Corrected Daft: Dated: 17/02/2020 ASSAM ELECTRICITY GRID CORPORATION LIMITED Regd. Office: 1st Floor, Bijulee Bhawan, Paltan Bazar, Guwahati – 781001 CIN: U40101AS2003SGC007238 Ph:- 0361-2739520/Fax:-0361-2739513 Web:www.aegcl.co.in



BID IDENTIFICATION NO: AEGCL/MD/O&M-OVERHAULING-REPAIR/2020/01

BID SPECIFICATION FOR

"Empanelment of Party/Firm/Vendor for a period of two years with provision to extend by another one year for the work related to Overhauling and repairing of various Power Transformers (Damaged) at AEGCL Grid Sub-Station and Erection, Testing & Commissioning of the same"

> Chief General Manager-O&M, AEGCL, Bijulee Bhawan, Paltan Bazar, Guwahati-01

> > Bid Document Cost - ₹2000.00

INSTRUCTION TO BIDDER

1.1.0 Scope of Bid

1.1.1. The ASSAM ELECTRICITY GRID CORPORATION LIMITED, herein after referred to as AEGCL or Employer will receive bids for the following:

1	1	2	A)	

SI. No.	Description	Bid Reference No.	EMD Amount (Rs.)
(i)	"Empanelment of Party/Firm for a period of one year with provision to extend by another two years for the work related to Overhauling or repairing of various Power Transformers (Damaged) at AEGCL Grid Sub-Station and Erection, Testing & Commissioning of the same"	AEGCL/MD/O&M- OVERHAULING- REPAIR/2020/01	Not Applicable

Cost of Bid Document:

Bidder has to pay Non-Refundable tender document cost **@Rs.2000.00 only** for bid document cost as applicable through DD only to service provider. DD/Banker Cheque may be drawn in favour of AEGCL, Payable at Guwahati.

1.0 Bidding Address:

- 1.1. Bidder must visit in the web portal <u>https://aegcl.co.in</u> for more details.
- 1.2. Bidders shall be required to bid for the complete Package and no part offer shall be accepted.

Bidder must download the bidding documents from the above-mentioned portal and both technical & Price bid must be submitted through **offline mode only** along with all sign & seal copies of supporting documents. Bidder can Rework/Edit their bids before closing date of the tender. Bidders are advised to submit/re-work their bids well advance in time to avoid any last-minute unforeseen hassle.

1.3 Please refer to notice for more details.

2.0 SCOPE OF THE PROPOSAL

A. Bidder scope:

- a) Dismantling, Oil handling & Dragging (if necessary) at site of works.
- b) Complete works related to overhauling & minor repairing of Transformers along with final testing at factory as mentioned in the work schedule.
- c) Painting of Transformers, Supply of accessories.
- d) Dragging to assigned pad after overhauling. Transportation from workshop to site will have been carried out by AEGCL empanelment.
- e) Complete erection & testing works related to transformer
- f) All associated works related to the transformer and its accessories.

B. AEGCL scope:

- a) Arrangement of shut down.
- b) Transformer oil filtration machine at site.
- c) Works related to final commissioning of the transformer including works related to conductors (HV&LV), switchgears & wiring & other civil works.
- d) Supply of materials for retrofitting of terminals equipment.
- e) In general transportation of the transformer between bidder's workshop and site

2.2 EMPLOYER'S SUPERVISION

- 2.2.1 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.
- 2.2.2 Arbitration:

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

2.2.3 The work shall be carried out in accordance with the specifications and joint assessment on the scope of work. 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) Witness or authorize Employer's representative to witness tests at the manufacturer's works or at site, or at any place where work is performed under the contract.
- c) Inspect, accept or reject any equipment, material and work under the Contract, in accordance with the Specifications.

3.2Tests

The acceptance and routine tests and tests during overhauling & repair to be carried-out on the material and equipment shall mean as follows:

- a) 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.
- b) Tests during overhauling 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.

3.3 INSPECTION AND TESTING

3.3.1 The Contractor shall carry out a comprehensive stage inspection and testing program during repairing & overhauling of the transformer. An indicative of inspection is given. This is, however, not intended to form a comprehensive program as it is contractor's responsibility to draw up and carry out such a program duly approved by the Employer.

The inspection and testing shall consist of following:

- a) Inspection and testing at different stages of overhauling.
- b) All routine and other tests as specified on the transformers and accessories.
- c) Site tests are as listed in hereunder.

3.3.2 The bidder shall state in his proposal the testing facilities available at his works. In case full testing facilities are not available, the bidder shall state the method proposed to be adopted so as to ascertain the transformer characteristics corresponding to full capacity testing.

3.3.3. STAGE INSPECTION

a) Tank and Conservator

- (i) Inspection of major weld.
- (ii) Leakage test of the conservator.
- (iii) Painting
- b) Core

(i)Checking of insulation of core bolt.

(ii)Insulation of Core to channel & tie rods.

(iii) Visual and dimensional check during assembly stage.

- (iv)Visual and dimensional checks for straightness and roundness of core and suitability of clamps.
- (v). High voltage test (2 kV for one minute) between core and clamps.

c) Insulating Material

(i). Sample check for physical properties of materials.

d) Winding

(i)Visual and dimensional checks on conductor for scratches, dent mark etc.

(ii) Check for the bonding of the insulating paper with conductor

(iii)Check and ensure that physical condition of all materials taken for windings is satisfactory and free of dust.

(iv)Check for brazed joints wherever applicable.

(v)Check for absence of short circuit between parallel strands.

e) Checks before Drying Process

(i)Check condition of insulation on the conductor and between the windings.

(ii)Check insulation distance between high voltage connections, between high voltage connection cables and earth and other live parts.

(iii)Check insulating distances between low voltage connections and earth and other parts.

(iv) Insulating test for core earthing.

f) Checks during Drying Process

(i)Measurement and recording of temperature and drying time during drying treatment. (ii)Check for completeness of drying.

g) Test Reports for bought out items

The contractor shall submit the test reports for all bought out/sub contracted items for approval.

- (i) Buchholz relay
- (ii) Sudden pressure rise relay in OLTC
- (iii) Winding temperature indicators.
- (iv) Oil temperature indicators.
- (v) Fans/Air Blowers
- (vi) On Load tap changer
- (vii) Any other item required to complete the works.

h) Special condition for the transformers during stage inspection-

• For any Transformer during internal inspection, the cause of evolution of key gases during oil DGA must be ascertained. Depending upon severity of the cause, actual cost involvement will be ascertained, if it requires major overhauling & repair. Considering the trend of the gas, hot spot is suspected without involvement of the winding. Therefore, bidder may quote considering it as minor repair without involving cellulose.

3.4. FACTORY TESTS

i) Following tests shall also be carried out on each transformer as routine test:

a) Magnetic Circuit Test

b) Measurement of capacitance and tan delta to determine capacitance between winding and earth. Value of Tan (δ) & its trend before & after overhauling.

c) Measurement of the no-load current

d) Oil leakage test on transformer

e) Frequency Response Analysis (FRA)

f) Operation testing of OLTC.

g) Magnetic balance test

h) Measurement of magnetization current at low voltage

i) Separate source & DVDF test at reduced voltage as per IS.

j) Special test (In case of major repairing):

k)Temp. rise test as per IS: 2026 (Part-I) for the Power Transformer(if deemed repaired by AEGCL). This test shall be carried out at maximum negative tap. DGA is to be carried out before and after temperature rise test for the any Transformer.

3.5 PRE-SHIPMENT CHECK AT MANUFACTURERS WORKS

i) Check for proper packing and preservation of accessories like radiators, bushings, explosions vent, dehydrating breather, rollers, buchholz relay, fans, control cubicle connecting pipes & conservator etc.

- ii) Check for proper provision of bracing to arrest the movement of core and winding assembly inside the tank.
- iii) Dew point measurement if transformer despatched in N2 filled condition.
- iv) Gas tightness test to conform tightness.

3.6 INSPECTION AT SITE

The contractor shall carry out detailed inspection covering areas right from the receipt of material up to commissioning stage. An indicative program of inspection as envisaged by the Engineer is given below. This is however not intended to form a comprehensive program as it is contractor's responsibility to draw up and carry out such a program.

(a) RECEIPT AND STORAGE CHECKS

(i) Check and record condition of each package visible parts of the transformers etc. for any damage.

(ii) Check and record the gas pressure in the transformer tank as well as in the gas cylinder. Measure and record the dew point of dry air/nitrogen in the transformer tank.

(iii) Visual check of core and coils before filling up with oil and also check condition of core and winding in general.

(b) INSTALLATION CHECKS

i) Inspection and performance testing of accessories like tap changers, cooling fans, etc.

ii) Visual check for wedging of core and coils before filling up with oil and also check conditions of core and winding in general.

iii) Capacitance and tan delta measurement of bushing before fixing/connecting to the winding, bidder shall furnish these values for site reference.

iv) Measure and record the dew point of nitrogen/dry air in the main tank before assembly if N2 filled.

v) Oil impregnation or drying under vacuum at site shall be done with the transformer and oil at a temperature not exceeding 70 deg C.

vi) The Ultra High Vacuum type oil treatment plant of suitable capacity (preferably 6000 to 8000 litres per hour) suitable for treatment of oil in EHV class transformer shall be used in order to achieve properties of treated oil.

vii) Test on oil samples taken from main tank top and bottom and cooling system. Samples should be taken only after the oil has been allowed to settle for 24 hours.

viii) Check the whole assembly for tightness, general appearance etc.

ix) Oil leakage tests.

3.6 GENERAL CONDITION:

i) The successful bidder shall be responsible for the entire job till successful charging of the Transformer.

ii) A specialist supervisor from the bidder side shall coordinate the entire job.

iii) The oil loss during the above job shall be kept at minimum level.

iv) Housekeeping/watchman of the transformer shall be ensured by the bidder.

iv) No damage to the core /winding /other mechanical parts – This has to be ensured by the bidder.

v) Necessary commissioning assistance shall be given by AEGCL.

vii) Boarding and lodging of required manpower shall be arranged by bidder or may be provided at site subject to availability.

viii) Conveyance for mobilized manpower inside plant premises shall be arranged by bidder

3.7. Qualification of the Bidder

3.7.1 To be qualified for award of Contract, bidders:

- (A) shall submit a written power of attorney authorizing the signatory of the bid to commit the bidder;
- (B) must compulsorily meet each of the following minimum criteria

(i) TECHNICAL ELIGIBILITY: -

The bidder(s) should be the manufacturer or repairer of 132 KV or above voltage class Power Transformer and the bidder should have experience of more than 3 (Three) years in the field of repairer or manufacture 132KV or above voltage class transformers from the date of publication of NIT. The 132 KV or above voltage class Power Transformer repaired must be in successful operation for at least 1 (One) year in reputed Indian power utilities as on the date of publication of NIT and shall be supported by performance certificates issued by not below the rank of Executive Engineer / Dy. General Manager /Divisional Engineer or equivalent". However, any party experienced in repairing of below 132kV level of transformer(s) and willing to upgrade to 132kV level of repairing transformers may also participate in the bid, demonstrating in documents their association with experienced and skilled any party based outside the state who meet up the above stated criterion for technical eligibility for repairer or manufacturer already associated with repairing works of power transformers 132kV level or above.

The average annual turnover of the bidder for the three best financial years out of the last Five (05) financial years at minimum of Rs15,00,000/-(Rupees Fifteen Lakhs Only). However, this may varies depending upon the work volume.

Bidder must submit annual turnover report in a separate sheet with the certification from approved Chartered Accountant / firm.

Bidder shall submit the scanned copy of complete annual reports together with Audited statement of accounts of the company for last five years.

(iii) EQUIPMENT/INFRASTRUCTURE CAPABILITIES

The bidder should possess the necessary equipment required for highly equipped factory, Transportation, Loading, Unloading and Dragging of Power Transformer/heavy machineries.

(iv) LITIGATION HISTORY

Bidders shall submit details of all litigation, arbitration or other claims, whether pending, threatened or resolved in the last five years.

3.7.2The Bidder's offer shall include and substantiate data on qualifying requirements such as in addition to given as above:

(v) Experience in works of a similar nature and volume for each of the last three years, and details of works under way or contractually committed; and clients who may be contacted for further information on those contracts

3.7.3. Even if 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 requirement.

3.7.4 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.

3.8.0 Cost for Bidding

3.8.1. 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.

3.8.2. Clarification on Bidding Documents

3.8.3.A prospective bidder may ask AEGCL in writing for any clarification on the bidding documents at the following address:

CGM (O&M). Assam Electricity Grid Corporation Limited, 1st Floor, Bijulee Bhawan, Paltan Bazar, Guwahati-781001.

3.9.0 Amendment of Bidding Documents

- a) At any time prior to the deadline for submission of bids, the Employer may for any reason modify the bidding documents by issuing addenda which shall be uploaded online in AEGCL website as such the bidder are requested to see the website in regular interval.
- b) Any addendum thus issued shall be part of the bidding documents.

4.0.0 Language of Bid

a) The bid, and all correspondence and documents related to the bid, exchanged between the bidder and the Employer shall be in the English language.

4.1.0 **Documents Comprising the Bid**

- A. The bid submitted by the bidder shall comprise **technical proposal** and the **price proposal separately, inside a sealed envelope. The bidder has to submit the complete package.**
- B. The Bid submitted by bidders shall contain the following:
 - a Bid Submission Sheet (Refer Section 4).
 - b Documentary evidence to establish that the Bidder meet the qualifying requirements in accordance with Clause 3.7.0
 - c Documents to be furnished as per Clause 3.7.1.

All Bidding Schedules (Section-4) properly filled up including Price Bid Schedules

4.2.0 **Bid Form and Price Schedules**

- A. The Bidder shall complete the Bid Form and the appropriate Price Schedules furnished in the bidding documents in the manner and detail indicated therein.
- B. Bidders shall use only the items mentioned in the (Price Schedules) while filling up the Price Bidding Schedules. Any other items which are reasonably inferred or necessary for satisfactory completion of the works covered in the Bidding Document, but which are not specifically specified in the above mentioned price Schedule of Items shall deemed to be included in other items of those Schedules. No payment shall be made separately for those items.
- C. Bidders shall give a breakup of the prices in the manner and detail called for in the Schedules of Prices
- D. In the Schedules, Bidders shall give the required details and a breakup of their prices (excluding payable taxes)

E. Price Adjustment

Prices quoted by the Bidder shall not be subject to adjustment during performance of the contract to reflect changes in the cost of labour, fuel, material, equipment and transport components. Duties and Taxes shall not also be adjusted, except there is variation due to changes in legislation of the Country.

4.3.0 Bid Validity

- A. Bids shall remain valid for a period of 210 (Two hundred and ten) days after the date of opening of Bids.
- B. In exceptional circumstances, prior to expiry of the original bid validity period, AEGCL may request that the bidders to 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.

4.4.0 Alternative Proposals by Bidders

A. Bidders shall submit offers, which comply with the Bidding Documents, including the basic Employer's Requirements as indicated in the bidding documents. Alternatives will not be considered.

4.5.0 Format and Signing of Bid

- A. The bidder shall prepare one original and one copy of the bid proposal, clearly marking each one as:"ORIGINAL-BID PROPOSAL", "COPY OF BID PROPOSAL", etc. as appropriate. In the event of discrepancy between the original and any copy, the original shall prevail.
- B. The original and scanned copies of the bid shall be signed by a person or persons duly authorized to sign on behalf of the bidder, pursuant to Sub-Clauses. All pages of the bid where entries or amendments have been made shall be signed by the person or persons signing the bid.

- C. 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 signed by the person or persons signing the bid.
- D. 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.
- E. 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.
- F. 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.
- G. Satisfactory evidence of authority of the person signing on behalf of the Bidder shall be furnished with the Bid.
- H. The Bidder's name stated on the proposal shall be exact legal name of the firm
- I. Bids not conforming to the above requirements of signing may be disqualified.

4.6.0 Sealing and Marking of Bids

- A. The bidder shall seal the original copy of the technical proposal, the original copy of the price proposal and each copy of the technical proposal and each copy of the price proposal in separate envelopes clearly marking each one as: "ORIGINAL-TECHNICAL PROPOSAL", "ORIGINAL PRICE PROPOSAL", "COPY NO. I TECHNICAL PROPOSAL", "COPY NO. I PRICE PROPOSAL", etc as appropriate group and package wise separately.
- B. The bidder shall seal the envelopes containing the original technical and price bids and copies of the bid and then the originals and copies along with the envelope containing the Bid Security shall be put into a sealed outer envelope.
- C. The inner and outer envelopes shall
 - 1. be addressed to the Employer at the following address:

Chief General Manager (O&M), Assam Electricity Grid Corporation Limited BijuliBhawan, Guwahati- 781 001 ,ASSAM

- 2. bear the following identification:
 - Bid for: Empanelment of Party/Firm/Vendor for a period of one year with provision to extend by another two years for the work related to Overhauling including transportation, Loading and Unloading of various Power Transformers (Damaged) at AEGCL Grid Sub-Station and Erection, Testing & Commissioning of the same.
 - Bid reference no: AEGCL/MD/O&M-OVERHAULING-REPAIR/2020/01

4.7.0 Deadline for Submission of Bids

The deadline for submission of bids will be at 14.00 Hrs on 29.12.2019.

Bids must be submitted on stipulated time and no bid will be accepted after expiry of closing time.

4.8.0 Late Bids

- A. Any bid received by AEGCL after the deadline for submission of bids prescribed in Clause will be rejected and returned unopened to the bidder.
- 4.9.0 Withdrawal of Bids

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

5.0.0 Withdrawal of a bid during the time between the deadlines for submission of bids and bid validity period specified in Sub-Clause 4.3.0 A may result in the forfeiture of the bid security.

5.1.0 Opening of Bids

A. AEGCL will open the technical bids, in the presence of bidders' representatives who choose to attendat14:00 hours on 30/12/19 at the following location:

Conference Room, O/O the Managing Director. Assam Electricity Grid Corporation Limited, BijuleeBhawan, Paltanbazar, Guwahati-781001.

The bidders' representatives who are present shall sign a register as evidence of their attendance. 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.

5.2.0 Process to Be Confidential

A. 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.

5.3.0 Clarification of Bid Proposals and Contacting AEGCL

A. 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, 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 detected by AEGCL in the evaluation of the bids.

5.4.0 Correction of Errors

- A. 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.
- **B.** If the bidder does not accept the corrected amount of bid, its bid will be rejected, and the bid security may be forfeited.

5.4.0 Evaluation and Comparison of Bid Proposals

- A. AEGCL will evaluate and compare only the bids determined to be substantially responsive.
- B. The comparison shall be on all components and other services required under the contract with due corrections as per Clause 0.

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

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

C. AEGCL reserves the right to accept or reject any variation or deviation.

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

Notwithstanding Clause, 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 assigning any reason and liability to the affected bidders.

5.6.0 Notification of Award

Prior to expiry of the period of bid validity prescribed by AEGCL, AEGCL will notify the successful bidder by letter, that its bid has been accepted. This letter ("Letter of Acceptance") shall mention the amount (per unit rate) which AEGCL will pay the Contractor in consideration of the execution and completion of the Works by the Contractor as prescribed by the Contract.

SECTION-2

SPECIAL CONDITION OF CONTRACT

2.1.0 Introduction

- 2.1.1. This section "SCC" supplementary to the "General Condition of Supply & Erection of AEGCL". Whenever there is a conflict the provisions in this shall prevail.
- 2.1.2. The General Condition of Supply & Erection of AEGCL is available in the official website of AEGCL. The bidder shall download the same from the AEGCL website **www.aegcl.co.in.**

2.2.0 Contractor to Inform Himself Fully

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

2.3.0 Extension of Time

2.3.1. There will be no extension of time. The contractor will have no right to request for extension except under force majeure. Time is the essence of this contract

2.4.0 Variations, Additions and Omissions

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

2.5.0 Terms of Payment

The terms of payment for the works shall be as follows

- a) No advance payment shall be made in this contract.
- b) No claim for interest shall be entertained by AEGCL.
- c) No running bills shall be entertained till completion of the work.
- d) The price is firm and no price variation shall be applicable.

e) 100% payment will be made on completion of the work as specified in the work order

2.6.0 Liability for Accidents and Damage

- 2.6.1. The contractor shall indemnify the AEGCL against any loss, damage, and injury to any person or to any property and against any other liability or obligation and against all actions, suits, claims demands costs, charges and expenses arising in connection with such damage, injury, liability or obligation resulting from:-
 - (a) The negligence of the contractor and his workers, agents, subcontractors; and/or
 - (b). the lack of or inadequacy of safety devices under this contract.
- 2.6.2 Any damages during loading, and unloading will be borne by the party, if found by testing after unloading.
- 2.6.3 No charge for detention of the vehicle will be admissible.
- 2.6.4 The Transporter should not carry other materials of any entity other than AEGCL along with the Transformer and accessories and the transporting vehicle is to be used exclusively for the work under execution.
- 2.6.5 The whole consignment is to be transported under Insurance cover at the full risk and responsibility of the transporter and the transporter shall be absolutely liable and responsible for safe custody and delivery in good condition.

2.7.0 Use of Materials Arranged by the employer

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

2.8.0 Penalty for Delayed Execution

- 2.8.1. In the event of delay in completing the work extending beyond the date of completion or beyond any extension, permitted by AEGCL, the contractor shall pay as agreed liquidated damage and not as a penalty a sum equal to 1% of the contract price under this contract for each week of delay or part thereof subject to a maximum of 10% of the contract price.
- 2.8.2 AEGCL is at liberty to cancel the contract wholly or in part and to engage another party to execute the work in case of deficiency of the executor in adhering to time line or quality of work. Further the decision of the employer as regards to deficiency on above accounts will be final and will not be questioned by the executor (defaulting contractor). Nevertheless the employer may intimate him about the deficiency in writing in the aftermath of disengaging the executing agency (defaulting contractor) if sought for by the work executing firm. In such event the executing agency will forfeit the security deposit.

2.9.0 Settlement of the Dispute & Arbitration

2.9.1. Any dispute arising out of the contract will first be discussed and settled bilaterally between the AEGCL 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 Assam Electricity Grid Corporation Limited, 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 (M) District.

2.10.0 Force Majeure

Normally, force majeure shall cover only act of God, fire, war, riots and act of Government etc. Any constraints other than those specified above, will not constitute a force majeure condition. In view of other constraints beyond the control of the contractor, primarily due to statutory compulsion, extension of time may be considered on merit of individual case. In case of a force majeure condition, the contractor shall notify the purchaser in writing of such condition within 10 days from the beginning of such delay in writing for consideration and acceptance.

2.11.0 PATENT RIGHTS AND ROYALTIES

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

2.12.0 DEFENCE OF SUITS

If any action in court is brought against AEGCL for the failure, omission or neglect on the part of the Contractor to perform any acts, matters, or things under the Contract, or for damage or injury caused by the alleged omission or negligence on the part of the Contractor, his agents, representatives or his Sub-Contractors, or in connection with any claim based on lawful demands of Sub-Contractors, workmen, suppliers or employees, the Contractor shall in all such cases indemnify and keep AEGCL, from all losses, damages, expenses or decrees arising of such action.

2.13.0 LIMITATION OF LIABILITIES

Limitation of liabilities shall remain in force up to the guarantee period of Power Transformer i.e. up to XX (XXX) months from the date of commissioning as specified. Bank Guarantee (BG) shall only be released from AEGCL after expiry of the guarantee period of the Power Transformer. So, validity of Bank Guarantee should cover until the expiry of the above guarantee period.

2.14.0 POWER TO VARY OR OMIT WORK

No alterations, amendments, omissions, suspensions or variations of the Works (hereinafter referred to as ",variation") under the Contract as detailed in the Contract Documents, shall be made by the Contractor except as directed in writing by AEGCL in charge of the work, but he shall have full powers subject to the provisions hereinafter contained, from time to time during the execution of the Contract, by notice in writing to instruct the Contractor to make such variation without prejudice to the Contract. The Contractor shall carry out such variation and be bound by the same conditions as far as applicable as though the said variations occurred in the Contract Documents. If any suggested variations would, in the opinion of the Contractor, if carried out, prevent him from fulfilling any of his obligations or guarantees under the Contract, he shall notify the AEGCL's in charge of the work thereof in writing and the owner's AEGCL in charge of the work shall decide forthwith whether or not, the same shall be carried out and if the owner confirm his instructions, the Contractor's obligations and guarantees shall be modified to such an extent as may be mutually agreed. Any agreed difference in cost occasioned by any such variation shall be added to or deduced from the Contract Price as the case may be.In the event of the owner requiring any variation, a reasonable and proper notice shall be given to the Contractor to enable him to work his arrangement accordingly, and in cases where goods or materials are already prepared or any design, drawings or pattern made or work done requires to be altered, a reasonable and agreed sum in respect thereof shall bepaid to the Contractor.

- 2.15.0 In any case in which the Contractor has received instructions from the AEGCL's Engineer in charge of the work as to the requirement of carrying out the alterations or additional or substituted work which either then or later on, shall in the opinion of the Contractor, involve a claim for additional payment, the Contractor shall immediately and in no case later than (14)days, after receipt of the instructions aforesaid and before carrying out the instructions, advise the AEGCL's in charge of the work to that effect. But the AEGCL's in charge of the work shall not become liable for the payment of any charges in respect of any such variations, unless the instructions for the performance of the same shall be confirmed in writing by the appropriate authority of AEGCL.
- **2.16.0** If any variation in the Works results in reduction of Contract Price, the parties shall agree, in writing, to the extent of any change in the price, before the Contractor proceeds with the change.
- **2.17.0** In all the above cases, in the event of a disagreement as to the reasonableness of the said sum, the decision of AEGCL's in charge of the work shall prevail.
- **2.18.0** Notwithstanding anything stated above in this clause, AEGCL's in charge of the work shall have the full power to instruct the Contractor, in writing, during the execution of the Contract to vary the quantities of the items or groups of items in accordance with the provisions of clause entitled 'Change of Quantity in Section III". The Contractor shall carry out such variations and be bound by the same conditions as though the said variations occurred in the Contract Documents.

2.19.0 CHANGE OF QUANTITY

During the execution of the Contract, AEGCL reserves the right to increase or decrease the quantities of items of spares or any other extra involvement of work required for complete execution of work under the Contract but without any change in other terms & conditions. Quantity variation and additional work involvement may be there as per actual and CGM (O&M) will take the final decision in this regard as per report of inspection

team if necessary. The successful bidder should be agreeable to carry work in the range of the NIT / Agreement Quantity /Agreement value.

2.20.0 NO WAIVER OF RIGHTS

Neither the inspection by AEGCL nor any order by AEGCL for payment of money or any payment for or acceptance of, the whole or any part of the Works by the owner's Engineer in charge of the work, nor any extension of time, nor any possession taken by the owner's Engineer in charge of the work shall operate as a waiver of any provision of the Contract, or of any power herein reserved to AEGCL or any right to damages herein provided nor shall any waiver of any breach in the Contract be held to be a waiver of any other or subsequent breach.

2.21.0 CERTIFICATE NOT TO AFFECT RIGHT OF AEGCL AND LIABILITYOF CONTRACTOR

No interim payment certificate of the owner's Engineer in charge of the work, nor any sum paid on account by AEGCL, nor any extension of time for execution of the Works granted by AEGCL shall affect or prejudice the rights of AEGCL against the Contractor or relieve the Contractor of his obligation for the due performance of the Contractor, or be interpreted as approval of the Works done or of the equipment furnished and no certificate shall create liability for AEGCL to pay for alterations, amendments, variations or additional works not ordered, in writing, by the owner's Engineer in charge of the work or discharge the liability of the Contractor for the payment of damages whether due, ascertained or certificate nor the acceptance by him of any sum paid on account or otherwise affect or prejudice the rights of AEGCL against the Contractor.

2.22.1 Any other point not specifically mentioned will be as per General conditions of supply and erection 2009 of AEGCL for the whole tender

SECTION – 3

TECHNICAL SPECIFICATIONS

3.0.0.0 The bidder(s) should be the manufacturer or repairer of 132 KV or above voltage class Power Transformer and the bidder should have experience of more than 3 (Three) years in the field of repairer or manufacture 132KV or above voltage class transformers from the date of publication of NIT. The 132 KV or above voltage class Power Transformer repaired must be in successful operation for at least 1 (One) year in reputed Indian power utilities as on the date of publication of NIT and shall be supported by performance certificates issued by not below the rank of Executive Engineer / Dy. General Manager /Divisional Engineer or equivalent".

A. For Transportation.

- Road transport is only to be carried out with low bed trailer.
- For securing the transformer on the transport vehicle, it should be attached with 4 retched straps, to the peaks of the 4 tie down loops on the vehicle. It should be done with a tension bracket of approximately 30^o downwards to the loops.
- During transportation, strains occur on the load. It is important to secure the Transformer and safeguard any forces that occur during start and braking action, going round the bends and going over the bumps.
- For normal running speed of 10 to 20 KpH shall be maintained on good roads, for bad road it is desirable to run the vehicle at much lower speeds. While crossing bridge it shall be 5 KpH.
- Normally night travel is avoided except where it is restricted for heavy vehicle to travel in day time.
- It should be ensured that sufficient line clearance from line conductor to the top most part of transformer and trailer is available. Branches of avenue trees that are likely to foul the equipment should be cleared.
- The transformer imbalance (maximum 10 degree) should be avoided during loading, transportation and unloading process.

B. Factory Standard/Vendor's Standard.

- Minimum Requirements for Transformer Repairing Agencies
- Independent constructed factory shed.
- Sufficient open land for storing of failed/repaired transformer with movement of man/material/vehicle.
- Loading and unloading facility for failed/repaired transformer.
- Permanent Electric connection with minimum 25 HP for under LTP-I category or 20 KW under LTP-III category tariff.
- For the purpose of connection LTP-1 tariff or connected load with using machinery or not using machinery will be considered.
- All necessary machinery for repairing of Transformers such as winding machine, drill machine, welding machine (electric/arc welding/gas welding) Oven for storing minimum 20 Nos. of job.
- Oil filter machine with sufficient capacity.
- Chain pulley block of sufficient ton capacity or electric hoist of similar capacity.
- Testing equipment suitable to carry out all acceptance test as per IS: 1180 and IS: 2026 along with calibrated meters.
- Test bench for conducting acceptance test with high accuracy class of meters.
- List of machinery SHOULD BE DEFINED
- List of testing instruments as per SHOULD BE DEFINED
- Proof of owner ship deed.
- List of partner/director.
- Agency should be working in shift duty during peak

3.0.0. 1Rate to be furnished

The list of the Sub-stations under AEGCL are listed below as Annexure-I. Price Variation on materials may be done as rules define IEEMA.

3.0.0.2 Comparison of Rates.

- a) For comparison of rates of various biddersformat of annexure 3 will be used. Against each and every item of rate under column B ,lowest rate quoting bidder will be indicated as mentioned in the annexure 3. A list of accepted rate will be determined as per the lowest quoted rate.
- b) Overall L1 bidder will be considered from the comparison list, who quoted maximum numbers of lowest rate. The L2, L3 etc. will be considered in order of lowest quoted rate. Further the eligible bidders will be offered the accepted rate for being empanelledasserviceprovider. Any bidder on agreeing to execute on accepted rate or in some cases negotiated rate will be enlisted as empanelled contractor.
- c) While execution of work L1 will be offered the first chance at accepted rate. If L1 conveys inability or does not communicate his acceptance in 7 days then L2,L3 etc. inascendingorder will be offered the work contract.
- d) Howeverif L1 bidder is already having 2 works under execution or executed, automatically the next offer will go to L2 bidder and so on.
- e) Without prejudice, AEGCL has right to place a specific contract for emergency reason with any contractor with due approval from MD, AEGCL.
- f) Bank Guaranty amounting 5% of total work value has to be deposited by the contractor at the time of awarding the contract. The BG submitted against the specific work will be released on successful completion of the work.
- g) The employer may have the discretion to entrust any other contractor other than the shortlisted contractor with the task of dragging of the equipment(s) from their site to the loading point in interest of synergy of other associated work and the contractor will not have the right to object to it.
- h) The eligible transporter will have to be registered as empanelled transporter for one year paying AEGCL an amount of **Rs.5000.00 as registration fees.**

3.0.0.3 GUARANTEE / WARRANTEE:

a) The Transformer overhauling/repairing and tested shall be warranted for a period of 12(twelve) months from the date of commissioning at site on job attended. As a compliance of the guarantee clause as stated above, the CPG (Contract Performance Guarantee) shall not be released and accordingly the validity of the CPG shall have to provide by the bidder.

b) Any work covered by warranty will have to be redone in face of any defect to set right and any associated works involved in the process of making good the defect will not be chargeable.

3.0.0 4. STAGE INSPECTION:

In this case the inspection shall have to carried out in three stages as mentioned below

- Inspection at the factory during lifting of the transformer and assessment of work as per work schedule.
- Stage inspection of the jobs.
- Final testing of transformers.
- Testing & commissioning at site.

3.0.0.5 TRANSFER OF THE TITLE

- a) This Transfer of Title of equipments / materials shall not be constructed to mean the acceptance and the consequent "Taking Over" of equipment and materials. The Contractor shall continue to be responsible for the quality and performance of such equipment and materials and for their compliance with the specifications until "Taking Over" and the fulfilment of guarantee provisions of this Contract.
- b) This Transfer of Title shall not relieve the Contractor from the responsibility for all risks of loss or damage to the equipment and materials as specified under the clause entitled "Insurance" of this Section.

3.0.0.6 COMMISSIONING ACTIVITY AFTER OVERHAULING OF THE TRANSFORMERAT SITE (S/S)

Bidder will depute Engineers/Technicians for commissioning successfully and till the overhauled transformer put in to service at site . No Boarding and Lodging facility will be arranged by AEGCL for the deputed personnel for this work. "To and fro" travelling expenses for the deputed personnel will be borne by the Bidder.

3.0.0.7 PERFORMANCE GUARANTEE DEPOSIT RELEASE:

Performance Guarantee Deposit can be made through a bank guarantee while concluding agreement as per the pro-forma of the owner and shall be released after successful covering guaranty period of the agreement.

3.0.0.8 INSURANCE

- a) The "Contractor" 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.
- b) The "Contractor" 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.
- c) 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.
- d) 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 Contractor.
- e) 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 "Contractor" with the Purchaser or take any other appropriate action.
- f) All materials will be dispatched against clear door delivery basis unless otherwise agreed by the "Purchaser"

3.0.0.9. LIABILITY FOR ACCIDENTS AND DAMAGES

Under the Contract, the Contractor shall be responsible for loss or damage to the equipment until the successful completion of commissioning as defined else-where in the Bidding Documents.

3.0.0.10 DELAYS BY AEGCL OR HIS AUTHORISED AGENTS

In case the Contractor's performance is delayed due to any act on the part of AEGCL or his authorized agents, then the Contractor shall be given due extension of time for the completion of the Works, to the extent of such act on the part of AEGCL has caused delay in the Contractor's performance of the Contract. Regarding reasonableness or otherwise of the extension of time, the decision of the AEGCL shall be final.

3.0.0.11**DEMURRAGE, WHARFAGE, ETC.**

All demurrage, wharf-age and other expenses incurred due to delayed clearance of the material or any other reason shall be to the account of the Contractor.

3.0.0.12 ADDRESS FOR COMMUNICATION

All communication / correspondences shall be made with: -The Chief General Manager (O&M), Bijulee Bhawan, Paltan Bazar, 1stfloor, Assam Electricity Grid Corporation Limited. Guwahati-781001, Assam.

Section – 4 BID SUBMISSION SHEET, BID FORMS AND SCHEDULES 1 Bid Submission Sheet

Name of Contract: (mention package and group specifically):-

To:

The Chief General Manager (O&M), Assam Electricity Grid Corporation Ltd, BijuleeBhawan, Paltanbazar, Guwahati-781001

Sir:

We have examined the General Conditions of Contract, Technical Specification, Schedules, and Addenda Nos _____(if any). We have understood and checked these documents and have not found any errors in them. We accordingly offer to execute and complete the said Works and remedy any defects fit for purpose in conformity with these documents and the enclosed Proposal (Offer).

We accept your suggestions for the appointment of the Dispute Adjudication Board, as set out in the Bidding Document.

We agree to abide by this Bid until **210 days** and it shall remain binding upon us and may be accepted at any time before that date.

If our bid is accepted, we will provide the specified performance security, commence the Works as soon as (maximum 7days)after receiving the notice to commence, and complete the Works in accordance with the above-named documents within the time stated in the Bidding Document.

Unless and until a formal Agreement is prepared and executed this Bid, together with your written acceptance thereof, shall constitute a binding contract between us.

We understand that you are not bound to accept the lowest or any bid you may receive.

Commissions or gratuities, if any, paid or to be paid by us to agents relating to this Bid, and to contract execution if we are awarded the contract, are listed below:

Yours faithfully

Signature ______ in the capacity of ______ duly authorized to sign bids for and on behalf of

Address