision shall be made for local electrical control. For this purpose a local/remote selector switch, close and trip control switch/push button shall be provided in the breaker central control cabinet.
- 3.4.2 The two way Local/Remote switch shall have minimum 4 (four) pair of contacts and wiring shall be made available to monitor local/remote status from local SCADA/SAS.
- 3.4.3 The trip coils shall be suitable for trip circuit supervision during both open and close position of the breaker. Necessary terminals shall be provided in the central control cabinet of the circuit breaker by the CONTRACTOR.
- 3.4.4 The auxiliary switch of the breaker shall be positively driven by the breaker operating rod.
- 3.4.5 A conveniently located manual tripping lever or button shall also be provided for local tripping of the breaker and simultaneously opening the reclosing circuit. A local manual closing device which can be easily operated by one man standing on the ground shall also be provided for maintenance purpose. Direction of motion of handle shall be clearly marked.
- 3.4.6 Necessary platform with Ladder shall be provided for easy access to the Operating Box thereby easing out local operation/maintenance.
- 3.4.7 **When the spring get fully charged either through motor or hand cranking, the spring charging motor and the hand cranking device should get disengaged mechanically from the charged spring and this should not be depended upon only the limit switch.**

3.5.0 SF6 GAS SYSTEM

- 3.5.1 SF6 gas shall serve as an arc-quenching medium during opening/closing operation and as an insulating medium between open contacts of the circuit breaker.
- 3.5.2 The circuit breaker shall be single pressure type. The design and construction of the circuit breaker shall be such that there is a minimum possibility of gas leakage and entry of moisture. There should not be any condensation of SF6 gas on the internal insulating surfaces of the circuit breaker.
- 3.5.3 All gasketed surfaces shall be smooth, straight and reinforced, if necessary, to minimize distortion and to make a tight seal, the operating rod connecting the operating mechanism to the arc chamber (SF6 media) shall have adequate seals. The SF6 gas leakage should not exceed 1% per year.
- 3.5.4 In the interrupter assembly there shall be an absorbing product box to minimize the effect of SF6 decomposition products and moisture. The material used in the construction of the circuit breakers shall be

such as fully compatible with Sf_6 gas decomposition products.

- 3.5.5 CBs of voltage class of 36kV, a common Sf_6 scheme/density monitor shall be acceptable.
- 3.5.6 The dial type SF_6 density monitor shall be adequately temperature compensated to model the pressure changes due to variations in ambient temperature within the body of circuit breaker as a whole. The density monitor shall have graduated scale and shall meet the following requirements: It shall be possible to dismantle the density monitor for checking/replacement without draining the SF_6 gas by providing suitable interlocked non return valve coupling.

3.6.0 BUSHINGS AND INSULATORS

- 3.6.1 Bushings and Insulators shall be of Porcelain, Solid core type.
- 3.6.2 Bushings shall be manufactured and tested in accordance with IS: 2099 & IEC- 60137, while Hollow column insulators shall be manufactured and tested in accordance with IEC-62155/IS: 5621.
- 3.6.3 The support insulators shall be manufactured and tested as per IS: 2544/IEC-60168 and IEC-60273. The insulators shall also conform to IEC-60815 as applicable
- 3.6.4 Porcelain used for the manufacture of bushings and insulators shall be homogeneous, free from defects, cavities and other flaws or imperfections that might affect the mechanical or dielectric quality and shall be thoroughly vitrified, tough and impervious to moisture.
- 3.6.5 Glazing of the porcelain shall be of uniform brown colour, free from blisters, burns and other similar defects. Bushings shall be designed to have sufficient mechanical strength and rigidity for the conditions under which they will be used. All bushings of identical ratings shall be interchangeable.
- 3.6.6 Puncture strength of bushings shall be greater than the dry flashover value. When operating at normal voltage, there shall be no electric discharge between the conductors and bushing which would cause corrosion or injury to conductors, insulators or supports by the formation of substances produced by chemical action. No radio interference shall be caused by the bushings when operating at the normal rated voltage.
- 3.6.7 Bushings shall satisfactorily withstand the insulation level specified in data sheet.

3.7.0 FIXED AND MOVING CONTACTS

- 3.7.1 Main contacts shall have ample area and contact pressure for carrying the rated current and the short time rated current of the breaker without excessive temperature rise which may cause pitting or welding. Contacts shall be adjustable to allow for wear, easily replaceable and shall have minimum moving parts and adjustments to accomplish these results. Main contacts shall be the first to open and the last to close so that there will be little contact burning and wear out.
- 3.7.2 Arcing contacts, if provided, shall be the first to close and the last to open and shall be easily accessible for inspection and replacement. Tips of arcing and main contacts shall be silver faced.
- 3.7.3 If multi-break interrupters are used, they shall be so designed and augmented that a fairly uniform voltage distribution is developed across them.

3.8.0 INTERLOCKS

- 3.8.1 Key release mechanical interlocks shall be incorporated in the operating mechanism for interlocking with the associated isolators, so that operation of the circuit breaker is dependent on a "key-trapped" situation. In addition, electrical interlocks with associated isolators shall be provided.

3.9.0 ADDITIONAL DUTY REQUIREMENTS

- 3.9.1 Circuit breakers shall be capable of clearing short line faults with the same impedance behind the bus corresponding to the rated fault current.
- 3.9.2 Circuit breakers shall be capable of breaking 25% of rated fault current at twice rated voltage under out of phase conditions.
- 3.9.3 The Bid shall highlight the design features provided to effectively deal with:
 - 3.9.3.1 Breaking of inductive currents and capacitive currents.
 - 3.9.3.2 Charging of long lines and cables.
 - 3.9.3.3 Clearing developing faults within the full rating of the breaker.
 - 3.9.3.4 Opening on phase opposition.

3.10.0 ACCESSORIES

3.10.1 Gas Pressure Detector

The circuit breaker shall be provided with gas pressure monitor with temperature compensation for initiating alarm

and locking the operating mechanism in the event of abnormality.

Gas pressure monitor shall be provided for each pole individually.

3.10.2 Position Indicator

Each pole of the circuit breaker shall be provided with a position indicator.

3.10.3 Terminals

Each circuit breaker shall be provided with suitable terminal pads of high conductivity aluminium alloy for connecting to the line.

3.10.4 Auxiliary Switches

Each circuit breaker shall be equipped with auxiliary switches with sufficient number of contacts for control, indication and interlocking purposes. Ten normally open and ten normally closed contacts shall be provided as spares. All contacts shall be rated for the DC voltage specified in data sheet.

3.10.5 Terminal Blocks

All accessories and control devices shall be completely wired. All wirings which are connected to external circuit shall be terminated on terminal blocks installed in the control cabinet. The terminal blocks provided shall have twenty (20) percent spare terminals.

3.10.6 Operating mechanism housing shall be supplied with all required accessories including the following:

3.10.6.1 Padlocks and duplicate keys.

3.10.6.2 Space heaters equipped with automatic thermostatic control.

3.10.6.3 Local/remote changeover switch.

3.10.6.4 Manually operated tripping push button/lever (mechanical) conveniently located to trip all three phases simultaneously.

3.10.6.5 Control switches to cut off control power supplies.

3.10.6.6 Fuses as required.

3.10.6.7 Two earthing terminals.

3.10.6.8 Auxiliary relays required for satisfactory operation.

3.10.6.9 Motor contactor with thermal release

3.10.6.10 Provision for mechanical interlock with isolator.

3.10.6.11 Readable wiring diagram shall be pasted inside the front cover of the operating mechanism box with indelible ink.

3.11.0 SUPPORT STRUCTURES

3.11.1 The Circuit Breakers shall be suitable for mounting on steel structures.

3.11.2 The support structure shall be of steel hot dip galvanized type. The height of support structure shall be designed to keep the bottom most live part and bottom of insulators of circuit breakers at minimum clearance from the plinth as specified in data sheet.

3.11.3 All necessary galvanized bolts, nuts and washers to complete the erection shall be furnished including the embedded anchor bolts for securing the supporting structure to the concrete foundations.

3.12.0 NAME PLATES

3.12.1 All equipment shall have non-corrosive name plates fix at a suitable position indelibly mark with full particular there on in accordance with the standard adapted.

3.13.0 EARTHING

3.13.1 Two earthing pads shall be provided on each supporting structure. Each control cabinet or terminal box mounted on the supporting structure shall also be connected to an earthing pad. Separately mounted control cabinets shall be provided with two earthing pads adjacent to the base of the cabinet. The earthing connection shall be bolted type and suitable for receiving 65mm x 12mm MS strip.

3.14.0 TERMINAL CONNECTORS

3.14.1 The equipment shall be supplied with required number of terminal connectors of approved type

suitable for ACSR conductors. The type of terminal connector, size of connector, material, and type of installation shall be approved by the Purchaser, as per installation requirement while approving the equipment drawings.

3.15.0 TESTS

3.15.1 All routine tests shall be carried out in accordance with relevant IS.

All routine/acceptance tests shall be witnessed by the Purchaser/his authorized representative. The tests shall include the following:

3.15.1.1 Routine/Acceptance Tests (all units)

- 3.15.1.1.1 Mechanical Operation tests
- 3.15.1.1.2 Power frequency voltage withstand test (dry)
- 3.15.1.1.3 Tests on auxiliary & control circuits
- 3.15.1.1.4 Measurement of resistance of the main circuit.

3.15.1.2 Type Tests:

The bidder shall furnish type test certificates and results for the following tests along with the bid for breaker of identical design.

- 3.15.1.2.1 Breaking and making capacity test
- 3.15.1.2.2 Short-time current test
- 3.15.1.2.3 Temperature rise tests
- 3.15.1.2.4 Lightning Impulse voltage test

3.15.1.3 Special Tests:

The operating mechanism box shall be tested for paint film thickness and the galvanization test for structure shall be conducted in one of the unit of each type.

3.15.1.4 Test Certificates

Copies of routine/acceptance test certificates shall be produced with the endorsement of the inspecting authority to the Purchaser before effecting despatch. The test report shall contain the following information.

- 3.15.1.4.1 Complete identification data, including serial No. of the breaker.
- 3.15.1.4.2 Method of application, where applied, duration and interpretation of results in each test.
- 3.15.1.4.3

3.16.0 PRE-COMMISSIONING TESTS

1. 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 of 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.
 - (a) Insulation resistance of each pole.
 - (b) Check adjustments, if any suggested by manufacturer.
 - (c) Breaker closing and opening time.
 - (d) Slow and Power closing operation and opening.
 - (e) Trip free and anti-pumping operation.
 - (f) Minimum pick-up voltage of coils.
 - (g) Dynamic Contact resistance measurement.
 - (h) Functional checking of control circuits interlocks, tripping through protective relays and auto reclose operation.
 - (i) Insulation resistance of control circuits, motor etc.
 - (j) Resistance of closing and tripping coils.
 - (k) SF6 gas leakage check.
 - (l) Dew Point Measurement
 - (m) Verification of pressure switches and gas density monitor.
 - (n) Checking of mechanical 'CLOSE' interlock, wherever applicable.
 - (o) Testing of grading capacitor.
 - (p) Resistance measurement of main circuit.
 - (q) Checking of operating mechanism.
 - (r) Check for annunciations in control room

3.17.0 SPECIAL TOOLS AND TACKLES

3.17.1 The Bidder shall furnish a list of any special tools and tackles required for maintenance and operation purposes with recommended quantities for each substation.

3.18.0 TECHNICAL DATA SHEET FOR CIRCUIT BREAKER

	Particulars	Unit	Data for 33 kV CB
1	Type		Sf ₆
2	No of poles		3 (3 Phase Ganged Unit)
3	Service		Outdoor
4	Rated System Voltage	kV	33
5	Highest System Voltage	kV	36
6	System earthing		Solidly earthed system
7	Rated Voltage of Breaker	kV	36
8	Rated Continuous Current	Amps	1250
9	Rated Frequency	Hz	50
10	Rated Short Circuit breaking current (I) – 3 sec - symmetrical	kA	25
11	Rated Short Circuit making current	kA	2.5*I
12	Duty cycle		0.3Sec-CO-3Min-CO
13	First pole to clear factor		1.3
14	Operating time		
	i) Opening Time	ms	Not exceeding 50ms
	ii) Closing Time	ms	Not exceeding 120ms
15	Insulation level		
	i) Power Frequency with Stand Voltage	kV	70
	ii) Impulse withstand Voltage	kV	170
16	Minimum clearance between phases	m	320
17	Minimum clearance between phase to earth	mm	320
18	Minimum Ground clearance (from bottommost live part to plinth level)	mm	4000
19	Minimum clearance from bottom Of Support insulator to plinth level	mm	2500
20	i) Minimum Creepage Distance (Total)	mm	900
	ii) Minimum Creepage Distance (Protected)	mm	460
21	Arcing horn		Yes
22	Operating mechanism:		
	a) Type		Spring Charged
	b) Rating of Drive Motor	V	Universal Motor/ 1 Phase 50 Hz 230V AC

Bidder's Signature & Seal

	c) Rated voltage of Shunt trip coil & operating range	V. DC	220 or 110 [50% - 110%]
	(d) Rated voltage of Closing coil & operating range	V. DC	220 or 132 [80% - 110%]
	(e) No. of trip coils	No	2 per CB
	(f) No. of closing coils	No	2 per CB
	g) No of spare auxiliary contacts & contact rating	Nos. AMPS	10 N/O+10 N/C (per CB) 10A at 240V AC & 2A at 220V/110V DC
	h) Minimum thickness of sheet steel for control cabinet	mm	3
	i) Enclosure Protection		IP55
23	Reclosing		Three Phase Auto Reclosing
24	Support structure (Painted / Galvanised)		Galvanised
25	All other parts (Painted / Galvanised)		Synthetic enamel shade 631 of IS5(125 microns)
26	Minimum size of control wiring (Copper)	Sq.mm	2.5

Documents to be submitted:

1. PAN card
2. Up-to-date GST return.
3. IT return (last 3 years).
4. Electrical license.
5. Labour license .
6. Audited balance sheet of last 3 years (CA certified).
7. Supervisor license (if any).
8. Experience of the organisation.
9. Annual Turnover as per format.
10. ID proof.
11. Contractor License.
12. Solvency certificate.
13. Bank Guarantee.
14. Manufacturer's authorization.
15. Manufacturer's warranty & Supplier's warranty.

SECTION – 3

BID SUBMISSION SHEET, BID FORMS AND SCHEDULES

1. Bid Submission Sheet

(To be submitted in Bidder's Letterhead)

Name of Work	Procurement of 33KV Circuit Breaker (SF6) for 33KV Tinsukia-Rupai Feeder by replacing the defective CB at 132/33kV Rupai GSS
Location of Work	132KV Rupai GSS, AEGCL
NIT No.	
Bid Identification No.	
Estimate (In Indian Rupees)	Rs. 4,84,980.00 (Rupees Four Lakhs Eighty Four Thousand Nine Hundred and Eighty) only including taxes and F&I.
Earnest Money Deposit(EMD)	Rs .10,000.00 (Rupees Ten Thousand) only.
Purchase's Address for correspondence	The Deputy General Manager T&T Circle AEGCL City: Dibrugarh (Assam) PIN Code: 786001 Country: India Electronic mail address: dgmmtc.dibrugarh@aegcl.co .
Pre-bid date	Shall be notified, if any, in due course.
Bid submission mode	To be submitted at the Bidding Address
Address for bid opening	The Deputy General Manager T&T Circle AEGCL City: Dibrugarh (Assam) PIN Code: 786001 Country: India
Key dates	Tender publishing date: 10:00 Hrs of 01/08/2025., Tender submission start date: 12:00 Hrs. of 01/08/2025, Tender submission end date and time: 12:00 Hrs. 18/08/2025, Techno-commercial bid opening date: 15:00 Hrs., 18/08/2025

Bidder's Signature & Seal

2. **COVERING LETTER (ON THE BIDDERS LETTER HEAD)**

To,
The Dy. General Manager,
T&T Circle, AEGCL,
Dibrugarh

Sub: Submission of Tender.

Ref: -

1. NIT No:
2. Name of work:-

Sir,

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

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

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

3. Form of Bid Security (Bank Guarantee)

WHEREAS, _____ [Name of Bidder] (hereinafter called "the Bidder") has submitted his bid dated _____ [Date] for the construction of _____ [Name of Contract] (hereinafter called "the Bid").

KNOW ALL MEN by these presents that We _____ [Name of Bank] of _____ [Name of Country] having our registered office at _____ (hereinafter called "the Bank") are bound unto _____ [Name of Employer] (hereinafter called "the Employer") in the sum of _____ for which payment will and truly to be made to the said Employer the Bank binds himself, his successors and assigns by these presents. SEALED with the Common Seal of the said Bank this ___ day of __20__.

THE CONDITIONS of this obligation are:

- (1) If the bidder withdraws his Bid during the period of bid validity specified in the Form of Bid:
Or
- (2) If the Bidder refuses to accept the correction of errors in his Bid;
Or
- (3) if the Bidder, having been notified of the acceptance of his Bid by the Employer during the period of Bid validity;
 - (a) fails or refuses to execute the Form of Contract Agreement in accordance with the Instructions to Bidders, if required; or
 - (b) fails or refuses to furnish the Performance Security, in accordance with the Instructions to Bidders;

we undertake to pay to the Employer up to the above amount upon receipt of its first written demand, without the Employer having to substantiate its demand, provided that in its demand the Employer will note that the amount claimed by it is due to it owing to the occurrence of one or all of the three conditions, specifying the occurred condition or conditions.

This Guarantee will remain in force up to and including the date 180 days after the deadline for submission of bids as such deadline is stated in the Instructions to Bidders or as it may be extended by the Employer, notice of which extension(s) to the Bank is hereby waived. Any demand in respect of this Guarantee should reach the Bank not later than the above date.

DATE _____ SIGNATURE OF THE BANK _____

WITNESS _____ SEAL _____

(Signature, Name, and Address)

4. Form-MA

Form of Manufacturer's Authorization
(To be submitted in Manufacturer's Letterhead)

Bid No.:

To,
The Deputy General Manager,
Dibrugarh T&T Circle, AEGCL,
Dibrugarh 786001

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 2.9.0** 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 2.6.0**

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

Common Seal and Signature of the authorised
person: Name:

Designation:

NOTE:

This MA should be signed by a person having either of the following-

- 1) Valid Power of attorney
- 2) Authorised by Managing Director
- 3) Member of Board of Directors

Bidder's Signature & Seal

5. Guarantee Declaration

We declare that the ratings, specifications and performance figures of the various plants and equipments /material furnished by us in the Bid are guaranteed. We further declare that in the event of any deficiencies in meeting the guarantees in respect of the characteristics mentioned in Guaranteed Technical Particulars, of Technical Bid as established after conducting the factory test, you may at your discretion, reject or accept the equipment/material after assessing the liquidated damages as specified in relevant clause of Bid Document.

Date: (Signature).....

Place: (Printed Name).....

(Designation).....

(Common Seal).....

6. PROFILE OF THE BIDDER

Hard copy of the following documents to be submitted with Techno-Commercial Bid.

Sl. No.	Particulars	To be filled by Bidder
a)	Name of the Bidder	:-
b)	Registration with Memorandum of Association	:-
c)	PAN	:-
d)	GST Registration number along with upto date GST to be submitted	:-
e)	Postal Address	:-
	House No.	:-
	Lane	:-
	Street	:-
	Town/Village	:-
	Post Office	:-
	P.S.	:-
	District	:-
	Pin code	:-
f)	Telephone Number	:-
	Mobile No.	:-
	E-Mail Address	:-
	Website	:-
g)	Name(s) of the Owners / Directors/Partners	:-
h)	Name of the Banker with Address and Telephone Number	:-
i)	Contact Person Details <i>(Furnish here name of that person with whom AEGCL may get in touch for more information or clarifications)</i>	Name: - Designation: - Mobile Number: - Email Address:-

SECTION-4

BOQ

(To be submitted in a separate envelope)

Name of the Work: Procurment of 33KV Circuit Breaker (SF6) for 33KV Tinsukia-Rupai Feeder by replacing the defective CB at 132/33kV Rupai GSS.

Name & Address of the Bid:

Sl.No.	Items Description	Units	Qty	Rate (Rs)	F & I		Total Amount (Rs)		
					Rate	Amount (Rs)			
1	2	3	4	5	6	7= 4x6	8=(4x5)+7		
A. Supply of Materials along with F & I:									
1	33kV, 31.5kA, 1250A, SF6 Gang operated Circuit Breaker including Terminal connectors and Gas filling kit.	Nos.	1						
(A) ----- Total Rs.									
B. Dismantling and Erection Works:									
Sl. No.	Particulars	Unit	Qty	Rate (Rs)	Amount (Rs)				
2	Dismantling of 33KV SF6 CB (Without Structure)	Nos.	1 Job						
3	Erection of 33KV SF6 Circuit Breaker (Without Structure)	Nos.	1 Job						
(B) ----- Total Rs.									
(A+B) ----- Total Rs.					Grand Total				
Total inclusive of GST @ 18% Rs.					Grand				
Say, Rs.									
Total Amount In Words:									

Bidder's Signature & Seal