



North Eastern Electric Power Corporation Ltd.
(A Government of India Enterprise)
An ISO 9001, 14001 & OHSAS 18001 Corporation

CONTRACT & PROCUREMENT WING (E)

KOPILO H.E. PLANT:: DIMA HASAO DISTRICT: UMRONGSO – 788931

Phone: 03670-288241, Fax: 03670-288254/288240

NOTICE INVITING TENDER No. : KHEP/C&P(E)/2015/244 Dated 03.12.2015

Online Sealed Single Stage Single Envelop bidding system (e_tender) through domestic competitive bidding with minimum 120 (One hundred & twenty) days validity are invited from reputed manufacturer/ manufacturer's authorized dealer by the under mentioned on behalf of North Eastern Electric Power Corporation Ltd. for awarding the contract of **Supply, Installation , Testing & Commissioning of Battery Bank , Charger and DC Distribution Board and Disposal through Buy Back of the Old Batteries** at 2X25 MW Khandong and 1X25 MW Kopili Stage-II Power Stations of Kopili Hydro Electric Plant , NEEPCO Ltd. Umrongso , Dima Hasao ,Assam.

Last date and time for submission of bids : 15:00 hrs. of 02/01/2016
Date and time for opening of bids : 15:30 hrs. of 02/01/2016
Earnest Money Deposit : Rs.2,10,000/- (Rupees Two Lac Ten Thousand) only
Tender Fees : Rs. 3000/- (Rupees Three Thousand) only

The detail Scope of Work and Terms & Conditions for execution of the contract shall be as under.

Scope: The Scope of work to be executed under this contract shall cover the following items-

S.N.	Description	Unit	Qty.
1	Supply, installation, testing & commissioning of 220V, 350Ah \pm 1% Plante Type Lead-Acid Flooded stationary Battery Bank in Transparent SAN Container for critical standby application (High Discharge Performance), consisting of each cell of 2V, conforming to IS 1652 of 1991 with Plante positive plates, pasted negative plates, lids, vent plugs, separators, bolts and nuts, cell insulators, inter-cell connectors, dry and uncharged along with Stand, IR-IT, Acid with non-returnable container and accessories, battery terminal jelly etc. whatever required to complete the battery bank in all respect.	Set	2(two)
2	Set of maintenance accessories for battery bank consisting items indicated in enclosed Annexure –I (Fittings and Accessories) of this tender	Set	2(two)
3	Design, Manufacture, Supply, Delivery including Installation, Testing & Commissioning at site one set of Automatic Float and Float cum Boost (50 Amps) Battery charging Equipment suitable for charging 220Volts , 350 Ah Plante Lead Acid Battery Bank and conforming to the technical specifications indicated in Annexure-II enclosed in this tender. The Float cum Boost Battery Charging Equipment should approved by battery manufacturer against suitability of above battery bank.	Set	1(one)

4	<p>Design, Manufacture, Supply, Delivery including Installation, Testing & Commissioning at site of three sets of 220 Volts DC Distribution Board along with all required accessories for installation to commissioning as per site requirement outgoing feeders for above mentioned battery bank conforming to the technical specification indicated in Annexure-III enclosed in this tender.</p> <p>The DCDB should have individual printed nameplate provision for all feeders. It should fitted with main I/C voltmeter & ammeter, individual MCCB ON/OFF & Trip status/indication which can be viewed from in front of the DCDB. The scope also included laying, testing & connecting/terminating of single core 50sq. mm Un-armoured, multi stand, fire resistant copper cable for redundancy of both battery banks to use as Source 1 & 2 between Khandong and Kopili Stage-II PS approx. 500Mtr length through existing cable trench. The scope also included the proper connection whatever required with existing loads as well as old DCDB for satisfactory running of PS as directed by site in-charge. All internal connections, Copper DC bus, marking of cables & bus, proper lugging etc. should be inbuilt with DCDB. The internal drawing should be submitted along with the supply.</p>	Set	3(three)
5	<p>Disposal through buy back of the old existing batteries in the battery bank of Khandong Power House.</p> <p>(On site dismantling of the old batteries in the battery bank and disposal as per statutory guide lines. Collection of the old batteries from Power Station site and draining of acid (if required) from the old batteries shall be in the Scope of the contractor)</p>	Set of battery bank	<p>2 sets</p> <p>(220 V , 300 Ah and 220V . 250 Ah Make Exide)</p>

The detail **Technical specification/ description of the items** included in the Scope of Work shall be as furnished below.

A. Battery Bank:

- 1) **Supply:** Scope of work under supply part shall include supply & delivery at site 02 (Two) sets of 220V, 350Ah \pm 1%, Plante Lead Acid Stationary battery banks of suitable numbers 2V battery including all required accessories like inter row/inter tier connectors, sulphuric acid, steel stand, all maintenance accessories, petroleum jelly etc. The supplier shall fully responsible to deliver the all materials at site in full & good condition at own risk.
- 2) **Installation, testing & commissioning:** The installation, testing & commissioning of both battery banks shall include the following:
 - a. Dismantling of existing battery banks, installations of both battery banks, filling of electrolyte, inter connecting each cell as per site requirement.
 - b. Initial charging of both the battery banks as per standard practice of the OEM & relevant IS.
 - c. Testing & commissioning of complete battery banks to the full satisfaction of the engineer in-charge.
- 3) **Disposal of old batteries under buy back:** The existing batteries & acid of both battery banks shall have to be properly dismantled and disposed by the contractor as per statutory regulations and arrange for collection of same from site at their cost. The draining of acid from old existing batteries shall be in the scope of supplier.

- 4) **Testing & Inspection of battery at manufacturer site:** The supplied batteries shall undergo testing as per provision of relevant IS standard. The test shall be carried out to evaluate the performance of the battery under normal use of hydro power plant as DC source for its protection equipment. The supplier/ contractor shall give notice well in advance to the Corporation for inspection and to witness of the tests. However the Corporation reserves the right to waive the inspection of testing clause as own discretion.

Neither the waiver of the inspection nor acceptance after inspection by the Corporation shall in any way absolve the supplier from his responsibilities towards satisfactory performance of the batteries under the actual operating condition prevailing at site at site.

- 5) **Dimension of battery bank:** The dimension of battery bank should be designed by the supplier in such a way that it can be installed in the existing battery rooms available space of Khandong: 7.6M X 4.5M and Kopili Stage-II: 5.2M X 3.8M without disturbing civil/electrical structure and maintenance work .
- 6) **Useful life:** The useful life of the battery bank should be clearly mentioned by the supplier. If any problem arises during declared useful life period during using of battery at normal duty for which it is installed, then the supplier shall be responsible to rectify the same at their cost.
- 7) **Technical specification of Plante Battery:** The detail technical specification of the batteries to be supplied shall be as indicated in enclosed Annexure-IV (Technical Specification of Battery) enclosed in this tender.

B. Battery Charger:

- 1) **Supply:** The Scope of work shall include supply & delivery at site 01 (One) sets of suitable battery charger panels (make approved by manufacturer) for the above battery banks including all required accessories like connectors from battery bank to charger, O&M manuals, drawings etc. The battery charger should have E/F protection, O/C protection, O/V & U/V protection, annunciation fascia, current & voltage regulator, inbuilt hooter etc. in both boost & float mode. The panels should fitted required voltmeter & ammeter for I/P, O/P display. The supplier shall be fully responsible to deliver the all materials at site in full & good condition at their own risk.
- 2) **Installation, testing & commissioning:** The installation, testing & commissioning of both battery charger panels shall be carried out by the OEM or their authorized firm. The scope of work shall include the following:
- a. Dismantling of existing panels, installation of both charger panels, connecting each panel with battery bank as per site requirement.
 - b. Initial charging of both the battery banks as per standard practice of the OEM & relevant IS.
 - c. Testing & commissioning of complete battery charger panels to the full satisfaction of the engineer in-charge.
- 3) **Support service:** The OEM /Authorised dealer of OEM has to provide support service for minimum 10 years after expiry of warranty / guarantee period on chargeable basis for supply of spares, technological up-gradation and troubleshooting if required.

C. DC distribution board:

- 1) **Supply:** Scope of work under supply part shall include supply & delivery at site 03 (Three) sets of suitable battery DCDB panels for above battery banks including all required accessories like connectors from battery bank to DCDB, cable lugs, crimping tools, O&M manuals, drawings etc. The DCDB should capable to handle the full load of the battery bank, should have main incomer MCCB, one main outgoing MCCB with approx. 80% capacity of main incomer to connect Source-2 DCDB of other PS, individual outgoing MCCB with different current carrying capacity as per site requirement which will be distributed up to full capacity of the battery bank.

Minimum MCCB requirement per DCDB:

- a) Main Incomer: 400A, 01 no.
- b) Main outgoing: 320A, 01 no.
- c) Feeder 12A: 10 Nos.
- d) Feeder 16A: 25 Nos.
- e) Feeder 20A: 15 Nos.
- f) Feeder 30A: 20 Nos.
- g) Feeder 60A: 04 Nos.

The fitted MCCBs should of reputed make and suitable for DC load with O/C, E/F protection features. All the outgoing feeders should be connected from a common DC bus. The main incomer should install with voltmeter & ammeter. The 50 sq. mm un-armored multi strand flexible copper cable with XPLE insulation, 1.1KV voltage grade, single cable of continuous 2.5 kilo meters (Considering one cable as spare) should also be supplied by the supplier for connecting battery bank & DCDB between Khandong and Kopili Stage-II PS who are approx. 500M away for formation of double battery bank connectivity. The supplier shall be fully responsible to deliver the all materials at site in full & good condition at their own risk.

- 2) **Installation, testing & commissioning:** The installation, testing & commissioning of DCDB panels shall be carried out by the OEM or their authorized firm. The scope of work shall include the following:
- a. Dismantling of existing panels, installation of DCDB panels, connecting each panel with battery bank as per site requirement.
 - b. Connecting all loads as per site requirement with proper crimping, testing etc. whatever required as per instruction of site in-charge. Lying of cables between Khandong & Kopili Stage-II PS as directed by site engineers and connecting accordingly with DCDB.
 - c. Testing & commissioning of complete DCDB panels to the full satisfaction of the engineer in-charge.

General Information to the bidder:

- i) The tools & tackles available at site required for execution of the installation and commissioning work will be provided by NEEPCO at free of cost but if any special tools are required for completing the job, same shall be arranged by the contractor at their own cost.
- ii) The required technical experts/engineers, skilled/unskilled manpower to complete the job has to be arranged by the firm at their own cost.
- iii) The available Bolero Camper vehicle will be only provided by NEEPCO for carrying materials from PH store to PH. If any other transportation is required then it has to be arranged by the firm at their own cost.
- iv) Free accommodation up to 08 persons at PH field hostel (Semi furnished room) will be provided by NEEPCO during execution of work.
- v) All the works will be executed simultaneously, and in case more than one firm is involved, they should coordinate their activities as per site requirement as directed by site in-charge.
- vi) The installation, testing & commissioning of the both power stations may be done in phase manner as per site condition.

Terms and Conditions:**1. Qualifying requirement of the Bidder :**

- 1.1 Bidder should state their Tax payer Identification Number, Sales Tax Registration no. and PAN without which Bids may be summarily rejected.
- 1.2 Bidder must be an original equipment manufacturer/ authorised dealer.

- 1.3 The manufacturer / principal supplier / bidder should have minimum experience in design, manufacture, supply, erection of batteries, charger panels & DCDB for last 10 years and at least two nos. of similar installation in any Govt./ PSU projects should be in successful operation for a minimum period of 5 years. The manufacturer shall have offices located at various regions throughout the country including North Eastern India equipped with the required instruments and properly trained personnel for taking care of after sales service throughout the expected life of the equipment.
- 1.4 Bid from authorised dealer should be supported with valid dealership certificate/ authorization letter issued by the manufacturer. Any bid submitted by a dealer without such certificate will be summarily rejected.
- 1.5 The intending bidder must have experience in execution of similar supply order to any Government department/ PSU in last 7(seven) years as follows :
 - a) At least one similar supply order having contract value not less than Rs. 84,00000/-
OR
 - b) At least two similar supply order having contract value not less than Rs.63,00000/- each OR
 - c) At least three similar supply order having contract value not less than Rs.42,00000/- each .

Documentary evidence (supply order copies) in support of execution of similar work must be submitted along with the bid. Non-submission of documents in support of similar experience may result in disqualification.

Similar works shall mean:

Supply of 220V, 350Ah Plante Lead acid battery bank, Battery charger & DC distribution board etc. to any Government department/ PSU.

2. **Price Basis:** The Price shall be quoted on FOR Umrongso basis indicating all charges towards freight & transit insurance and Taxes & Duties. All prices and rates shall be clearly indicated both in figures and words. Applicable rates of taxes & duties shall be clearly stated in the bid. The quoted prices shall remain FIRM during the currency of the contract.
3. **Taxes & Duties:** Taxes and duties will be paid at actual prevailing at the time of dispatch against submission of documentary evidence.
4. **Earnest Money / Bid Guarantee :**
 - 4.1 A bid guarantee shall be submitted along with the bid. The Bid Guarantee offered shall be in one of the following forms :
 - a) EMD of Rs.2,10,000.00/- in the form a crossed bank draft in favour of North Eastern Electric Power Corporation Limited, payable at Garampani , Umrongso (SBI code: 4812)
OR
 - b) An irrevocable bank guarantee issued preferably by any Indian Nationalized Bank in favour of North Eastern Electric Power Corporation Limited in the prescribed format. Proforma of bank guarantee (BG) in the format (Annexure-EMD) furnished in this tender specification .
 - 4.2 Any bid not accompanied by the requisite EMD / Bid Guarantee will be rejected.
 - 4.3 Firms/ contractors which registered as SSI or MSME and hence exempted from submission of EMD / PBG etc. should mention the same enclosing valid/ current authentic documentary evidence in support of such registration to avail the said exemptions.
 - 4.4 The Bid Guarantee shall be made payable without any condition to the Purchaser. The Bid Guarantee shall be valid for a period of 180 (One Hundred Eighty) days from the date set for opening of bids. If any further extension of this guarantee is required, the same shall be

extended to such required period on receiving instructions from the Corporation. All bank charges shall be borne by the bidder.

- 4.5 The Bid Guarantee of successful bidder to whom the contract is awarded, will be returned after submission and acceptance of the Contract Performance Guarantee furnished by the bidder as stated in clause no. 5 of terms & conditions in this NIT.
- 4.6 The Bid Guarantees of the unsuccessful Bidders will be returned only after awarding the contract to the successful bidder.
- 4.7 No interest will be payable by the Corporation on the Bid Guarantee submitted by the bidder alongwith his bid.
- 4.8 If the bidder withdraws the bid while it is under consideration, his EMD shall be forfeited along with other action as per norms of the Corporation.

5. **Submission of Contract Performance Guarantee :**

- 5.1 Within 20(twenty) days from the date of issue of the order, the Contractor/ successful bidder shall furnish a Bank Guarantee from a Nationalized Bank for an amount equal to (10) ten percent of the contract value by way of guarantee for the due and faithful performance of the contract. The Bank guarantee shall be submitted in the prescribed format (Annexure-CPG) enclosed in this order and initially be valid for such period to cover ninety days after the warranty period.
- 5.2 The Performance Guarantee will be returned to the Contractor without any interest at the end of the 90 (ninety) days after the warranty period, subject to fulfillment of the contract in all respects.

6. **Payment Terms :** The supplier / contractor may choose any one of the following payment terms.

- a) 100% of the contract price alongwith 100% taxes and duties shall be paid after receipt of materials in full and good condition at site subject to submission of CPG as per clause no. 5 stated above.

OR

- b) 90% payment with 100% taxes and duties shall be released on receipt of complete materials at site in full & good condition and balance 10% payment shall be retained as Contract Performance Guarantee and shall be released after 3(three) months from date of expiry of guarantee period, **in the event of non submission of CPG** as per clause no. 5 above.

7. **Delivery Period:** The materials shall be delivered at site within 16(sixteen) weeks from the date of awarding the contract / issue of order.

8. **Liquidated damage:** LD @ 0.5% on the contract value for per week of delay in delivery subject to a maximum of 10% on the contract value shall be applicable.

9. **Guarantee / Warranty :**

- 9.1 The materials supplied shall be warranted / guaranteed as per manufacturer's norms or for a period of 18 months from the date of despatch against manufacturing defect/ defective workmanship.
- 9.2 The successful bidder shall supply the materials to the satisfaction of the Engineer-in charge. Defective materials shall be replaced/ rectified by the supplier at free of cost immediately on intimation from this end.

10. **Submission of Drawing & Technical Data:**

- 10.1 Immediately on awarding the contract, the supplier shall submit for approval of the purchaser all the requisite drawings and data (OGA and BOM) which shall describe the equipments to be supplied in full details. On receipt of the drawing, the purchaser

- shall verify and accord approvals of the drawings in order to enable the manufacturer to supply the equipment as per site requirement.
- 10.2 The contractor shall furnish general layout diagram to accommodate the batteries with necessary fitting and fixings in the existing battery room at Khandong P.S and Kopili Stage-II P.S. sites.
- 10.3 The technical data/ information of battery furnished by the contractor should contain the followings-
- a) Battery cell voltage characteristics and data for different discharge rates
 - b) Technical leaflets
 - c) Battery sizing calculations as per IEEE 485.
 - d) Type test certificate for similar rating.
 - e) Connection details of take off terminals
11. **Operational Manual** : The supplier / contractor shall provide 3(three) sets of operational manual of the Battery Charger along with equipment.
12. **Pre dispatch Inspection and Testing**: Testing of the equipment to be supplied as per relevant standard shall be carried at contractor's works. The tests shall be performed in presence of the Corporation's representative. For deputation of an authorised representative for inspection and to witness such tests, advance intimation prior to the tests shall be given to the Corporation. The test certificates are to be forwarded for approval of the purchaser.
13. **Dispatch clearance**: No materials shall be dispatched without inspection by the purchaser or his authorized representative or otherwise given dispatch clearance in writing of the purchaser.
- Neither acceptance of test reports nor accordance of dispatch clearance shall in any way relieve the supplier from their responsibility towards satisfactory performance of the materials delivered at site.
14. **E-tendering / E- procurement**: This tender is being processed through e-tendering / e-procurement system. The bidding documents/ detail NIT are to be downloaded , filled in bids are to be submitted / uploaded through e-tendering system of NEEPCO Ltd at website <https://neepco.abcpco.com>.
15. **Vendor Registration for Participation in Bids**:
- 15.1 **Portal Registration**: The intending bidders have to register themselves in the portal <https://neepco.abcpco.com>. Information about the bidder required to be submitted during registration is available in the portal.
- 15.2 **Vendor Registration Fee**: The Fees for vendor registration in the portal is Rs. 3000/- (Rupees Three Thousand) only per year.

The bidder shall furnish the copy of receipt of payment for vendor registration at email id contract@neepco.gov.in & contract_khep@rediffmail.com to advise NEEPCO's service provider for approval of vendor registration.

Bidders who are already registered in the system shall ensure to keep their registration valid till completion of entire bidding process.

15.3 Procedures for payment of registration fee :

Bidders shall make payment of vendor registration fee of INR 3000.00 (Indian Rupees Three thousand only) at the following Account:

Name of account : E Procurement Account, NEEPCO Ltd.,
Account No : 913020005982636 of Axis bank
IFS Code : UTIB0000270

The bidder shall clearly indicate the head against which payment has been made at the above mentioned account in the following format:

(i)-----/ NIT No. ----- dated -----/ Registration fee

(Name of bidder)

15.4 Procedure for Payment of BID Fees and EMD:

- a) Bidder shall make payment of Bid fees of amount Rs. 3000/- (non refundable) in the form a crossed bank draft in favour of North Eastern Electric Power Corporation Limited, payable at Garampani Umrongo (SBI code 4812).
- b) The detail for submission of EMD amount of Rs. 210000/- is described at clause no. 4 (Terms & Conditions) and clause no. 16 of this tender specification.

Both Bid fees and EMD of the tender needs to be submitted physically (offline) i.e. either personally or by Registered Post in a sealed envelope at the following address so as to reach us before due date and time of opening of the tender.

The Sr. Manager (E/M), C&P
KHEP , NEEPCO Ltd. , Umrongso
Dima Hasao , Assam
Pin-788931

Phone : 03670-288241/ 288254 Fax : 03670 288240 / 288254

15.5 For any clarification related to e- procurement procedures of NEEPCO against this tender, bidders are requested to make their query as follows-

- a) Contact Sr. Manager (E/M) / Manager (E/M), C&P, KHEP at Phone no. : 03670-288241/288254, Fax no. : 03670-288254/ 288240, email Id: contract_khep@rediffmail.com.
- b) Bidders may also contact e- Procurement Technologies Ltd. (Service Provider of NEEPCO) having the following contact details :

e- Procurement Technologies Ltd.

A-201-208, Wall Street –II/ Opp. Orient Club
Nr. Gujarat College/ Ellisbridgge
Ahmedabad- 80015
Gujjarat , India
Tel: +91-79-40016802-77
Cell : +91-9374519754/ 93779881191

16. **Preparation and Submission of bids:**

- 16.1 Bidder shall prepare and submit their bids in the electronic form at <https://neepco.abcprocure.com> . Online bidding forms shall be available in the above website. Submission of online bids is mandatory for consideration of the bids. The tender specification/ detail NIT can be downloaded from this website after vendor registration and payment of bid fee.
- 16.2 Bidders are also requested to visit the websites <https://neepco.abcprocure.com> and <http://neepco.gov.in> for any updated information / clarification regarding the tender.
- 16.3 Bidders may view the tender opening results of techno commercial and price bids at <https://neepco.abcprocure.com> by making their presence for online tendering opening.
- 16.4 In the online bid submission , bidders will submit their Techno – Commercial bids and Price bids in the online bidding forms using their digital signatures.

Techno commercial bids shall be submitted / uploaded as per techno commercial checklist form and price to the quoted online in the price bid form readily furnished in the e-tendering portal.

- 16.5 **Scan copy of EMD submitted in the form of DD or in the form of BG in the prescribed format in this tender specification and scan copy of Tender Fee in the form of DD are to be uploaded.**
- 16.6 Authentic documentary evidence in support of qualifying requirements as mentioned under sl. No. 1 above in the terms & conditions shall be uploaded along with the bid. For qualifying requirements, the documents should be submitted in the form of certificate of clients/ owners. Bids submitted without qualifying requirements shall be rejected.
- 16.7 A signed copy of the detail NIT/ tender specification must be uploaded along with the bid submission in acceptance of NIT conditions.
- 16.8 Besides the online submission , bidders shall “compulsorily submit the following documents in offline mode / physically by registered post or in person in sealed envelop addressed to “The Sr. Manager(E) , C&P, KHEP , NEEPCO Ltd. , Umrongso, Pin -788931, Assam”.
- a) Earnest Money Deposit in the form of DD or in the form of BG as per prescribed format and Tender Fee in the form of DD . The document must be submitted in a envelop super scribing “ Bid Guarantee and Tender Fee against NIT no. KHEP / C&P(E)/2015/244.
- 16.9 The documents submitted in offline/ physically must be sent by registered post with acknowledgement/ transmitted receipt / courier sufficiently in advance so as to reach the office of the under mentioned within the schedule dated and time of bid opening . The bidders are requested to ensure in their own interest the delivery of the documents on time.
- 16.10 Submission of bids not construe qualification for evaluation. The Corporation reserves the right to reject any or all bids or to annul the bidding process and reject all the bids, without thereby incurring any liability to the affected bidders , nor does it have any obligation to inform the bidders of the ground for such action on the part of the owner.
- 16.11 In the event the date of opening of bids is declared as a closed holiday for NEEPCO, the date of opening of bids will be the following working day at the appointed times.

- 16.12 The bidder registered as Micro Small Enterprise and NSIC / SSI are exempted from paying applicable bid fee and earnest money deposit subject to submission of valid and relevant document/ certificate. In addition to the above, all other advantages/ benefit as per guidelines of MSMED Act. 2006 shall be extended to the bidders which are registered as Micro, Small or Medium Enterprise.
- 16.13 If the bidder is eligible for any concessional duties and taxes he should invariably mention this in the bid. On or before the date of opening the price bid the bidder should also confirm any change in this regard. The price bid shall be evaluated on the basis of the information supplied by the bidder and hence the actual payments of taxes and duties shall be limited to the extent mentioned in the bid or in subsequent confirmation before opening of the price bids.
- 16.14 The bid will be opened at the time and date set for opening of bids, in presence of representatives of bidders. Bidders' authorized representative shall be permitted to attend the bid opening only on production of authorized letter. In the event that the day for opening of bids is holiday, the bids shall be opened on the next working day. No electronic recording device will be permitted during bid opening.
- 16.15 All texts and amounts of the bid shall be legibly written. The language and currency applicable are English and Indian currency respectively. In case of any discrepancy between figures and words, the amount indicated in words will be considered. In case of any discrepancy between unit rate and total amount, the total amount evolved by multiplying unit rate and quantity shall be considered. In case of discrepancy between lump sum amount and breakup, the lump sum amount shall prevail. In such case the bidder shall adjust the breakup as and when requested for billing purpose.
- 16.16 Any action on the part of the bidder to revise the price or to change the structure of the price at his own instance after opening of the bid and within the validity of the offer shall not be possible.
- 16.17 The Corporation (NEEPCO) reserves the right to extend the last date and time for submission of bid submission and opening.
- 16.18 No separate tender document shall be issued against this NIT.

17. **Important Information and dates :**

S.N.	Particulars	Information / Dates
1	Tender Fees	Rs. 3000/-
2	Earnest Money Deposit (EMD)/ Bid Security	Rs. 2,10,000/-
3	Date of commencement of downloading of detail NIT/ tender specification from https://neepco.abcprocure.com	12:00hrs. of 04.12.2015
4	Last Date & time for receipt of online bids	15:00hrs. of 02/01/2016
5	Last Date & time for receipt of offline documents	15:00hrs. of 02/01/2016
6	The last Date & time of online opening of bids	15:30hrs. of 02/01/2016

- Encl.: 1. BG Format (Annexure-EMD &CPG)
2. Annexure- I , II & III

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Sr. Manager (E/M), C&P (E)
KHEP, NEEPCO Ltd., Umrongso
Dima Hasao, Assam

Annexure-I

Fittings and Accessories:

S. N.	Item Description	Quantity (No.)
1	Syringe Type Hydrometer set complete in all respect and capable of indicating specific gravity reading in steps of 0.005 for plante type Lead Acid Cell Battery	1 no.
2	Cell Testing Voltmeter Range: 3-0-3 Volts having scale confirming to IS	1 no.
3	Mercury Glass Thermometer Range: 0-100 ⁰ C having suitable scale representing 1 ⁰ C temperature rise	1 no.
4	Plastic Syringe: 10 OZ	1no.
5	Plastic Funnel : 150mm dia	1 no.
6	Acid resisting plastic jug: 2 ltrs. Capacity	1 no.
7	Rubber Syphone : 12.7 mm dia. 2 mtr. Long	1 no.
8	Rubber Apron	2 no.
9	Rubber Gloves	2 no.
10	Rubber Boots: Knee Heights	2no.
11	Special Tools: Insulated Spanner etc.	As required

Annexure-II

Technical specification of Automatic Float cum boost charger suitable for 220VOLT 425Ah Plante Batteries

FLOAT CUM BOOST CHARGER – SCR CONTROLLED :

S. N.	Technical Specification/ particulars	Ratings
1	Input Power supply	415Volts +10% , 3 phase, 4 wire, 50 Hz \pm 5% AC
2	Output voltage Battery terminal	Upto 2.75 V / Cell
3	Out put Current	80 Amps(Max)
4	Float Mode	80Amps DC continuous plus trickle charging current of battery bank
5	Boost Mode Starting rate Finishing Rate	: 59.50 Amps (Max.) upto 2.35V/ Cell : 29.75 Amps (max.) upto 2.75V/ Cell
6	Mode of operation	Automatic / Manual
7	Termination of charging	Automatic / Manual
8	Control Configuration	3 phase full wave control thyristorised bridge fed thru 3 phase transformer and controlled byh constant potential / current controller unit with load limiting feature (AVR/ ACR)
9	Battery Bank	110 nos. Plante cells of 425 AH Capacity

Technical specification for 220V DCDB

S.N.	Particulars (item description)	Quantity
1	400Amps 3P MCCB as I/C	01 No.
2	320 A 3P MCCB as main outgoing	01 No.
3	12A, 2 P MCCB as outgoing feeder	10 Nos.
4	16A, 2P MCCB as outgoing feeder	25 nos.
5	20A , 2 P MCCB as outgoing feeder	15 Nos.
6	30A, 2P MCCB s outgoing feeder	20 Nos.
7	60A, 2P MCCB as outgoing feeder	04 Nos.
6	<p>Fabricated Sheet Steel enclosure (Compartmentalized) floor mounting type over MS channel pedestal, main body 2mm thick , front / rear doors / covers 2mm thick , front/ rear doors hinged type with locking arrangement , complete with gasket ; the enclosure will be provided with detachable bottom cable entry plates for incoming / outgoing cable ; necessary terminals , earthing terminals . internal wiring , ferules, identification plates/ name plates will be provided ; degree of protection IP-52.</p> <p>Voltmeter & Ammeter should be fitted for a common DC Copper Bus for main I/C & Main O/P Feeder. All outgoing feeders should be connected from a common DC Copper bus. The DC bus should fed supply from Main I/C MDDB. The DC bus should be insulated properly throughout its length to avoid any electric shock during maintenance.</p>	1 Set

(Technical Specification of Battery)

A. PLANTE' TYPE LEAD-ACID STATIONARY BATTERIES**A.0 Minimum applicable standards (LATEST REVISION)**

IS-1885 :	Electrical vocabulary, secondary cells and batteries
IS-1652 :	Lead acid batteries with Plante' positive plates
IS-1069	Water for storage batteries
IS-266 :	Sulphuric acid for storage batteries
IS-8320 :	General requirements for methods of tests for lead-acid Storage batteries.
IS-1146 :	Specification for rubber and plastics container for lead Acid storage batteries
IS-6071 :	Synthetic separator for lead acid batteries
BS-6290 (Part 2) :	High Performance Plante' cells
IEEE-485 :	IEEE Recommended practice for sizing of large lead acid Storage batteries for generating stations and substations.
IEEE-484 :	Recommended practice for design and installation of Storage batteries.
IEC896-1 :	Stationary Lead-acid Batteries

A.1 DESIGN AND CONSTRUCTIONAL FEATURES OF BATTERY

A.1.1 Type : The battery shall be lead acid Plante' type. Float Charging voltage for Plante type cells shall be maintained in accordance with the electrolyte temperature. As per the table below:

Temperature	Float Voltage
Less than 5 Deg C	2.30 +/- 0.02VPC
5-19 Deg C	2.28 +/- 0.02 VPC
20-35 Deg C	2.26 +/- 0.02 VPC
36 – 45 Deg C	2.24 +/- 0.02 VPC

The Boost Charge preferred voltage shall be 2.75V per cell. The Equalizing Charge voltage per cell shall be 2.36 V per cell.

A.1.2 Positive Plates: The positive plates shall be of Plante' lamellar type. Plates shall be made of 99.99% pure lead and shall be free from any kind of manufacturing defects. It shall be electro-chemically formed and shall be capable of operating under normal working conditions without buckling or cracking. The positive plates should be cast in a single piece. Welding together of smaller size lead castings/ plates to form larger sizes will not be acceptable. It should be genuine Plante' type of plate only and not so called equivalent type. The plates shall be designed for maximum durability during all service condition including high rate of discharge and rapid fluctuation of load.

A.1.3 Negative Plates: The negative plates shall be of flat pasted type. It should have adequate mechanical strength and should be so designed that active material is maintained in intimate contact with the grid under normal working conditions throughout the life of the battery.

A.1.4 Separators: The separators should be of sintered PVC providing a complete diaphragm between the plates. It should be acid resistant, chemically inert and should have excellent oxidation resistance and high degree of porosity to ensure minimum internal resistance. It should not exhibit any tendency to swell or shrink at temperature encountered during operation.

A.1.5 Containers: The container should be moulded from transparent Styrene Acrylonitrile (SAN) giving excellent clarity for clear view from outside, outstanding chemical resistance, rigidity and toughness with very high insulating qualities which eliminate the need for separate cell insulators. It should have adequate Mechanical strength to prevent bulging, cracking etc. during the life span of battery when operating under expected temperature range and due to action of static and dynamic loads and the action of electrolyte. Transparent SAN container enables the electrolyte level and the cell condition to be monitored at a glance.

A.1.6 Cell Lids: It should be moulded from opaque SAN and sealed to the container. It should be easily removable if the need arises for replacement.

Annexure-IV(ii)

A.1.7 Microporous Ceramic Vent Plugs: The vent plugs should be specially designed incorporating a microporous ceramic filter which effectively returns all acid spray to the cell, but allow free exit of oxygen and hydrogen which is generated at the end of boost charging. On removal, the plugs shall permit drawing of the electrolyte sample for servicing and of checking of the electrolyte level.

A.1.8 Connectors: Connectors should be adequately designed to offer minimum impedance. The current carrying area of the connectors shall conform to the requirement of BS 6290 Part II 1999. While considering the terminal voltage of the cell at the time of testing for discharge, the voltage drop due to inter-row and inter-cell connectors shall be considered. Connectors shall be of lead plated copper. The lead coating shall be adequate and tenacious. Minimum thickness of lead coating shall be 25 microns. Connectors shall be adequately designed to withstand various stresses due to temperature changes, attack of acid and dynamic forces that could occur during the operation of the battery.

A.1.9 Electrolyte: The electrolyte shall be battery grade sulphuric acid conforming to latest edition of IS 266 and 1.190 Sp. Gravity or better at 27°C. Required quantity of electrolyte for the initial filling with 10% extra quantity shall be supplied in non-returnable non-degradable acid resistant strong plastic containers.

A.1.10 Water: Water used in preparation of electrolyte and also for periodic topping up during the course of operation or testing shall conform to the latest edition of IS-1069.

A.1.11 Terminal Post: Positive and negative terminal posts of the cells shall be clearly and unmistakably identifiable. Terminal posts shall be designed to accommodate external bolted connections conveniently and positively. The terminal post size should be capable of carrying current so as to conform to BS 6290 Part II 1999. All metal parts of the terminals shall be of lead or lead coated type. Bolts, heads and nuts, except seal nuts, shall be hexagonal and shall be lead covered. Terminal posts shall be adequately fixed to prevent its turning or twisting when the connectors are being fixed or removed. The junction between terminal posts and cover shall be adequately sealed to prevent any seepage of the electrolyte. All terminals shall be provided with insulated covers (Shrouds).

A.1.12 Battery Stand: Non-Sesmic MS Stand with adequate mechanical strength for carrying load of battery back and additional load of maintenance persons. Should not be reactive with the battery acid and water throughout its use life. Proper detachable ladder should be provided if height of the battery exceeds the normal working height of human.

A.1.13 Marking: Each cell shall be marked legibly and indelibly to meet the requirements of relevant Indian standards. In addition, each cell shall be legibly numbered serially to identify the cell during manufacture, testing, installation and operation of battery to identify after having assembled into battery bank in battery racks.

Following marking however, shall be provided

- a) Manufacturer's type and trade name
- b) Electrolyte level (min & max).
- c) Type of container and standard AH capacity as per IS (Cell nomenclature as per IS).
- d) Polarity marking as per relevant IS
- e) Year of manufacturing & battery manufacturing serial number.

A set of loose stickers shall be provided to mark the cells position in the assembled battery bank at site so that a cell removed for maintenance can be put back in original position.

The battery shall be shipped uncharged with the electrolyte furnished in a separate non returnable container. 10% electrolyte shall be furnished extra and should hand over to site after 1st filling.

FORM OF BANK GUARANTEE
(In lieu of earnest money to be deposited with the tender)
(To be stamped in accordance with Stamp Act)

Guarantee No..... Place.....

Date.....

To,

.....
.....
.....

Whereas the North Eastern Electric Power Corporation Ltd., (hereinafter referred to as the Corporation) has called for tender for..... in connection with the..... Project, vide NIT No..... dated..... and whereas..... (hereinafter referred to as the contractor) has submitted tender / tenders for the aforesaid works / supply.

And whereas one of the conditions of the tender is that the intending bidder should furnish, in lieu of Earnest Money, a Bank Guarantee for Rs.....(Rupees.....) only alongwith the tender.

Now, therefore this witnesseth:-

We, the

(Name & address of the Bank)

having registered office at.....(hereinafter referred to as the Bank) in consideration of the Corporation entertaining the tender submitted by the contractor do hereby agree with the Corporation.

That it shall in the event of the contractor failing to keep open the tender for acceptance for a period of **eight calendar months** from the date of opening of tender and for failing to execute an agreement in the form prescribed incorporating the terms and conditions of contract as per the tender submitted by him and accepted by the Corporation with or without modifications within 30 days from the date of acceptance of the tender or to renew this Guarantee for a further period as demanded by the Corporation, pay to the Corporation without any demur, reservation, contest, recourse or protest and or without any reference to the contractor and without waiting for the results of any litigation, dispute whatsoever in this connection pending before any Court, Tribunal, Arbitrator or any other authority and on a mere demand by the Corporation the sum of Rs.....(Rupees.....) only.

That as to whether the occasion has arisen for the demand of the amount covered by the Bank Guarantee, the decision of the Corporation shall be final and shall be accepted by the Bank without any reference to the contractor.

That the Guarantee herein contained shall remain in full force and effect during the period taken for finalising the contract and execution of the agreement

That it shall continue to be enforceable until the Guarantee is fully discharged.

That this Bank Guarantee shall be enforceable against the Bank even if any negotiable instrument shall be outstanding against the Bank at the time of the proceeding.

That is to give effect to the Guarantee the Corporation shall be at liberty to act as though the Bank were the principal debtor:

That the Bank shall not be released of its obligation under this Guarantee by any exercise by the Corporation of its liberty with reference to the matters aforesaid or any of them or by reason or any other acts of omission on the part of the Corporation or any other indulgence shown by the Corporation or by any other matter or thing whatsoever which under law would but for this provision, have the effect of relieving the Bank.

That the Guarantee shall remain in full force and effect notwithstanding any neglect or forbearance or delay in the endorsement of the same.

And that the Bank shall not revoke the Guarantee during its currency except with the previous consent in writing of the Corporation.

Notwithstanding, anything contained hereto before it is mutually agreed:

That the liability under this Bank Guarantee, shall not exceed Rs.
(Rupees.....)
.....)only.

That it shall be in full force only for a period of.....months from the date it bears and it will hold good for any demand made by the Corporation in the meanwhile.

And that if any further extension of this Guarantee is required the same shall be extended to such required period on receiving instructions from the Corporation and failure to comply such required extension by the contractor shall be treated as claim of the above mentioned sum by the Corporation upon the Bank.

The liability or obligation of the Bank under this guarantee bond shall not be affected or suspended by any dispute between the purchaser and the supplier and the payment under this guarantee bond need not wait till the disputes are decided by a Competent Court or Tribunal or any other authority and that any payment made by the bank to the purchaser under the guarantee bond shall be deemed to have been rightfully and lawfully made.

Lastly the Bank also assures that the guarantee bond will not be discharged due to the change in the constitution of the bank or the contractor.

In witness where-of I.....the agent / Manager of the Bank, who is duly authorised in this behalf as per rules of the Bank hereby set my hand and seal to this on this day of.....

Witness

(Signature).....
(Name)

(Signature)
(Name)

Designation with
Bank Stamp.....
Authority as per Power
Of attorney No.....

(Official Address)

.....

Dated

Note:- (1) The BG shall be submitted preferably from a Nationalized Bank.

Proforma of Bank Guarantee for Contract Performance
(To be stamped in accordance with Stamp Act)

Ref.....

Bank Guarantee No.....

Date

To,

.....
.....

Dear Sir,

In consideration of the North Eastern Electric Power Corporation Ltd.; (hereinafter referred to as the "Purchaser" which expression shall unless repugnant to the context or meaning thereof include its successors, administrators or and assigns) having awarded to M/s

.....
with its Registered/Head Office at

.....
(hereinafter referred to as the "Contractor" which expression shall unless repugnant to the context or meaning thereof include its successors, administrators or and assigns) a contract by issue of Purchaser's Letter of Intent No dtdand the same having been unequivocally accepted by the Contractor resulting in a "Contract" valued at Rs

.....
(Rupees.....)

only for

(Scope of the Contract)

and the Contractor having agreed to provide a Contract Performance Guarantee for the faithful performance of the entire Contract equivalent to 10 (ten) percent of the said value of the Contract to the Purchaser.

We

(Name and address of the Bank)

having registered Office at (hereinafter referred to as the "Bank" which expression shall unless repugnant to the context or meaning thereof include its successors, administrators, executors or and assigns) do hereby guarantee and undertake to pay the purchaser, on demand any and all money payable by the Contractor to the extent of as aforesaid at any time upto (day/month/year) without any demur, reservation, contest, recourse or protest and/or without any reference to the Contractor. Any such demand made by the Purchaser on the Bank shall be conclusive and binding notwithstanding any difference between the Purchaser and Contractor or any dispute pending before any Court, Tribunal, Arbitrator or any other Authority. The Bank undertakes not to revoke this guarantee during its currency without previous consent of the Purchaser and further agree that the guarantee herein contained shall continue to be enforceable till the Purchaser discharges this guarantee.

The Purchaser shall have the fullest liberty without affecting in any way the liability of the Bank under this guarantee from time to time to extend the time for performance of the contract by the Contractor. The Purchaser shall have the fullest liberty without affecting this guarantee, to postpone from time to time the exercise of any powers vested in them or of any right which they might have against the Contractor and to exercise the same at any time in any manner, and either to enforce or to forbear to enforce any covenants, contained or implied, in the Contract between the Purchaser and the Contractor or any other course or remedy or security available to the Purchaser. The Bank shall not be released of its obligations under these presents by any exercise by the Purchaser of its liberty with reference to the matters aforesaid or any of them or by reason or any other acts of omission or commission on the part of the Purchaser or any other indulgence shown by the Purchaser or by any other matter or thing whatsoever which under law would, but for this provision, have the effect of relieving the Bank.

The Bank also agrees that the Purchaser at its option shall be entitled to enforce this Guarantee against the Bank as a principal debtor in the first instance without proceeding against the Contractor and not withstanding any security or other guarantee the Purchaser may have in relation to the Contractor's Liabilities.

The liability or obligation of the Bank under this guarantee bond shall not be affected or suspended by any dispute between the purchaser and the supplier and the payment under this guarantee bond need not wait till the disputes are decided by a Competent Court or Tribunal or any other authority and that any payment made by the bank to the purchaser under the guarantee bond shall be deemed to have been rightfully and lawfully made.

Lastly the Bank also assures that the guarantee bond will not be discharged due to the change in the constitution of the bank or the contractor.

Not withstanding anything contained herein above our liability under this guarantee is restricted to Rs..... (Rupees.....) only and it will remain in force upto and including.....and shall be extended from time to time for such periods as may be advised by the Purchaser who is the beneficiary under this guarantee and in the event if the Contractor fails to comply such extension within the validity period, this shall be treated as a claim by the purchaser on the Bank.

Dated this day of200 at

Witness

..... (Signature).....
..... (Signature)

..... (Name)
..... (Name)

Designation with
Bank Stamp.....
Authority as per Power
Of attorney No.....

.....
(Official Address)

Dated

- Note: (1) This sum shall be ten percent (10%) of the "Contract Price".
(2) The date of validity of this Bank Guarantee will be ninety (90) days after the end of the warranty period or as specified in the Contract.
(3) The BG shall be submitted preferably from a Nationalized Bank