

ASSAM ELECTRICITY GRID CORPORATION LIMITED
Regd. Office: 1st Floor, Bijulee Bhawan, Paltan Bazar, Guwahati – 781001
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**TERMS, CONDITIONS AND TECHNICAL SPECIFICATIONS OF CONTRACT
WITH ITEM RATE SCHEDULE**

NIT No: AEGCL/STTC/TECH-12/2019-20/003 Dated :27/08/2019

Bidding Document

For

**Erection, Testing & Commissioning of 50MVA , 132/33kV Transformer along
with other associated works at Srikona Grid Substation (State Annual Plan
for Augmentation Work of Transformer).**

**DEPUTY GENERAL MANAGER
SILCHAR T&T CIRCLE
AEGCL, SILCHAR-15**

Notice Inviting Tender (Short Notice)

For & on behalf of the **Managing Director, AEGCL, the Deputy General Manager, Silchar T&T Circle, AEGCL, Silchar-15** invites sealed-tenders from reputed Engineering Firms/Contractors with having valid License with sound technical and financial capabilities for the following work. A single stage two envelope procedure (**Techno-Commercial and Price Bid**) will be adopted for this tender.

Sl. No.	Name of work	Estimated Cost in INR	Bid Security In INR	Time of Completion
1.	Erection, Testing & Commissioning of 50MVA, 132/33kV Transformer at Srikona Grid Substation along with other associated works (State Annual Plan Fund for Augmentation Work of Transformer).	7,31,664.00	14,700.00	30 days from the date of formal handing over of site.

Key Dates	
Starting Date & Time for download of Bid Document	29.08.2019 from 10.30 AM Onwards.
Bid Submission End Date & Time – (Offline)	12.09.2019 till 04.00PM
Techno-Commercial Bid Opening Date & Time -	17.09.2019 on 02.30PM

TENDER PAPER COST AND MODE OF PAYMENT:-

Bidder has to pay Non-Refundable tender document cost of ₹ . 1000.00 in the form of DD duly pledged in favour of **the Managing Director, AEGCL, Guwahati-01** and should submit the DD in original to the office of the undersigned before the submission End Date of BID i.e. **12/09/2019** failing which the Bid will be rejected.

**The intending bidders have to download the bidding documents from the AEGCL Website (www.aegcl.co.in). No manual paper will be issued from this office (Except in case of any error, the Bid Document will be issued from this office). The undersigned on behalf of AEGCL reserves the right to withdraw the NIT, accept or reject any or all tenders or to split the work among different contractors without assigning any reason thereof and the U/S is not bound to accept the lowest quoted rate.

S/D
Deputy General Manager
Silchar T&T Circle,
AEGCL, Silchar-15
Dated : 27/08/2019

Memo No AEGCL/STTC/Tech-12/2019-20/179(a)

Copy to :

1. The Chief General Manager (O&M), AEGCL, Bijulee Bhawan, Paltan Bazar, Guwahati-01- for kind information.
2. The General Manager, Lower Assam T&T Zone, AEGCL, Narengi, Guwahati-26- for kind information.
3. The AGM -IT, O/o the MD, AEGCL, for publication of the NIT & bid document in AEGCL's Website. (Soft copy enclosed)
4. The AGM (PRO), O/o the MD, AEGCL for publication of the NIT in The Assam Tribune, Dainik Jugasankha.
5. The All AGMs Under this Circle for information and circulation. They are to display the Notice in their respective Notice Board including Substation Notice Boards.
6. Notice Board of STTC.

S/D
Deputy General Manager
Silchar T&T Circle,
AEGCL, Silchar-15

For & on behalf of the **Managing Director, AEGCL, the Deputy General Manager, Silchar T&T Circle, AEGCL, Silchar-15** invites sealed tenders from reputed Engineering Firms/Contractors with sound technical and financial capabilities for the following work. A single stage two envelope procedure (**Techno-Commercial and Price Bid**) will be adopted for this tender.

Sl. No.	Name of work	Bid Security In INR	Time of Completion
1.	Erection, Testing & Commissioning of 50MVA, 132/33kV Transformer at Srikona Grid Substation along with other associated works (State Annual Plan Fund for Augmentation Work of Transformer).	14,700.00	30 days from the date of formal handing over of site.

Cost of Bid Document:

Bidder has to pay Non-Refundable tender document cost of ₹ . 1000.00 in the form of DD duly pledged in favour of the **Managing Director, AEGCL, Guwahati-01** and should submit the DD in original to the office of the undersigned before the submission End Date of BID i.e. **12/09/2019** failing which the Bid will be rejected.

1.0 Bidding Address:

- 1.1. Bidder must visit in the web portal <https://aegcl.co.in> 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 signed & sealed copies of supporting documents . Bidders are advised to submit their bids well in advance to avoid any last minute unforeseen hassle. **AEGCL requested all the bidder to visit the work site before participating in the Bid.**

2.0 Validity of Bids

- 2.1. Bids shall remain valid for the period of **180 days** after the bid submission deadline date prescribed by AEGCL. In exceptional circumstances, prior to the expiration of the bid validity period, AEGCL may request Bidders to extend the period of validity of their bids.

3.0 Bid Security:

- 3.1. All bids must be accompanied by a bid security amounting to ₹ **14,700.00 only** in the form of **BG** only from any Nationalised Bank payable at Guwahati in favour of the **Managing Director, AEGCL, Guwahati-01**.
- 3.2. Original copy of the bid security must be submitted to the O/O the DGM, Silchar T&T Circle, AEGCL, Silchar-15 along with the technical bid. Bid security shall have to be valid for **90 days beyond the validity** of Bid i.e. **270 days**.
- 3.3. The bid security of unsuccessful Bidders shall be returned as promptly as possible after the successful bidder has been allotted the work.
- 3.4. The bid security may be forfeited:
 - a) If a Bidder withdraws its bid during the period of bid validity specified by the Bidder.
 - b) If the successful Bidder fails to sign the Contract agreement within 15 (Fifteen) days from issue of the letter of intent/detailed orders and furnishing performance security.
- 3.5. The Bid Security of a JV (joint venture) shall be in the name of the JV (joint venture) that submits the bid.

4.0 Eligible Bidders

- 4.1. A Bidder may be a private entity or a government-owned entity or any combination of such entities with the intent to enter into an agreement supported by a letter of intent or under an existing agreement in the form of a joint venture, consortium, or association (JV). In the case of a JV:
- a) all partners shall be jointly and equally liable, and
 - b) the JV shall nominate a Representative who shall have the authority to conduct all business for and on behalf of any and all the partners of the JV during the bidding process and, in the event the JV is awarded the Contract, during contract execution.
- 4.2. A Bidder, and all partners constituting the Bidder, shall have Indian nationality. A Bidder shall be deemed to have the nationality of a country if the Bidder is a national or is constituted, incorporated, or registered and operates in conformity with the provisions of the laws of Republic Of India. This criterion shall also apply to the determination of the nationality of proposed subcontractors or suppliers for any part of the Contract including related services.
- 4.3. AEGCL considers a **conflict of interest** to be a situation in which a party has interests that could improperly influence that party's performance of official duties or responsibilities, contractual obligations, or compliance with applicable laws and regulations, and that such conflict of interest may contribute to or constitute a prohibited practice under Anticorruption Policy of Government of India and Government Of Assam. In pursuance Anticorruption Policy's requirement that Employer as well as bidders, suppliers, and contractors observe the highest standard of ethics. AEGCL will take appropriate actions if it determines that a conflict of interest has flawed the integrity of any procurement process.
- Consequently all Bidders found to have a conflict of interest shall be disqualified. A Bidder may be considered to be in a conflict of interest with one or more parties in this bidding process if, including but not limited to:
- (a). they have controlling partners in common; or
 - (b). they receive or have received any direct or indirect subsidy from any of them; or
 - (c). they have the same legal representative for purposes of this bid; or
 - (d). they have a relationship with each other, directly or through common third parties, that puts them in a position to have access to information about or influence on the bid of another Bidder, or influence the decisions of the Employer regarding this bidding process; or
 - (e). a Bidder participates in more than one bid in this bidding process. Participation by a Bidder in more than one Bid will result in the disqualification of all Bids in which it is involved. However, this does not limit the inclusion of the same subcontractor, not otherwise participating as a Bidder, in more than one bid; or
 - (f). a Bidder or any of its affiliates participated as a consultant in the preparation of the design or technical specifications of the plant and services that are the subject of the bid.
- 4.4. A firm that is under a declaration of ineligibility by the AEGCL or any Government Entity or PSU at the date of the deadline for bid submission or thereafter i.e. on or before contract signing date shall be disqualified.
- 4.5. Bidders shall provide such evidence of their continued eligibility satisfactory to the AEGCL, as the Employer shall reasonably request.
- 5.0** The Bidder must have experience of executing work of similar nature previously. The bidder must submit experience and completion certificate for scrutiny by AEGCL.
- 5.1 **A person, Firm or any other prospective bidder who is involved in fraud, unethical practices or barred from submitting bids by AEGCL or any sister concerns of AEGCL i.e. APDCL & APGCL will not be allowed to participate in the bids. If such cases are detected after submission of the bids, in later stages of the bidding process, then such bids will be rejected outright.**
- 6.0 Financial Capability:**
- 6.1. Bidder will require to submit along with the bid the audited balance sheets, IT return and other legal financial statements acceptable to AEGCL, for the **last 3 (three) years** to demonstrate the current soundness of the Bidders financial position and its prospective long term profitability. As a minimum, an Applicant's net worth calculated as the difference between total assets and total liabilities should be positive.
- 6.2. **Average Annual Turnover** : Minimum average annual turnover required are as follows and will be calculated as total certified payments received for contracts in progress or completed within the last 3 (Three) Years.
- (a) INR 2,20,000.00**

7.0 Experience:

- 7.1. (a) The Bidder should have successfully completed at least 3 (Three) contracts having the work value of not less than **INR 2,93,000.00** in similar nature of work within last 7 (Seven) financial years. Documentary evidence such as work order and completion certificate must be submitted.
- (b) The Bidder should have successfully completed at least 2 (Two) contracts having the work value of not less than **INR 3,66,000.00** in similar nature of work within last 7 (Seven) financial years. Documentary evidence such as work order and completion certificate must be submitted
- (c) The Bidder should have successfully completed at least 1 (One) contract having the work value of not less than **INR 5,86,000.00** in similar nature of work within last 7 (Seven) financial years. Documentary evidence such as work order and completion certificate must be submitted
- 7.2. The bidders who have already been awarded works from this end but not completed in time and also applied for time extension for several times, they are not eligible for participating in this tender process.
- 7.3. (a) List of contracts for similar Works and services executed in the past three years with copies of LoAs and execution status of each contract supported by client's certificate.
- (b) Audited Annual Accounts certified by CA of the company for the last three (3) years (in case of companies) or IT Return duly acknowledged by the tax department for the last three (3) years (in case of bidders other than companies)
- (c) Copies of Professional Tax Clearance Certificate, PAN and/or TAN Card, Registration Certificate (Form GST REG - 06) issued under Goods and Services Tax Laws.

7.4. Mandatory Submission, failing of any may led to rejection of BID.

- (a) **GST Registration Certificate**
- (b) **PAN Card**
- (c) **Valid Labour Licence**
- (d) **IT Return of Last 3 (three) financial years**
- (e) **Audited Balance Sheet of last 3 (three) Financial years**
- (f) **Bank Solvency Certificate**
- (g) **Affidavit stating the List of requisite T&P, equipments & machineries**
- (h) **List of Technical Man Power on pay Roll.**
- (i) **List of Technical Man Power on Contractual Basis.**

NB:- **Hard Copies of all the aforesaid listed documents must be submitted along with the bid.**

8.0 Evaluation Criteria:

- 8.1. Techno-Commercial Evaluation will be done on the basis of Work experience and Financial Capability as well as other requisite credential supposed to be submitted by the bidder.
- 8.2. Price Bid of only **Responsive Techno-Commercial Bid** will be opened.
- 8.3. **Arithmetical Error**, if observed during evaluation of Price Bid, same will be corrected and the value after correction will be taken into consideration during evaluation of Price Bid.

9.0 Clarification

- 9.1. Interested Bidders requiring any clarification of the Bidding Document shall contact the AEGCL in writing at the AEGCL's address indicated in the BDS or raise his enquiries prior to 5 (Five) days of closing of the bid. The Employer will respond to any request for clarification, provided that such request is received no later than 5 (five) days prior to the deadline for submission of bids. The AEGCL's response shall be in writing with copies to all Bidders who have acquired the Bidding Document including a description of the inquiry but without identifying its source. If AEGCL feels it necessary to amend the Bidding Document as a result of a request for clarification, it shall do so.
- 9.2. **The Bidder is advised to visit and examine the site where the work is to be Carried out and its surroundings and obtain all necessary information on his own responsibility that may be necessary for preparing the bid and before entering into a contract for the provision of plant and services. The costs of visiting the site shall be at the Bidder's own expense.**

- 9.3. **The Bidder and any of its personnel or agents will be granted permission by the Employer to enter upon its premises and lands for the purpose of such visit, but only upon the condition expressed by the Bidder or its personnel and agents. The bidder will remain entirely liable/responsible for any death or personal injury, loss of or damage to property, as well as any other loss, damage of departmental property. The costs, and expenses of any such damages if happens during said inspection will be recovered from the concerned bidder.**

10.0 Amendment of Bidding Document

- 10.1. At any time prior to the deadline for submission of bids, the Employer may amend the Bidding Document by issuing addenda.
- 10.2. Any addendum issued shall be part of the Bidding Document and shall be communicated in writing to all who have obtained the Bidding Document from AEGCL.
- 10.3. To give prospective Bidders reasonable time in which to take an addendum into account in preparing their bids, AEGCL may, at its discretion, extend the deadline for the submission of bids.

11.0 Preparation of Bids By The Bidders:

11.1. Cost of Bidding

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

11.2. Language of Bid

The Bid, as well as all correspondence and documents relating to the bid exchanged by the Bidder and AEGCL, shall be written in the English language.

11.3. Bid Prices and Discounts

- 11.3.1. Unless otherwise specified in the Bid Document and/or AEGCL's Requirements, bidders shall quote for the entire plant and services on a —single responsibility basis such that the total bid price covers all the Contractor's obligations mentioned in or to be reasonably inferred from the bidding document in respect of the including procurement and subcontracting (if any), delivery, construction, installation and completion of the Work. This includes all requirements under the Contractor's responsibilities for completing the work and where so required by the bidding document, the acquisition of all permits, approvals and licenses, etc.; the operation, maintenance and training services and such other items and services as may be specified in the Bidding Document, all in accordance with the requirements of the General Conditions. Items against which no price is entered by the Bidder will not be paid for by the Employer when executed and shall be deemed to be covered by the prices for other items.
- 11.3.2. Bidders are required to quote the price for the commercial, contractual and technical obligations outlined in the bidding document.
- 11.3.3. GST , Royalty and all other taxes (as applicable) payable on the work should be shown separately.
- 11.3.4. Since the work is being "work contract" which is one and individual and which involves no separate contract for the sale of materials, the contractor shall have not be entitled to get any other taxes, levies reimbursed from the AEGCL for the supply of the materials.
- 11.3.5. Taxes like work contract, income tax etc. which need to be deducted at source as per the prevailing law of the land, will be deducted at source.
- 11.3.6. **Every pages of the Tender document should be signed by tenderer. Every correction in the tenderers rates should bear the tenderer's signature before submission**
- 11.3.7. **The prices shall be FIXED & FIRM.**
- The Bided Price should on Fixed Price basis, prices quoted by the Bidder shall be fixed during the Bidder's performance of the contract and not subject to variation on any account. A bid submitted with an adjustable price quotation will be treated as non-responsive and rejected.

12.0 Additional Requirements:

- 12.1. Detailed list of tools, plants, equipment's and machinery available with the tenderer along with their value (A copy of approved assessor's certificate to be enclosed or affidavit).
- 12.2. Name, qualifications of the technical supervisors and staff under the employment of the tenderer and organization on hand and proposed to be engaged for the subject work (Authenticated by a Chartered Accountant or sworn through affidavit).
- 12.3. Other facilities available with the tenderer not covered hither to.
 - 12.3.1. Bidders(s) knowledge from actual personal investigation of the resources of the region or District (S) in which he/they offers the work.
 - 12.3.2. Copy of Contract labour license.
 - 12.3.3. The Bidder shall furnish copy of their PAN Card. The card must be in the name of firm, in case the tenderer is a partnership Firm.
 - 12.3.4. In case the tenderer is a partnership Firm, the work experience, solvency and turn over shall be in the name of partnership Firm only.
 - 12.3.5. GSTN certificate/ and valid labour license.
 - 12.3.6. Registered Power of attorney, if any.

13.0 Negotiation with successful bidder:

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

14.0 Contract Agreement:

- 14.1. An agreement shall have to be drawn on non judicial stamp of appropriate value with the Department by the selected Contractor in AEGCL's General Conditions of Supply and Erection 2009 of contract within 10 (ten) days from the date of issue of the LOI/Work Order.
- 14.2. Wherever there is any variation in between the conditions of the AEGCL's General Conditions of Supply and Erection 2009 and the above terms & conditions, this bid conditions will supersede the conditions of the AEGCL's General Conditions of Supply and Erection 2009.

15.0 Liquidated Damage:

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

- 15.1. An amount at the rate of 0.5% (Zero Point Five percent) of the Contract Price per week or part thereof for the delay, subject to maximum of 10% (Ten percent) of the contract price will be recovered as liquidated damage by AEGCL.

However, the payment of liquidated damages shall not in any way relieve the Contractor from any of its obligations to complete the works or from any other obligations and liabilities of the Contractor under the Contract.
- 15.2. Contractual failure:- Refer clause No.27.1 of AEGCL's General Conditions of supply and erection 2009.

16.0 PERT Chart and/or BAR Chart:

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

17.0 Site Facility

- 17.1. AEGCL will not provide any accommodation at the work site for the contractor and their field personnel. The same have to be arranged by the Bidder/Firm from their own. The contractor shall provide Medical/Hygienic facilities to the personnel engaged by them.

The quoted price shall be deemed to include charges for all site facilities for labour that are considered necessary for execution of the work. Subject to availability of land the AEGCL may provide free site for labour camp, construction of yard etc close to site of work.

No assurance can be given regarding the vulnerability of AEGCL's land given for use to the Bidder to flooding during high floods. The AEGCL undertakes no responsibility or liability in this regard.

The bidder shall make his own arrangement for arranging power supply as may be required for work. The AEGCL may, however assists in recommending his/their application to the Electricity Supply Utility for the power supply on payment basis as per norms of the Electricity Supply Utility.

- 17.2. No claim shall be entertained from the bidder for making his own arrangement for approach roads from outside PWD road to the site and bidder will bear entire expenses

18.0 Insurance:

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

19.0 Warranty:

The term period of warranty shall mean the period of 6 months from the date of completion of the work.

20.0 Safety:

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

21.0 Pollution:

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

22.0 Payment Terms:

- 100% payment will be made through 1st and Final bill after completion of the work
- **Source of Fund: State Annual Plan Fund, GoA**

- 22.1. TDS as applicable at actual will be deducted from the payable amount against the invoice/bill.

- 22.2. The Bidder / Firm will have to submit the following Bank details.

- (a) Banker's Name & Branch
- (b) Account No
- (c) Banker's address
- (d) Banker's IFSC Code
- (e) Banker's RTGS Code

23.0 Performance Security Deposit:

- 23.1. The successful bidder shall have to deposit through a **Bank Guarantee** from a Nationalized or scheduled Bank of RBI in AEGCL's standard proforma on non-judicial stamp of appropriate value for an amount equivalent to 10% (ten percent) of the total value of the order as performance security, immediately within 10 (ten) days from the issue of the letter of intent/detailed orders (as the case may be), duly pledged in favour of **The Managing Director, AEGCL** and such security deposit shall be valid up to 30 days beyond the warranty period of 6(Six) months. The Performance Bank Guarantee (BG) should be submitted directly to the **Deputy General Manager, STTC, Botertol, Meherpur, Silchar-15.**

- 23.2. Please note that, if the selected Bidder / Firm fails to furnish the requisite performance security as stated above and/or sign the Contract Agreement within the stipulated period as will be specified in the LOI/work order then the issued LOI/Work order will automatically be Null & void.

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

23.4. No interest shall be payable on such deposits.

24.0 Force Majeure Condition:

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

25.0 Settlement of Dispute and Arbitration:

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

26.0 Scope of Work:

Erection, Testing & Commissioning of 50MVA , 132/33kV Transformer along with other associated works at Srikona Grid Substation (Augmentation Work of Transformer).

The scope of work under this contract consist of providing of all labours, materials, scaffolding, equipment and plants and transportation of all incidental items not shown or specified but reasonably implied or necessary for the proper completion of work. The scope of work will also include complete civil works associated with transformer augmentation..

29.0__Additional Works If Any:

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

The actual necessary cost will include:-

- (a) Market value of the materials utilized in the extra work, excluding taxes and duties, if any. Taxes will be dealt separately.
- (b) Actual cost of handling and transportation of materials, wherever applicable.
- (c) Direct labour charges.
- (d) A reasonable allowances for the use of contractors plants and equipment, where required.
- (e) The actual charges of facility like electricity etc. where required.
- (f) Further overhead and supervision charges will be allowed @ 10% on the sum of (a) to (e) and a profit will be allowed @ 10% on the sum of (a) to (e). In case any materials or a part is furnished by the department no overhead and profit will be allowed on the value of such materials or parts.

30.0 Plea of Custom:

- (a) The plea of "Custom" prevailing will not on any account be permitted as an excuse for infringement of any of the conditions of contract or specifications.
- (b) The contract shall not be vitiated by any inadvertent omissions of any kind in the surveys, information, specifications, drawings or schedule of quantities.

31.0 Final Acceptance and Taking Over:

When the term of contract shall be fully complied with completing all works as per approved drawing and technical specifications to the satisfaction of the Department for a period as applicable, the Contractor/Firm shall have to submit completion certificate to the office of the undersigned after the satisfactory completion of the work through the executing authority for finalization of the work/payment as well as for the final acceptance and taking over the completed work and to issue the necessary certificate thereof.

32.0 Right to Reject:

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

33.0 Specials Terms and Condition.

QUALIFICATION REQUIREMENTS FOR ERECTION, TESTING & COMMISSIONING

- The bidder should have carried out erection, testing, commissioning and test charging of at least two nos. of 132 kV or above class transformers at 132 KV sub stations satisfactorily during last five years before date of submission of the bid.
- The bidder should arrange requisite tools and tackles including adequate capacity hydraulic crane having suitable adjustable boom length for erection of bushing, radiators, conservator, and other associated costly equipments.
- The bidder should have team of trained personnel and skilled labour force and supervising engineers to carry out erection, commissioning, testing and test charging work including laying of control cables and wiring of OLTC gear scheme and inter connection of RTCC panel with D.M., of OLTC., wiring of cooler control scheme and cooling fans including automatic operation of cooler control etc.

ERECTION OF TRANSFORMER

- Erection includes entire vacuum by proper capacity of vacuum pump, for not less than 48 hours, or more if required as per the instruction of engineer in charge.
- Oil may be supplied in tanker/steel drums, which should be properly sealed during transportation and storage. Seal shall be verified and opened by AEGCL representative before filling in transformer. Contractor should have enough storage capacity for handling oil. Filling the oil from tank/drums to the transformer shall be through 5000 ltrs. or more capacity high quality filter machine and filtration of the same shall be carried out to get desired BDV & PPM as per IS/IEC/specification.
- Contractor has to replace all the gaskets by new ones if required by engineer –in –charge.
- Erection shall include wiring of cooling fans, RTCC panels, terminations of alarm and trip contacts from buchholz relay, WTI, OTI, PRD to M.K. box and in turn to remote relay panel and RTCC panel in control room. Required cabling on the transformer as well as from transformer to control room shall also be included in scope of work. The testing and commissioning of OLTC as well as cooler control scheme shall be carried out as per instruction of engineer in charge.
- The contractor shall arrange nitrogen cylinder required at site for above work. In case of any breakage of any item, contractor has to follow up with insurance for the claims and amount for damage /breakage will be with held from contractor's bill till the time claim is finalized by insurance company.
- Minimum 10 Nos. of good skilled fitters, with 2 Nos. qualified supervisors and senior engineer having sufficient experience should be posted at site during the above work.

- Contractor has to repaint the transformer tank with two coat of anti rusting good finish LTBS grey shade 631 of IS:5 by spray painting as per the direction of engineer in charge. Contractor is required to carry out all minor/major fabrication work of pipes and hangers if required at site as per direction of engineer in charge.
- All tools and tackles, testing equipments listed here under are to be arranged by the contractor.
- Contractor shall arrange required capacity of oil tanker atsite.
- Any other items not mentioned above but required for successful completion of erection shall have to be arranged by the contractor.

TOOLS REQUIRD FOR THE PURPOSE OF ERECTION, TESTING & COMMISSIONING

- One or two mobile crane hydraulic of adequate capacity with long boom of 30 ft. bearing free vertical lifts suitable for lifting HV bushing.
- Steel/Manila/Nylon ropes and D shackle for lifting of 3-ton weight.
- 4000 or 6000 liters. / hr. capacity filter machine in excellent working condition. It must be capable of heating transformer oil up to 80⁰ C and must be equipped with built in high vacuum pump and chamber filter elements.
- Following accessories should also be made available.
- Non-collapsible hose piping of size 40 mm to 80 mm with nipple and flange.
- Hosepipe should be of oil resistant 2" to 3" BSP suitably threaded for connecting hose pipes & provided with holes for fastening.
- 2 Nos. storage tanks for insulating oil of adequate capacity provided with 2 bottom drain cum filter valve and another 2[□] top valve.
- Two complete sets of ring and flat spanners of metric size up to 4 to 36.
- One complete set of Allen keys.
- One complete set of screw drivers.
- 3-ply nylon rope of 15 mtr. Length suitable for 1/4 " shackle.
- 4 nos. of flange each of 1", 2" to 3" BSP suitably threaded for connecting hose pipe & provided with holes for fastening.
- Multi stage vacuum pumping system capacity 250-500 mm cu/hr. & should be able to create absolute vacuum of 1 tor or 1.3 m bar or less having following accessories.
- Non return valve at inlet.
- GI pipe/non-collapsible pipes with flange for connecting vacuum pump to transformer main tank.
- Vacuum gauge for reading 0 to 50 mm along with flange for fitting at top of transformer of any suitable size 3/16" and 3/8" set in good quality.
- Oil testing kit in good working condition having 2.5mm and 4 mm guage for adjusting the gap, 2.5/5 KV megger motor driven and capable of reading up to 50000 M-OHM.
- 3 Ltrs. Of CTC.
- Hot air blower for drying out of bushing.
- Required nitrogen cylinder.
- Stainless steel bottles for samples.
- Gas cylinder with nozzle torch for gas cutting etc.
- Any other item required for successful completion of the work.

**BOQ-1 for Erection, Testing & Commissioning of 50MVA , 132/33kV
Transformer at Srikona Grid Sub-Station**

Sl. No	Job	Unit	Quantity	Rate (Rs)	Amount (Rs.)
1	(a)Transportation of dragging materials like wooden sleeper, hydraulic jack, chain pulley block, Rail pol etc from Guwahati to Srikona and back (approx one way distance= 350km)	per truck	2 way		
	(b) 2 (two) times Loading and unloading at both end (approx 8 MT)	per MT	8 MT X2		
2	Cost of fuel filling regarding Transportation of 1 No. Deptt.Truck mounted filter machines from Guwahati to Srikona and back. (Distance 350 km x 2 =700 km approx)	litre	100		
3	Preparation of site at Srikona s/s by engaging unskilled daily labours	Mandays	30		
4	Dragging out of the old transformer from pad to safe storage point (approx dragging distance=70 Mtr)	per MT/Meter	51 MT		
5	Dragging out of the new transformer (without oil) and accessories from storage point to transformer pad (approx dragging distance=40 Mtr)	per MT/Meter	57.5 MT		
6	Preparation of oil in the intermediate tank by engaging 5 Nos. unskilled labour under supervision of Deptl. Authority for 3 days	Mandays	15		
7	Dismantling & Restringing of 33 kV panthar conductor by engaging 10 Nos Skilled Manpower for 1 day.	Mandays	10		
8	Dismantling of 33 kV gantry	per Job	1		
9	Preparation of shed (including the cost of terpolyn & bamboo etc. Complete with labour charges) over the transformer for fitting and fixing of accessories	per Job	1		
10	Hiring of "Hydra" for lifting and fitting of transformer accessories at Srikona GSS	per Day	1		

11	Manpower for fitting and fixing of transformer accessories by engaging 10 Nos. Skilled Manpower for 2(days)	Mandays	20		
12	Modification of M.B position & re-alignment & re-laying of protection and indication cable by engaging 10 Nos skilled labour under supervision of Deptl. Authority for 1 days	Mandays	10		
13	Vaccum drying of the transformer by engaging 5 Nos skilled labour under supervision of Deptl. Authority for 2 days	Mandays	10		
14	Pushing oil to the transformer and circulation thereafter by engaging 5 Nos. skilled labour under supervision of Deptl. Authority for 2 days	Mandays	10		
15	Removal of gravel, steel grill of transformer by engaging 10 Nos unskilled labour under supervision of Deptl. Authority for 1 days	Mandays	10		
16	Removal of and dragging of cables from old M.B by engaging 10 Nos unskilled labour under supervision of Deptl. Authority for 1 days	Mandays	10		
17	Removal and reconnection of OLTC cables from old to the new transformer by engaging 5 Nos. skilled labour under supervision of Deptl. Authority for 2 days	Mandays	10		
18	Removal, modification and reconnection of earthing points of the old transformer to the new one by engaging 5 Nos. skilled labour under supervision of Deptl. Authority for 1 day	Mandays	5		
19	Removal of neutral CT along with its structure and re-installation of the same	per Job	1		
20	Removal of jumpers of HV, LV, neutral bushing and 33 kV LA and refitting after erection of new transformer by engaging 10 Nos. skilled labour under supervision of Deptl. Authority for 2 days	Mandays	20		
21	Removal of 3 nos 33 KV LA along with structure and refitting after erection of new transformer	per Job	1		

22	Erection of 33 kV Gantry (considering rate of dismantling)	per Job	1		
23	Testing and Commissioning of the transformer in presence of manufacturer's representative by engaging 10 Nos. skilled labour under supervision of Deptl. Authority for 2 days	Mandays	20		
24	Retrofitting of cooling gear structure.	per unit	2		
25	Construction of Transformer M.B pad	per Job	1		
26	Removal of old RTCC panel and erection of new one including reconnection of cables by engaging 5 Nos. skilled labour under supervision of Deptl. Authority for 2 days	Mandays	10		
27	EARTHWORK IN EXCAVATION	Cum	12.86		
	Earthwork in excavation for foundation trenches of walls, retaining walls, footings of column, steps, septic tank etc. including refilling (return filling) the quantity as necessary after completion of work, breaking clods in return filling, dressing, watering and ramming etc. and removal of surplus earth with all lead and lifts as directed and specified in the following classification of soils including bailing out water where necessary as directed and specified.				
	(A) Up to a depth of 2.00m below the existing ground level.				
	(b) In hard/ dense soil				
28	Providing soling in foundation and under floor with stone/ best quality picked jhama brick, sand packed and laid to level and in panel after preparing the subgrade as directed including all labour and materials and if necessary dewatering, complete.	Sqm	8.74		
	(a).Brick on flat soling.				

29	Providing form work of ordinary timber planking so as to give a rough finish including centering, shuttering, strutting and propping etc., height of propping and centering below supporting floor to ceiling not exceeding 4.0M and removal of the same for in-situ reinforced concrete and plain concrete work in:	Sqm	4.17		
	3.1.1.1 Foundation, footings, bases of columns, pile cap, raft and mass concrete works etc.				
	(b) Using 25mm thick plank				
30	Plain cement concrete works with coarse aggregate of sizes 13mm to 32mm in foundation bed for footing steps, walls, brick works etc. as directed and specified including dewatering if necessary, and curing complete (shuttering where necessary shall be measured and paid separately).	Cum	0.6		
	(a) In prop 1cement: 3 sand :6 coarse aggregate by volume				
31	Brick work in cement mortar with 1st class brick including racking out joints and curing complete as directed.	Cum	1.84		
	(I) In Sub-structure upto plinth level including dewatering if necessary				
	(a) In proportion 1:3.				
32	15 mm thick Cement plaster in single coat on single or half brick wall for interior plastering up to 1st floor level including arises, internal rounded angles, not exceeding 80mm girth and finished even and smooth including curing complete as directed.	Sqm	17.67		
	B) On fair side				
	b) In cement mortar 1:4				

33	<p>Supplying, fitting and fixing in position reinforcement bars conforming to relevant I.S. Code for R.C.C. work/ R.B. walling including straightening, cleaning, cutting and bending to proper shapes and length as per details, supplying and binding with 20G annealed black wire and placing in position with proper blocks, supports, chairs, spacers etc. complete. (No extra measurement for lap, hook, chair, anchor etc. will be entertained in the measurement as they are included in the rate) (Upto 1st floor level)</p> <p>a) From Primary Producer: TATA/SAIL/Esser Steel/ Jindal steel/Shyam steel/RINL</p> <p>(i) TMT Corrosion resistant steel (CRS) reinforcement bar</p>	Qtl	0.79		
34	<p>Providing and laying plain/reinforced cement concrete works cement, coarse sand & 20mm down graded stone aggregate including dewatering if necessary, and curing complete but excluding cost of form work and reinforcement for reinforced cement concrete work (form work and reinforcement will be measured and paid separately)</p> <p>(I) Using Mixer Machine</p> <p>(A) In substructure up to plinth level</p> <p>Foundation, footing, columns with base tie and plinth beam, pile cap, base slab, retaining walls, walls of septic tank, inspection pit and the like and other works not less than 100mm thick up to plinth level.</p> <p>N) Without using admixture, plasticiser</p> <p>b) M20 grade concrete or Prop. 1:1.5:3</p>	Cum	0.81		
Total Estimated Value:-					

Add GST @ 18% =
Grand Total Estimated Value:-