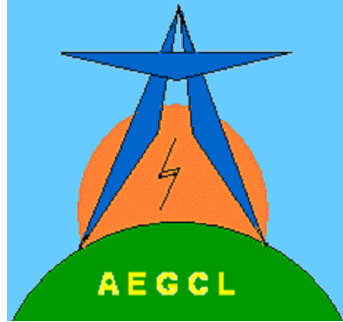


ASSAM ELECTRICITY GRID CORPORATION LIMITED

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

CIN:U40101AS2003SGC007238

Ph:-0361-2739520/Fax:-0361-2739513 Web: www.aegcl.co.in



OFFICE OF THE DEPUTY GENERAL MANAGER
SILCHAR T&T CIRCLE, AEGCL
MEHERPUR, SILCHAR-15

TENDER DOCUMENT

NAME OF WORK:- Construction of foundation, erection, testing and commissioning of one (01) number 33 kV Bay at 132/33 kV Panchgram GSS for feeding power to 33/11 kV Karimganj(Subashnagar) ss of APDCL.

NIT No:-AEGCL/STTC/TECH-12/2020-21/002 Dated :22/06/2020

ISSUED TO:-
(NAME OF THE CONTRACTOR) :

ISSUED BY :-
Name & Designation. (With Seal)

Bidders Signature & Seal



ASSAM ELECTRICITY GRID CORPORATION LIMITED
SILCHAR T&T CIRCLE, MEHERPUR, SILCHAR-15

NOTICE INVITING TENDER
(No-AEGCL/STTC/TECH-12/2020-21/002 Dated :22/06/2020)

The Deputy General Manager, Silchar T&T Circle, AEGCL, Meherpur, Silchar-15 invites Tenders against Administrative Approval vide Letter No-AEGCL/MD/Tech-723/33 kV Bays (APDCL)Deposit/2017/63 dated 24.04.2020 under sealed cover from reputed contractors/firm, competent enough for the following works.

Name of Work	Estimated Amount (₹) (including GST)	Earnest Money (₹)	Time of Completion from the date of formal handing over of site
Construction of foundation, erection, testing and commissioning of one (01) number 33 kV Bay at 132/33 kV Panchgram GSS for feeding power to 33/11 kV Karimganj(Subashnagar) ss of APDCL.	9,47,304.00	19,000.00	90 Days

Key Dates	
Starting Date & Time for download of Bid Document	23.06.2020 from 10.30 AM Onwards.
Bid Submission End Date & Time – (Offline)	07.07.2020 till 02.00PM
Techno-Commercial Bid Opening Date & Time -	07.07.2020 at 02.30PM

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 Bid Submission End Date of BID i.e. **07.07.2020** 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,

Bidders Signature & Seal

AEGCL. Silchar-15.

Memo No. AEGCL/STTC/Tech-12/2020-21/085(a) Date: **22/06/2020**

Copy to:

1. The Chief General Manager (PP&D), 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 General Manager (Projects), AEGCL, Bijulee Bhawan, Paltan Bazar, Guwahati-01- for kind information
4. The AGM -IT, O/o the MD, AEGCL, for publication of the NIT & bid document in AEGCL's Website. (copy enclosed)
5. The AGM (PRO), O/o the MD, AEGCL for publication of the NIT in The Assam Tribune, Dainik Jugasankha (silchar Edition).
6. 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.
7. Notice Board of STTC.

S/D

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

Silchar-15.

For and on behalf of the Managing Director, Assam Electricity Grid Corporation Limited (AEGCL), the Deputy General Manager, Silchar T&T Circle, AEGCL, Silchar-15 invites tender from reputed Engineering firm/Contractor for the work “**Construction of foundation, erection, testing and commissioning of one (01) number 33 kV Bay at 132/33 kV Panchgram GSS for feeding power to 33/11 kV Karimganj(Subashnagar) ss of APDCL**”.A single stage two envelope procedure (Techno-Commercial and Price Bid) will be adopted for this tender.

(A) INFORMATION TO BIDDER:

1. **NAME OF WORK:-Construction of foundation, erection, testing and commissioning of one (01) number 33 kV Bay at 132/33 kV Panchgram GSS for feeding power to 33/11 kV Karimganj(Subashnagar) ss of APDCL.**
2. **LOCATION OF WORK:-132/33 KV Grid Sub-Station AEGCL Panchgram.**
3. **TENDER ADDRESS:- o/o the Deputy General Manager Silchar T&T Circle,AEGCL, Silchar-15**

4. BIDDING PROCEDURE:-

- a) All tenders shall have to be submitted in prescribed forms attached herewith eventually to be drawn up in the rules of AEGCL.
- b) Two different envelopes to be used as follows.
Envelope-1: Bid document signed by bidder on all pages, Earnest Money, Techno-commercial data of the Bidder and other necessary documents must be enclosed.
Envelope-2: Price Bid
- c) All tenders shall have to be submitted under sealed& signed covers super-scribing the Tender Notice No and name of the work completely and clearly on the top of the cover.
- d) All tenders shall have to be submitted on or before the last date and time of submission of tenders either by post or in person.
- e) If Bidders desire to submit their Bid by post, at their own expenses, it should be posted well in advance so as to ensure that their tenders reach the office of the tendering address on or before the specified date and time of submission of tender. AEGCL will not take any responsibility for loss, damage, tempering or delay of tenders sent by post.
- f) Bidder submitting Bid in person should submit their Bid in the tender box during the working hours on the last date and time of submission of tender.
- g) Tender will be rejected if submitted beyond the aforesaid time and date.
- h) Tenders or their authorized representatives may remain present during the opening of the tenders.
- i) Only Price Bid of responsive Techno-Commercial Bidders will be opened.
- j) AEGCL has the right to cancel the tender at any moment, without assigning any reason thereof. Bidder will not be entitled to claim any expenses and AEGCL will not be responsible for any costs or expenses incurred on the preparation and submission of the Bids.
- k) Bidders may obtain further information from the office Deputy General Manager, Silchar T&T Circle, AEGCL,Silchar-15. For the purpose of preparation of their bid.

5.	KEY DATES:-	Date	Time
a)	Starting Date & Time for download of Bid Document	23.06.2020	from 10.30 AM Onwards.
b)	Bid Submission End Date & Time – (Offline)	07.07.2020 till	02.00PM
c)	Techno-Commercial Bid Opening Date & Time -	07.07.2020at	02.30PM

6. **TENDER PAPER COST AND MODE OF PAYMENT:-**

Bidder has to pay Non-Refundable tender document cost @Rs.1,000.00 (Rupees one thousand) only in the form of Demand Draft duly pledged in favour of the **Managing Director, AEGCL, Paltan Bazar, Guwahati-1.** along with relevant documents in the Envelope-1.

7. **BID SECURITY/EARNEST MONEY AND MODE OF PAYMENT:-**

- a) For participation in bidding procedure, participants must compulsorily pay the Bid Security of **Rs. 19,000.00 (Rupees Nineteen Thousand)** only in the form of Demand Draft duly pledged in favour of the **Managing Director, AEGCL, Paltan Bazar, Guwahati-1, payable at Guwahati.** The original copy of the Bid Security must be submitted along with relevant documents in the Envelope-1.
- b) The bid security of the successful Bidder shall be returned as promptly as possible once the successful Bidder has signed the Contract and furnished the required performance security.
- c) The bid security of unsuccessful Bidders shall be returned as promptly as possible upon the successful Bidder's furnishing of the performance security.
- d) The bid security may be forfeited:-
 - (i) if a Bidder withdraws its bid during the period of bid validity period.
 - (ii) if the successful Bidder fails to sign the Contract within the specified period.
 - (iii) if the successful Bidder fails to furnish a performance security within 15 (fifteen) days time of issue of Letter of Intent (LOI).

8. **PERFORMANCE GUARANTEE:-**

- a) The materials and entire work is to be guaranteed against defective design, materials and workmanship and for satisfactory performance for a period of **18 (Eighteen) Months** from the date of final acceptance of the completed work. Performance Guarantee will be in the form of Bank Guarantee of 10% of the contract amount.
- b) 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, within allotted time on acceptance of letter of intent/detailed orders (as the case may be), duly pledged in favour of the **Managing Director, AEGCL, Paltan Bazar, Guwahati-1** and such security deposit shall be valid up to **60 days beyond the warranty period of 18 (eighteen) months.**
- c) If the contractor/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.
- d) If the value of the work increases from original ordered value, the contractor has to provide performance guarantee for additional amount.
- e) No interest shall be payable on such deposits.

9. CLARIFICATIONS:-

- a) A prospective Bidder requiring any clarification of the Bidding Document shall contact the AEGCL in writing at the AEGCL's address indicated in the Bid Document or raise his enquiries prior to 7 (seven) days of closing of the bid. AEGCL will respond to any request for clarification if deemed necessary. Should AEGCL deem it necessary to amend the Bidding Document as a result of a request for clarification, it shall do so.
- b) The Bidder is advised to visit and examine the site where the work is to be Carried out and its surroundings and obtain for itself on its own responsibility all information that may be necessary for preparing the bid and entering into a contract. The costs of visiting the site shall be at the Bidder's own expense.
- c) The Bidder and any of its personnel or representatives will be granted permission by AEGCL to enter upon its premises and lands for the purpose of such visit, but only upon the express condition that the Bidder and its personnel will release and indemnify the Employer and its personnel from and against all liability in respect thereof, and will be responsible for death or personal injury, loss of or damage to property, and any other loss, damage, costs, and expenses incurred as a result of the inspection.

10. VALIDITY OF BID:-

- a) Bid shall remain valid for the period of 180 days after the submission deadline date prescribed by AEGCL. In exceptional circumstances, prior to the expiration of the Bid validity period, AEGCL may request Bidders to extend the period of validity of their bids. The request and the responses shall be made in writing.

11. TIME OF COMPLETION:-

- a) **The allotted time of completion for the work is 90(Ninety) days from formal handing over of the site.**

12. DISCLAIMER:-

- a) AEGCL is not committed contractually in any way to those Bidders whose Bid are accepted. The issue of this Bid does not commit or otherwise oblige AEGCL to proceed with any part or steps of the process.

13. AMENDMENT OF TENDER DOCUMENT:-

- a) At any time prior to the deadline for submission of bids, the Employer may amend the Bidding Document by issuing addenda.
- b) 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.
- c) Any corrigendum/Addendum/modifications issued to the bid documents will be published on the website mentioned above will be part of the Bid Document.

14. LANGUAGE OF BID:-

- a) 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.

15. NEGOTIATION WITH BIDDER:-

- a) The AEGCL reserve the right to hold negotiations with lowest bidder if AEGCL feels the quoted rates of particular item(s) are unreasonably high. The bid must be valid, eligible and technically acceptable and considered for award of contract.

16. VERIFICATION OF DOCUMENTS:-

- a) AEGCL reserves the right to verify the documents submitted by the bidders with issuing

authority and if any abnormalities are observed in the same, their bids will be rejected.

17. RIGHT TO REJECT:-

- a) AEGCL reserves the right to reject any or all the bids without assigning any reason thereof and AEGCL further reserves the right to split up the work order in favour of more than one Contractor. 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 Bid document 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.

(B) ELIGIBILITY QUALIFICATION.

1. ELIGIBLE BIDDERS:-

- a) A Bidder may be a private entity or a government-owned entity or any combination of such entity with the intent to enter into an agreement supported by a letter of intent or under an existing agreement in the form of a joint venture, consortium or association.
- b) In the case of the Joint Venture (JV):-
When the bidder is a Joint Venture (JV) of two or more firms as partners, all partners shall be jointly and severally liable. The JV shall legally authorize one of the partners as the lead partner for the purpose of submitting the bid, incur liabilities; receive payments and instructions on behalf of the others. A copy of the **registered** JV agreement, executed on Non judicial stamp paper, shall be submitted with the bid. However, in case of successful bid, the agreement shall be signed by all the partners, so as to be legally binding on all the partners.
- c) A Bidder, and all partners constituting the Bidder, shall have Indian nationality.
- d) 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.
- e) 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:-
- f) they have controlling partners in common; or
- g) they receive or have received any direct or indirect subsidy from any of them; or
- h) they have the same legal representative for purposes of this bid; or
- i) 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
- j) 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.
- k) 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.

- l) Bidders shall provide such evidence of their continued eligibility satisfactory to the AEGCL, as the Employer shall reasonably request.
- m) In case a prequalification process has been conducted prior to the bidding process, this bidding is open only to prequalified Bidders.
- n) The bidder must have experience of execution of work of similar nature previously. The bidder must submit experience and Performance Certificate for scrutiny by AEGCL.
 - o) **The contractor/bidder must possess a valid Electrical License of 33 kV and above issued by the competent authority.**
- p) **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.**

2. LEGAL ENTITY:-

- a) Verification may be undertaken to verify that an applicant is a bona-fide registered company or business. Bidders are required to provide evidence of the legal entity by providing a copy of an official document as mentioned in the appendix attached along with this bid document.

3. TECHNICAL QUALIFICATION:-

- a) Experience having successfully completed similar works during last 7(Seven) years ending last day of the month previous to the one in which applications are invited should be either of the following.
 - i) 3(Three) similar completed works costing not less than the amount equal to 40(forty) % of the estimated cost. or
 - ii) 2(Two) similar completed works costing not less than the amount equal to 50(fifty) % of the estimated cost. or
 - iii) 1(One) similar quoted completed works costing not less than the amount equal to 80(eighty) % of the estimated cost
- b) Definition of “similar works” should be clearly defined.
In addition to the above the criteria regarding satisfactory performance of works, personnel establishment, plant, equipments etc may be incorporated according to the requirement of the project.

If the nature of work and value differs from the above stated conditions, it will not be considered while evaluation of technical qualification.

4. FINANCIAL QUALIFICATION:-

- a) Average annual financial turnover during the last 3 three years, ending 31st march of the previous financial year, should be at least 30% of the estimated cost.
- b) Current bank solvency certificate must be submitted to show the bidder’s financial position.

5. EVALUATION CRITERIA:-

- a) The Techno-Commercial Evaluation will be done on the basis of technical qualification, Financial qualifications and fulfilment of the legal conditions.
- b) The Price Bid of only Responsive Techno-Commercial Bidders will be opened and intimation will be issued in due course.

(C) GENERAL CONDITIONS OF CONTRACT:

1. INSPECTION OF SITE:-

- a) The Bidder is advised to visit and examine the site where the work is to be carried out and its surroundings, nature of work, site conditions, area for storage of materials, establishment of labour camp, site office, means of access to the site etc. and obtain for itself on its own responsibility all information that may be necessary for preparing the bid and entering into a contract. The costs of visiting the site shall be at the Bidder's own expense. Non-familiarity with the site conditions will not be considered a reason either for extra claims or for not carrying out the work in strict conformity with the specifications & requirement.

2. PREPARATION OF BID:-

a) 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.

- b) Documents Establishing Conformity of the Goods and Services:-The documentary evidence of the conformity of the goods and services to the Bidding Document may be in the form of letter, drawings and data, and shall furnish. A detailed description of the essential technical and performance characteristics of the goods and services, including the functional guarantees of the Goods, in response to the specification.

- c) Bidder should note clearly that department should not take any responsibility for issuing of any materials, equipment and T&P's that may be required in the work.

- d) All materials, labours, equipment, T&P and heavy vehicle etc. required in the work shall have to be arranged by the bidder/contractor from his own sources in the event of allotment of the said work to him/them.

- e) Water to be used in the work should be clean and free from all impurities; the bidder should note that no water will be provided to them for the execution of the work from the department

- f) The department is also not bound to supply power that may be required in the execution of the work. However subject to the availability of the power source near the vicinity of the work site, the department on payment of tariff as applicable at the time of execution of work may arrange one point near the work site.

- g) The bidder should clearly understand that all materials to be utilized in the work must confirm to the specifications. No substandard materials will be allowed to utilize in the work. Samples of each and every materials to be brought to the site of work shall have to be get approved by the competent authority of the department before use.

- h) The contract must not be sublet under any circumstances. If any contractor found in doing so, his work liable to be terminated.

- i) The specification for the work shall be as per specification laid down in the items of work contained in the enclosed schedule of items of work or as per the APWD schedule of rates for Building (civil works), sanitary and Water supply and internal electrification respectively (whichever is applicable) but, certain modification in the specification and method of execution of work if required shall have to be carried out which shall be finalized with the contractor bilaterally through discussion.

3. PRICE BID:-

- a) 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, delivery, testing of materials, construction, labour cost, insurance, statutory requirements, and any other expenditure deemed necessary for completion of the Work. The rate should also include the cost of testing of materials at the approved laboratory, carriage and transportation of sample, preparation of report, submission of report in all respect as required by AEGCL. 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.

- b) Bidders are required to quote the price for the commercial, contractual and technical obligations outlined in the bidding document.
- c) **Bidders quoted price should include all cost of testing of materials, transportation of sample, storage, preparation and submission of report during approval period, construction period as well as after completion of the work.**
- d) **Bidders quoted price should include all cost of testing of concrete (destructive or non destructive) transportation of sample, storage, preparation and submission of report.**
- e) Taxes like work contract, income tax etc. which need to be deducted at source as per the prevailing law, will be deducted at source.
- f) The Bided Price should be 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.

4. SITE FACILITIES:-

- a) AEGCL will not provide any accommodation at the work site to the contractor and their field personnel. The same has to be arranged by the contractor on their own. However, AEGCL may provide space for storage of the materials but responsibility of the material and their safety shall be taken care of by the Contractor. In case of none availability of space under AEGCL the same should be arranged by the contractor outside AEGCL campus/work site at their own cost and responsibility.
- b) AEGCL shall not be responsible for the safety of the workers at site either on account of the works executed by the Contractor or on account of the works executed by any other agency involved at that time.
- c) AEGCL shall on no account be responsible for the expenses incurred by the Contractor during the progress of work at site, towards any incidental expenditure like medical amenities to the workers at site, security arrangements.
- d) 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, AEGCL may provide free site for labour camp, construction of yard etc. close to site of work.
- e) No assurance can be given regarding the availability of AEGCL's land given for use to the Bidder to natural calamities. AEGCL undertakes no responsibility or liability in this regard.
- f) The bidder shall make his own arrangement for arranging power supply as may be

required for work. AEGCL may, however assist 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.

- g) 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.
- h) AEGCL on no account shall be responsible for storage of materials or loss or pilferage or theft either in respect of the material stored or material already billed and paid for by the AEGCL.
- i) Any facilities available at site shall be utilized only with prior permission of AEGCL and it should not be taken as granted for availing such services.

5. DEFECT AFTER COMPLETION OF WORK:-

- a) The contractor shall make good at his own cost and to the satisfaction of AEGCL all defects, or other faults which may appear during the defect liability period. In default, AEGCL may employ and pay other agency or persons to amend and make good such damages. Losses and expenses consequent thereon or incidental thereto shall be made good and borne by the contractor, failing which the same shall be recoverable from the payment due to the contractor and performance guarantee. In the event of amount due and performance guarantee being insufficient, the balance amount will be recovered from the contractor from the amount due or retained for other works executed in AEGCL.

6. DEVIATION/ERROR IN DRAWING AND SPECIFICATIONS.

- a) In case of non-suitability of drawing or specifications, the matter to be brought to the notice of Competent Authority without any delay. Any modification or deviation should only be done after approval of Competent Authority.
- b) In case of any omission and error in the drawing and specification the same procedure as above should be followed.

7. VARIATION AND DEVIATION OF QUANTITY:-

- a) The Tendered rates shall hold good for any variations in the Tendered quantities for completion of work on account of any modification in the bill of quantities or design or specification.
- b) **Deletion of work:**
AEGCL and its representative have the right to delete or decrease any item or quantity from schedule of quantity at its discretion if deemed necessary. No claim by the contractor will be admissible for this deletion or deduction of Item/quantity from schedule of quantity.

8. LABOUR LEGISLATION:-

- a) The Bidder shall comply with the provisions of the Apprentices Act 1961, payment of Wages Act 1936, Minimum Wages Act 1948, Employees Liability Act 1938, Workmen's Compensation Act 1923, Industrial Disputes Act 1947, Maternity Benefits Act 1961, and the Contract Labour (Regulation and Abolition) Act 1970, Provident Fund Act or the modifications thereof or any other laws relating thereto and the rules made there under from time to time.
- b) The Bidder shall indemnify and keep indemnified AEGCL against payments to be made under and for the observance of the laws aforesaid and the Contractors' Labour Regulations without prejudice to his right to claim. The laws aforesaid shall be deemed to be a part of this contract and any breach thereof shall be deemed to be a breach of this contract.
- c) The Bidder shall at his own expense arrange for all the safety provisions for the safety

- of all workers and employees directly or indirectly employed on the work by the Bidder.
- d) The Bidder shall be fully responsible at his own expenses for compliance all the labour regulations and rules to be observed by them. The Bidder shall fully indemnify AEGCL against any action by the state and/or Central Government for any default or alleged default by the Bidder for violation of any of such rules and regulations. If, due to any default of the Bidder, AEGCL has to incur any expenditure for compliance of the rules and regulations or for any other reason connected with such default, AEGCL shall be entitled to recover from the Bidder all such expenditure in full from any payment due to the Bidder.

9. GOVERNMENT AND LOCAL RULES:-

- a) The Contractor shall conform to the provisions of all local bye-laws and acts relating to the work and to the regulations etc. of the Government and Local Authorities and of any Company whose system and design is proposed to be connected/utilized. The cost, if any, shall be deemed to have been included in his quoted rates, taking into account all liabilities and shall indemnify AEGCL against such liabilities and shall defend all actions arising from.

10. ELIGIBILITY OF CONTRACTORS EMPLOYEES:-

- a) The Contractor shall employ in and about the Execution of the works only such persons as are skilled and experienced in their several trades. A list of such personal should be submitted in corresponding Appendix.

11. ENGINEER AT LIBERTY TO OBJECT:-

- a) AEGCL's Site in-charge shall have right to remove any person provided by the Contractor who, in the opinion of the Site in-charge, misconducts himself, or is incompetent or negligent in the proper performance of his duties, or whose presence on Site is otherwise considered by the Engineer to be undesirable, and such person shall not be again allowed upon the Works without consent of the Engineer. Any person so removed from the Works shall be replaced immediately without hampering the work.

12. TAXES:-

- a) Any taxes, royalties and duties as per Govt. Law should be responsible of the contractor and must be included in their quoted rate.

13. INSURANCE:-

- a) 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 the land.

14. DAMAGE TO PERSON AND PROPERTY:-

- a) The Contractor shall be responsible for all injury to the work or to workmen, to persons, animals or things and for all damages to the structural and/or decorative part of property which may arise from the operations or neglect of contractor or its employees, against whether such injury or damage arise from carelessness, accident or any other cause whatsoever in any way connected with the carrying out of this Contract. The Contractor shall at his cost effect the insurance necessary and indemnify AEGCL entirely from all responsibility in this respect. The scope of insurance is to include loss or damage to the work and workmen due to carelessness, accident including fire, earthquake, floods, all medical expenses, compensation to be borne in the event of accident etc., damage or loss to the Contract itself till this is made over a complete state. Insurance is compulsory and must be affected from the very initial stage and should cover the entire contract period till handing over of complete works. The Contractor shall also be

responsible for anything which may be excluded from damage to any property arising out of incidents, negligence or defective carrying out of this Contract.

AEGCL shall be at liberty and is hereby empowered to deduct the amount of any damages, compensations, costs, charges and expenses arising or occurring from or in respect of any such claim or damages from any sums due or to become due to the Contractor.

15. ACCEPTANCE OF BID AND CONTRACT AGREEMENT:-

- a) An agreement shall have to be drawn on non-judicial stamp of appropriate value with AEGCL 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.

Wherever there is any variation in between the conditions of AEGCL's General Conditions of Supply and Erection 2009 and the above terms & conditions, this bid conditions will supersede the conditions of AEGCL's General Conditions of Supply and Erection 2009.

16. STATUTORY AND SAFETY REQUIREMENT:-

- a) 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.
- b) During the execution of the work, the contractor shall have to mark the site with banner warning/indicating precautions.
- c) The Contractor shall, throughout the execution and completion of the Works and the remedying of any defects therein:
- d) Have full regard for the safety of all persons entitled to be upon the Site and keep the Site (So far as the same is under his control) and the Works in an orderly state appropriate to the avoidance of danger to such persons, and
- e) Provided and maintain at his own cost all lights, guards, fencing, warning signs and watching, when and where necessary or required by the Engineer or by any duly constituted authority for the protection of the Works or for the safety and convenience of the public or others, and Take all reasonable steps to protect the environment on and off the Site and to avoid damage or nuisance to persons or to property of the public or others resulting from pollution, noise or other causes arising as a consequence of his methods.

17. PAYMENT TERMS:-

- a) No advance/Mobilization advance shall be made in this contract.
- b) No claim for interest shall be entertained by AEGCL.
- c) First & final bill shall be released to the contractor only after final acceptance by AEGCL.
- d) Final bill must contain the original site register.**
- e) Final payment shall be released to the contractor only after completion of the work in all respect and final acceptance by AEGCL.
- f) Payment is subject to availability of specific fund.
- g) The Bidder / Firm will have to be submitted the following Net Banking details.
- Banker's Name & Branch
 - Account No
 - Banker's address

- Banker's IFSC Code
- Banker's RTGS Code

18. WARRANTY:-

- a) The term period of warranty shall mean the period of 18(Eighteen) months from the date of Taking Over of the Work by AEGCL. A Taking over Certificate (TOC) will be issued by the appropriate authority.

19. EXTENSION OF TIME:-

- a) Time is the essence of the contract. No extension of time shall normally be allowed except on valid and genuine ground.

20. CHANGE OF NAME OF THE TENDERER:-

- a) At any stage after tendering, AEGCL shall deal with the Contractor only in the name and the address under which he submitted the tender. All the liabilities/ responsibilities for due execution of the contract shall be that of the Contractor.
- b) Any change/ alteration of name/ constitution/ organization of contractor shall be duly notified to the AEGCL and the AEGCL reserves the right to determine the contract, in case of any such notification.

21. DEATH, BANKRUPTCY ETC.:-

- a) If the Contractor becomes bankrupt or being a corporation is in the process of winding up, amalgamation or reorganization, the AEGCL shall be at liberty to:
- i. Terminate the contract forthwith by notice in writing to the Contractor or to the liquidator or receiver or to any person in whom the contract may become vested.
 - ii. Give such liquidator, receiver or other person the option of carrying out the contract subject to his providing a guarantee for the due and faithful performance of the contract up to an amount to be determined by the AEGCL.
- b) In case of death of the Contractor before completion of work and supply, the Engineer or AEGCL shall be at liberty to:
- i. Close up the contract and take over the completed portion of work done and made as per specification and make final payment to the legal heir of the Contractor on receipt of claim from such legal heir.
 - ii. Give the contract to the legal heir of the Contractor subject to his depositing a performance security for the due and faithful performance of the contract. The performance security amount shall be determined by the AEGCL commensurate with the incomplete portion of the work. The AEGCL will enter into a fresh contract with the legal heir of the Contractor on the same terms and conditions of the earlier contract.

22. CONTRACTUAL FAILURE, LIQUIDATED DAMAGE AND PENALTY:-

- a) Liquidity Damages 1.0% (one percent) of the amount of delayed work per week subjected to the maximum 10 % of the contract value.

23. TERMINATION OF CONTRACT:-

- a) If the performance of the contract is not satisfactory and not corrected within 15 days of receiving notice, then employer shall be at liberty to terminate the contract and get the work executed through other means at the risk and cost of the Contractor.

24. PAYMENT ON TERMINATION:-

- a) In the event of termination of the contract, AEGCL shall be at liberty to get balance work done by any third party at the risk and cost of the contractor and due payment of the contractor, if any shall be released after the completion of whole of the works.

25. SUSPENSION OF BUSINESS DEALINGS WITH FIRMS/ CONTRACTORS:-

- a) The AEGCL may suspend business dealings with a Firm/ Contractor, if:-
- i. The Central Bureau of Investigation or any other investing agency recommends such a

course in respect of a case under investigation; and if a prima facie case is made out that the firm is guilty of an offence involving unethical, unlawful, fraudulent means in relation to business dealings, which, if established, would result in business dealings with it being banned.

- ii. The AEGCL has past record of non-performance of the Firm in its previously awarded contracts.
- iii. The AEGCL has record of ban against the Firm by other Government /Public sector utility.
- b) However, the AEGCL shall give the Firm/ Contractor a fair chance to explain the circumstances of such previous suspensions.

26. BANNING OF BUSINESS DEALINGS WITH FIRMS/CONTRACTORS:-

The AEGCL may ban business dealings with a Firm/ Contractor, if:-

- a) The owner (s) of the Firm/ Contractor is convicted by a court of law following prosecution for offences involving unethical, unlawful, fraudulent means in relation to business dealings.
- b) There is strong justification that the Firm has been guilty of malpractices such as, bribery, corruption, fraud, substitution of tenders, interpolation, mis-representation, evasion or habitual default in payment of any Government tax etc.
- c) The Firm continuously refuses to return government dues without showing adequate cause and government are reasonably satisfied that this is not due to reasonable dispute which would attract proceeding in arbitration or court of law.
- d) The Firm is found guilty of involving in unethical practices, such as:-
 - i. "corrupt practice" involving offering, giving, receiving or soliciting, directly or indirectly, of anything of value to influence the action of any such official/ party in procurement process or in contract execution.
 - ii. "fraudulent practice" involving misrepresentation or omission of facts in order to influence a procurement process or the execution of a contract to the detriment of the Employer.
 - iii. "collusive practice" involving a scheme among bidders (prior to or after bid submission) designed to establish bid prices at artificial non-competitive levels and to deprive the Employer of the benefits of free and open competition.
 - iv. "coercive practice" involving harming or threatening to harm directly or indirectly, persons or their property to influence procurement process or the execution of a contract.

The AEGCL may sanction a Firm/ Contractor or its successor, including declaring ineligible, indefinitely or for a period of not less than 3 (three) years.

27. FORCE MAJEURE CONDITION

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

28. SETTLEMENT OF DISPUTE AND ARBITRATION:-

- a) 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. The contractor shall not stop the work during settlement of any dispute. All

disputes shall be subjected to the jurisdiction of District Court of respective District of work.

29. POLLUTION AND ENVIRONMENT:-

- a) 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.

30. ACCEPTANCE AND TAKEOVER:-

- a) 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 Performance 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.

(D) GENERAL SPECIFICATIONS OF WORK.

1. SITE PREPARATION:-

All works required for site preparation will have to be carried out by the contractor at his own expense, whenever directed by the Site In-charge.

- a) The Contractor shall clear the site of unnecessary vegetation to prepare the site for work only as per directions given by the Site In-charge.
- b) Any unnecessary structures are to be demolished and serviceable materials to be stacked and stored as directed by AEGCL.
- c) Any waste or unwanted material has to be disposed by the contractor if ordered by AEGCL. No materials will be allowed to leave the site without the permission of the Site In-charge.
- d) The Contractor will have to construct roads or any means for transport as instructed by the Site in-charge if the site is not easily accessible.
- e) All water which may accumulate on the site before or during the progress of the works or in trenches and excavations shall be removed and drained out from the site to the satisfaction of the Site In-charge by the Contractor.
- f) Any other work required for adequate preparation of the site shall be carried out by the Contractor.

2. PROFILE SETTING AND LEVELLING:-

- a) Profile setting and levelling for the site has to be carried out by the Contractor for finding the amount of earth cutting and filling that will be required for setting the Final Ground Level, Tie Beam Level and to find the amount of excavation to be done for required foundation depth.

3. SETTING OF LAYOUT:-

- a) The Site In-charge shall supply dimensioned drawings, levels and other information necessary to enable the Contractor to set out the works and the Contractor shall set out the works and be responsible for the accuracy of the same.
- b) He shall rectify at his own cost and to the satisfaction of the Site In-charge any error found at any stage which may arise through in accurate setting out unless such error is based on incorrect data furnished in writing by the Site In-charge, in which case the cost of rectification shall be borne by the Corporation.

- c) The Contractor shall protect and preserve all bench marks used in setting out the works till end of the Defects Liability Period unless the Site In-charge directs their earlier removal.

4. EXCAVATION AND BACKFILLING:-

- a) Trenches for foundation and other structures shall be taken out to the levels and dimensions shown on the approved drawings or to such other levels and dimensions as the Engineer-in-charge may direct. The bottom of all excavations shall be carefully levelled and stopped on benches as directed by the Engineer. Any pocket of soft or loose materials and fissures in the bottom pits and trenches shall be removed and the cavities so formed filled or grouted with concrete as directed by Engineer-in-charge. When any excavation has been done and trimmed to the required levels and dimensions, the Engineer-in-charge shall be informed accordingly so that he may inspect the complete pit or trench and no excavation shall be filled in and covered with concrete until it has been inspected and the contractor has been authorized to proceed with work. All surplus excavation not required for refilling shall be deposited in embankments, or otherwise disposed off as directed. The work shall include all necessary sheeting, shoring, bracing, drawing and pumping out water, removal of all logs, stumps, grabs and other deleterious matters, obstructions, necessary for placing the foundations.
- b) When required by the Engineer-in-charge, materials in the last 500mm of depth of the excavations shall not be removed until immediately before the concrete is to be placed.
- c) Refilling of foundation pits and trenches shall be carried out only after the foundation and structure works within the excavation have been inspected and approved by the Engineer-in-charge. Unless otherwise directed by the Engineer-in-charge all fillings shall consist of approved materials. All space between foundation concrete and the sides of excavation shall be refilled to the original surface using approved plant, in single layers not exceeding 250mm loose thickness which shall be watered and completed to a dry density not less than that of the adjoining soil strata. Timber sheeting and other excavation support shall be carefully removed as the filling proceeds but the removal of such supports will not relieve the contractor of his responsibility for the stability of the works.

5. DEWATERING:-

- a) Where water is met with during excavation due to stream flow, seepage, shoring, rain or other reasons, the contractor shall take adequate measures such as bailing, pumping, constructing diversion channel, drainage channel, ponds and other necessary works to keep the foundation trenches dry and to protect the green concrete against damage by eruption or sudden rising of water level.
- b) Approval of the Engineer-in-charge shall be required for any method adopted, for the adequacy of dewatering and protection arrangements and for the sound safety of the work shall be required.

6. PREPARATION OF BASE:-

- a) Any excavation taken out to a greater depth than that required shall be back filled with concrete of the foundation grade at the cost of the contractor. If required sand may be used for backfilling, if permitted by Site In-Charge.
- b) Refilling of foundation pits and trenches shall be carried out only after the foundation and structure works within the excavation have been inspected and approved by the Engineer-in-charge.

- c) Unless otherwise directed by the Engineer-in-charge all fillings shall consists of approved materials.
- d) All space between foundation concrete and the sides of excavation shall be refilled to the original surface using approved plant, in single layers not exceeding 250mm loose thickness which shall be watered and completed to a dry density not less than that of the adjoining soil strata.
- e) Timber sheeting and other excavation support shall be carefully removed as the filling proceeds but the removal of such supports will not relieve the contractor of his responsibility for the stability of the works

7. BRICK SOLING:-

- a) Bricks in soling should be well placed and the surface after placing of brick should be flat.
- b) An extension of 75 mm should be maintained on each side of the footing or as specified in the drawing.

8. PLAIN CEMENT CONCRETE:-

- a) Plain Cement Concrete (PCC) works must be carried out in dry condition and dewatering should be carried out wherever necessary before placing of concrete. Over the PCC layer, a surface course of minimum 100 mm thickness of broken stone shall be spread. For this purpose, the recovered gravel from the switchyard shall be used. Any additional quantity of gravel required to achieve 100mm thickness shall be supplied by the contractor.

The Bidder should note that the price quoted shall be inclusive of cost of all activities for site preparations, such as clearing the area, earth filling, earth cutting, levelling etc. It is advised that the Bidders should visit the concerned sites before finalising their bids.

- b) The proportion of Plain Cement Concrete should be 1:3:6 or as specified in the drawing and design. The quality of the mix will have to be checked and approved by the Site In-charge.
- c) Curing should be done properly and as per instructions.

9. SHORING AND PROPPING:-

For pits and trenches requiring stabilising of slope, shoring or propping may be carried out at the Contractors own expense.

10. REINFORCEMENT:-

- a) All reinforcement shall be cleaned thoroughly by removing loose scales, oil, grease or other deleterious materials. The contractor shall obtain the approval of the Engineer-in-charge or his representative to the reinforcement when fixed in position before any concrete is deposited in the forms.
- b) Bars shall be bent cold or straightened in a manner to the satisfaction of the Engineer-in-charge or his representative. Bars bent during transport or handing shall be straightened before using on work. They shall not be heated to facilitate bending. Welding shall be done as per latest IS Code of practice.
- c) All reinforcement bars shall be cut and standard hooks for MS rounds made at ends and accurately placed in position as shown on the approved drawings. They shall be securely held in position before and during concreting by annealed binding wires used for binding the reinforcement which shall be of approved quality soft annealed iron wire not less than 1 mm (18SWG) size, conforming to IS:280.

- d) As far as possible, bars of full length shall be used. Where bars are required or permitted

to be lapped by the Engineer-in-charge, or his representative, the over laps shall be staggered for different bars and located at points, along the span where bending moment is not maximum. The concrete measured over the reinforcing bars shall be in accordance with the approved drawings.

11. Construction of Cable trenches:-

- a) The cable trenches should be primarily of Brick masonry supported with RCC pillars 250*250mm at an interval of 2500mm over 75 mm RCC base. In each pillar, 2 nos of MS flats of 50*6*200mm shall be suitably embedded to hold 2nos of cable racks. The cable trench wall inside the control room will be of 100mm thick RCC only. The top of the cable trench should be RCC to hold the RCC covers (as per the approved drawing, enclosed). For main power cables separate cable trench should be made. Cable trenches and pre-cast removable RCC covers (with lifting arrangement) shall be constructed using RCC of M15 grade

12. REINFORCED CEMENT CONCRETE:-

- a) Optimum quantity of water shall be mixed to produce the design mix/nominal mix concrete of required workability.
- b) Workability shall be such that the concrete surrounds and properly grips all reinforcement.
- c) The degree of consistency, which shall depend upon nature of work and method of vibration of concrete, shall be determined by regular slump tests to be carried out by the contractor at his cost.
- d) Usually for mass concrete in RCC works where vibrations are used the slumps shall be within 10mm to 25mm.
- e) The frequency of such tests and the natures of slumps shall be maintained within the limits specified by the Engineer-in-charge.
- f) The Engineer-in-charge also reserves the right to carry out slump tests independently at his own discretion.
- g) Cube moulds should be prepared for destructive testing randomly as per instructions given by Site In-Charge.
- h) Cement shall have to be weighed from bulk stocks at site and not by bags. It shall be weighed separately from the aggregates.
- i) Water shall either be measured by volume in calibrated buckets or weighed. All necessary equipment shall be maintained in a clean and serviceable condition. Their accuracy shall be periodically checked.
- j) Honeycombed RCC structure should be dismantled immediately and reconstructed.
- k) If Reinforced Cement Concrete works include Stone masonry works then stone masonry works should be carried out in stages. After completing one stage mortar droppings shall be cleaned and Reinforced Cement Concrete works should be done before starting the second stage of stone masonry work.

13. PLASTERING:-

- a) Surfaces to be rendered must be cleaned and made free from all dust, loose materials, grease, etc, and be well wetted for a few hours (the wall should not be soaked but only damped evenly); but the wall should not be too wet.
- b) Plaster may be applied in one or two coats. No single coat should exceed 12 mm in thickness as thick coats shrink more and crack.
- c) Plaster work on new construction should be deferred as much as possible so as to let shrinkage in reinforced concrete and masonry take place before plastering.
- d) General proportion for cement plaster should be 1:4.

14. CURING:-

- a) Curing should be done as soon as possible after concrete is placed and when initial set has occurred and before it has hardened. It should be continued for a minimum period of 7 to 12 days when normal (Portland) cement is used, 4 to 7 days when rapid hardening cement is used, and should be kept thoroughly wet for 24 hours when high alumina cement is used.
- b) Vertical surfaces may be covered with hanging curtains. Columns and small members shall be cured by wrapping round them wet sacks or by sprinkling water continuously. On vertical surfaces it should be checked that the wet fabric is in contact with the surface.
- c) Water should be sprinkled on the underside of beams and slabs for proper curing.

15. Earthmat Extension and Grounding of Equipment:-

- a) The main earth mat of the entire switchyard is already in place.
- (b) All conductors buried in earth and concrete shall be GI. All conductors above ground level and earthing leads, cable trench earthing shall be of galvanised steel.
- (c) Light poles, junction boxes on the poles, cable and cable boxes/glands, lockout switches etc. shall be connected to the earthing conductor running along with the supply cable which in turn shall be connected to earthing grid conductor at a minimum two points
- (d) The metallic switchyard security fencing may not be connected to the substation main earth grid. The security fencing shall be earthed by running a separate 40 mm dia MS rod earthing conductor along the fence along with 40 mm dia rod electrodes of 3000 mm long at regular intervals and at each corner
- (e) Ineffective/damaged Equipment/Structure earthing identified for the substation equipments in coordination with the concerned Resident Engineer shall be properly earthed using electrodes and GI flats as required.
- (f) Placing of electrodes should be such that if the length of earth electrode is "1", the next electrode should be placed at "2l" distance from the 1st.
- (g) Security fencing should be separately earthed. At max, 4 no. of 100 mm dia rod electrodes of 3000 mm long electrodes may be used for the earthing of the fencing on each side.
- (h) Parts of the switchyard where earthing mat (main mesh) does not exist at present (if any) as identified by the concerned Resident Engineer or as per BoQ and necessary earthing activities to be undertaken.
- (i) Also, the proper earthing of Kiosks as per direction of the concerned Resident Engineer in the switchyard and depending on availability of earth-mat in that area of the switchyard, necessary earthing activities are to be carried out.
- (j) One number 100 mm dia, 3000 mm long earth electrode with test link, CI frame and cover shall be provided to connect each down conductor of surge arresters, capacitive voltage transformers, lightning masts and towers with peak.
- (k) For substation equipments, the connection between existing earthing pads and the earthing grid shall be made by two short earthing leads (one direct and another through the support structure) free from kinks and splices. In case earthing pads are not provided on the item to be earthed, same shall be provided in consultation with Purchaser.

- (l) All lighting panels, junction boxes, receptacles fixtures, conduits etc. shall be grounded in compliance with the provision of I.E. rules
- (m) Each earthing lead from the neutral of the power transformer/Reactor shall be directly connected to two pipe electrodes in treated earth pit (as per IS) which in turn, shall be buried in Cement Concrete pit with a cast iron cover hinged to a cast iron frame to have an access to the joints. All accessories associated with transformer/reactor like cooling banks, radiators etc. shall be connected to the earthing grid at minimum two points
- (n) Neutral points of systems of metallic enclosures and frame works associated with all current carrying equipment and extraneous metal works associated with electric system shall be connected to the existing earth mat.
- (o) Earthing connections with equipment earthing pads shall be bolted type. Contact surfaces shall be free from scale, paint, enamel, grease, rust or dirt. Two bolts shall be provided for making each connection. Equipment bolted connections, after being checked and tested, shall be painted with anti-corrosive paint/compound.
- (p) The 75x12mm GI flat shall be clamped with the equipment support structures at 1000mm interval.
- (q) Connection between equipment earthing lead and main earthing conductors and between main earthing conductors shall be welded type. For rust protections, the welds should be treated with red lead and afterwards coated with two layers bitumen compound to prevent corrosion.
- (r) All ground connections shall be made by electric arc welding. All welded joints shall be allowed to cool down gradually to atmospheric temperature before putting any load on it. Artificial cooling shall not be allowed.
- (s) All earthing activities shall conform to the Code of practice for Earthing IS: 3043 and as directed by the site-in-charge.
- (t) Installation of Ground wire is to be done as instructed by Engineer-in-Charge.
- (u) To keep provision in the structures for earthing, holes shall be drilled on two diagonal opposite legs of the towers/columns/mounting structures. The holes shall be suitable for bolting 65 mm X 12 mm GI strips and shall be such that the lower hole is about 350 mm above the ground level, clear of the concrete muffing, for connecting the earthing strip.

16. Criteria for selection of power and control cables:

- a) Aluminium Conductor PVC insulated armoured power cables of 1.1 KV grade shall be used for various applications in switchyard area/control room.
- b) For all control/protection/instrumentation purposes PVC insulated armoured control cables of minimum 2.5 sq.mm. size with stranded copper conductor shall be used.
- c) AC input Cable to the Battery Charger shall be of PVC insulated, armoured, stranded Copper Cable. DC output Cables from the Charger as well as from the battery shall be of PVC insulated, armoured, stranded Copper Cable.
- d) All connections for PT and D.C. Circuit to control and relay panel shall be made with not less than 2.5 sq. mm. copper control cable.
- e) All connections of CT circuits to control and relay panel shall be made with not less

than 4 sq. mm. copper control cable.

f) Separate cable shall be used for AC and DC.

g) For different cores of CT and PT separate cables shall be used.

h) However, if required from voltage/VA burden consideration additional cores or higher size shall be used.

i) Sizing of power cables shall be done keeping in view continuous current, voltage drop and short circuit current consideration. Cable size shall be such that the voltage drop between the current consuming devices and supply distribution board shall not exceed 3% of supply voltage.

j) At least one (1) core shall be kept as spare in each copper control cable of 4C, 5C or 7C size, whereas minimum no. of spare cores shall be two (2) for control cables of 10 core or higher size (maximum 19 core can be used). However for control cable to be used in CT circuits shall be colour coded.

k) For 2.5 sq. mm. control cables, all cores must be grey in colour and for 4 sq mm cable, colour code is to be maintained.

17. Erection, Testing and Commissioning:

a) The erection, testing and commissioning of all 33 kV equipments including control and relay panel along with integration to the Siemens SAS should be done in the presence of authorized representative of AEGCL.

b) The pre-commissioning checklist will be further developed by the contractor and will seek approval prior to commencement of pre-commissioning tests from the DGM, MRT Circle, AEGCL. The tests will be witnessed and approved by him or by his authorized officers

(E) WORK SCHEDULE.

1. SITE HANDOVER:-

a) Handing over of the work site will be done in presence of Project Manager or its authorized representative, Resident Engineer, site engineer and contractor or its authorized representative.

b) The date of site handing over to be noted on the Site register duly signed by the Project Manager or its authorized representative, Resident Engineer, site engineer and contractor or its authorized representative.

2. WORK COMMENCEMENT:-

The work should be started only after having the following documents.

a) Work order

b) Site Register

c) Measurement Book

d) Drawings

e) Specifications of item & schedule of Quantity

3. SITE REGISTER:-

a) It will be issued along with the work order.

b) It will be the responsibility of the Contractor to record and update the site register with details of Day-to-Day activities and other details countersigned with seal by AEGCL.

c) The days on which no work is carried out should be recorded in the site register with proper justification.

- d) Any instruction by AEGCL officials during site visit must be noted properly and should be jointly signed by the official and the contractor or its authorised representative. In case of any disagreement, the Contractor must notify AEGCL in written.
- e) Any deviation in works must be properly noted in the site register by the Contractor along with proper justification for it.
- f) Progress report along with work completion percentage must be prepared by the Contractor on the basis of site register log and has to be submitted to AEGCL on 1st and 16th day of the month. In case of holiday, it should submit on next working day.
- g) Site register shall be verified from time to time by the Site In-charge and any anomalies found will be forwarded to higher authorities in written by the Site In-charge of AEGCL.

Appendix-1

COVERING LETTER (ON THE BIDDERS LETTER HEAD)

To,

The Deputy General Manager Silchar T&T Circle, AEGCL, Silchar-15

Sub: Submission of Tender.

Ref:-

1. NIT No:-

Name of work:-**Construction of foundation, erection, testing and commissioning of one (01) number 33 kV Bay at 132/33 kV Panchgram GSS for feeding power to 33/11 kV Karimganj(Subashnagar) ss of APDCL.**

Sir,

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

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

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

Appendix-2

PROFILE OF THE BIDDER

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

Sl. No.	Particulars	To be filled by Bidder
a)	Name of the Bidder	:-
b)	Registration with Memorandum of Association	:-
c)	PAN	:-
d)	Valid Electrical License of 33 kV and above	:-
e)	GST Registration number	:-
f)	Employees Provident Fund	:-
g)	Employees State Insurance certificate	:-
h)	Labour License registration	:-

Bidders Signature & Seal

i)	Income Tax Clearance Certificate	:-
j)	Professional Tax Registration	:-
k)	Date of Establishment/ Incorporation	:-
l)	Postal Address	:-
	House No.	:-
	Lane	:-
	Street	:-
	Town/Village	:-
	Post Office	:-
	P.S.	:-
	District	:-
	Pincode	:-
m)	Telephone Number	:-
	Mobile No.	:-
	E-Mail Address	:-
	Website	:-
n)	Name(s) of the Owners / Directors/Partners	:-
o)	Name of the Banker with Address and Telephone Number	:-
p)	Contact Person Details <i>(Furnish here name of that person with whom AEGCL may get in touch for more information or clarifications)</i>	Name:- Designation:- Mobile Number:- Email Address:-

Appendix-3

WORK EXPERIENCE OF THE BIDDER

Following documents to be submitted with Techno-Commercial Bid (Envelope-1)

In order to techno-commercially qualify for this Bid, the bidders have to submit work orders along with Performance certificate for similar nature of work executed within last 7 (Seven) years at any Govt. Deptt., PSU etc. As per guidelines laid down in clause **(B) i.e. (ELIGIBILITY QUALIFICATION) 3. i.e. (TECHNICAL QUALIFICATION)**

If the nature of work and value differs from the above stated conditions, it will not be considered while evaluation of technical qualification.

Sl. No.	Name of work	Nature of Work	Executed Amount	Starting Date	Completion Date
a)					
b)					
c)					

NB:- The Bidder may prepare extra sheet if required

Bidders Signature & Seal

Appendix-4

FINANCIAL QUALIFICATIONS

Following documents to be submitted with Techno-Commercial Bid (Envelope-1)

In order to techno-commercially qualify for this Bid, the bidders have to submit annual audit report for last 3 (Three) years. As per the guidelines laid down in clause no **(B) i.e. (ELIGIBILITY QUALIFICATION) 4. i.e. (FINANCIAL QUALIFICATION)**.

1.	Financial Qualifications:
a)	Minimum average annual turnover of ₹ _____ calculated as total certified payments received for contracts in progress or completed.
b)	Minimum cash flow of ₹ _____ showing financial resources such as liquid assets unencumbered real assets, line of credit and other financial means. Bank solvency certificate to be submitted.

NB:- The Bidder may prepare extra sheet if required

Appendix-5

PRICE SCHEDULE

SI No	Particulars of Materials	Unit	Qty	Unit Price exclusive of GST (Rs.)	Total Price exclusive of GST (Rs.)
1	2	3	4	5	6
1	Erection, testing & commissioning of Equipment including laying & terminating of LT power and control cables, connection of terminal clamp Connectors as required and equipment earthing.				
	(i) 33 kV Gang operated Vaccum Circuit Breaker	Set	1		
	(ii) 33 kV, 400-200/1-1 A, 2 core CT including marshalling box.	Nos	3		
	(iii) 33kV Isolator with Earth Switch	Set	1		
	(iv) 33kV Isolator without Earth Switch	Set	1		
	(v) 33 kV Lightning Arrestor	Nos	3		
	(vi)) 33kV Post Insulator	Set	2		
2	Erection of equipment mounting structure including excavation, construction of foundation, backfilling, compacting and supply of all foundation materials and labour as per supervision of site engineer				
	(i) 33 kV Gang operated Vaccum Circuit Breaker	Set	1		
	(ii) 33 kV, 400-200/1-1 A, 2 core CT including marshalling box.	Nos	3		
	(iii) 33kV Isolator with Earth Switch	Set	1		
	(iv) 33kV isolator without Earth Switch.	Set	1		
	(v) 33 kV Lightning Arrestor.	Nos	3		
	(vi) 33kV Post Insulator	Set	2		
3	Installation, testing and commissioning of 33kV Feeder Control & Relay panel including Integration to the Siemens SAS.	Nos	1		

4	Installation, testing and commissioning of AC Marshalling Kiosk (63A 4P-2Nos, 25A 4P-3Nos, 16A 4P-8Nos, 10A 4P-8Nos, 10A 2P-5Nos) including construction of foundation along with supply of foundation materials and labour as per supervision of site engineer.	Nos	1		
5	Installation and testing of 3Ph, 4 wire, ABT compliant Energy Meter (Class-0.2) in existing control panel	Nos	1		
6	Construction of covered Cable trenches including supply of all foundation materials and labour as per specification and drawing				
	(i) Type D	meter	10		
7	Providing 80mm thick 1:4:8 PCC base of switchyard as per specification & Drawing including supply of all materials and labour.	Sq meter	40		
8	Providing 100mm thick gravelling on the switchyard Including supply of all materials, labour and leveling etc as per directive of site engineer.	Sq meter	40		
9	Installation of switchyard illumination LED lights including necessary cabling and termination.	No	4		
10	Installation of Earthing system				
	(i) Installation of Main Earth mat (50x10 mm GI Flat) and connection to riser including painting of welding joints with bitumen paint	meter	50		
	(ii) Installation 100 mm Dia 3mtr long M.S. rod earth electrode (driven) with test link including making necessary connections as required	meter	5		

Total Rs.

Add GST @ 18%

Grand Total Rs.