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Miniratna Category-1

# नॉर्थ ईस्टर्न इलेक्ट्रिक पॉवर कॉर्पोरेशन लिमिटेड North Eastern Electric Power Corporation Limited

(भारत सरकार का उद्यम) / (A Govt. of India Enterprise)

135 मे.वा. अगरतला गैस टरबाइन कंबाईड साइकिल पॉवर प्लांट  
135 MW Agartala Gas Turbine Combined Cycle Power Plant  
अनुबंध एवं प्रापण, क्यू.एस.एच.ई. एवं जोखिम प्रकोष्ठ / Contract & Procurement : QSHE & Risk Cell  
रामचन्द्र नगर, त्रिपुरा (प) / Ramchandra Nagar, Tripura (W) - 799008



## NOTICE INVITING TENDER (E-TENDER)

e-NIT No. 09 /NEEPCO/AGTCCPP/C&P/2021-22 Dated 22.05.2021

North Eastern Electric Power Corporation Limited (NEEPCO) invites online tenders under the two bid (Single-Stage Two-Envelope) Tendering system with 180 (One Hundred Eighty) days validity from manufacturers, authorized dealer for awarding the contract of "Supply, Installation, Testing and Commissioning of DGA Monitoring Equipments" at NEEPCO Ltd. Agartala Gas Turbine Combined Cycle Power Plant (AGTCCPP). Ramchandranagar, Agartala.

Detailed Tender Documents (Section - I, II & III) containing Terms and Conditions for Bidding including Qualifying Requirement and required Technical Specification can be down loaded from NEEPCO's online portal <https://etenders.gov.in>

	Item Description	Required Quantity
1.	Online DGA Monitoring Equipment	3 Nos.
2.	Installation, Testing & Commissioning of Online DGA Monitoring Equipments	3 Nos.
3.	Offline DGA Monitoring Equipment	1 No.

SCHEDULE		
1.	Estimated Value:	₹ 55,23,300/- (Rupees Fifty-Five Lakhs Twenty-Three Thousand Three Hundred) Only which is inclusive of Freight & Insurance charges but <b>exclusive of GST</b> .
2.	Bid Security Declaration	Format enclosed.
3.	Tender Fees :	₹ 1000/- (Rupees One Thousand) only
4.	Last Date & time for Bid submission:	24-06-2021 upto 13:00 Hrs.
5.	Date & time of opening of Bid:	26-06-2021 at 15:00 Hrs.
6.	Validity of Tender:	180 Days

### CONTENT OF BID DOCUMENTS:

- A) The equipments required, bidding procedures and contract terms are prescribed in this bidding document which includes:
- |              |                             |
|--------------|-----------------------------|
| Section -I   | Notice Inviting e-Tender    |
| Section-II   | Technical Specifications    |
| Section-III  | Plant Information to bidder |
| Section - IV | BG Format.                  |
- B) The bidder is expected to examine all instructions, forms, terms, and specifications in the bidding documents. Failure to furnish all information required by the bidding documents or submission of a bid not substantially responsive to the bidding documents in every respect will be at bidder's risk and may result in rejection of his bid.

### BIDDING PROGRAMME

#### Participations & Submission of Tenders:

##### 1. Registration for Participation in Bids:

- 1.1 Bidders are required to enroll on the e-Procurement module of the Central Public Procurement Portal (URL: <https://etenders.gov.in/eprocure/app>) by clicking on the link "Online bidder Enrollment" on the CPP Portal which is free of charge.
- 1.2 As part of the enrolment process, the bidders will be required to choose a unique username and assign a password for their accounts.

- 1.3 Bidders are advised to register their valid email address and mobile numbers as part of the registration process. These would be used for any communication from the CPP Portal.
- 1.4 Upon enrolment, the bidders will be required to register their valid Digital Signature Certificate (Class III Certificates with signing key usage) issued by any Certifying Authority recognized by CCA India (e.g. Sify / nCode / eMudhra etc.), with their profile.
- 1.5 Only one valid DSC should be registered by a bidder. Please note that the bidders are responsible to ensure that they do not lend their DSC's to others which may lead to misuse.
- 1.6 All the bidders are requested to get themselves registered well in advance and no extra time will be considered for submission of bids for the delay in online vendor registration, if any.
- 1.7 Bidder then logs in to the site through the secured log-in by entering their user ID / password and the password of the DSC / e-Token.

## 2 Submission and opening of Bids:

- 2.1 Bidders shall prepare and submit their bids in the electronic form in <https://etenders.gov.in>. Bidding forms will be available in the above website. Bids will be opened on the stipulated date and time in the office of the **General Manager(C), C&P, NEEPCO Ltd, AGTCCPP, R.C.Nagar, Agartala, Tripura(W), Pin-799008.**
- 2.2 Bidder should log into the site well in advance for bid submission so that they can upload the bid in time i.e. on or before the bid submission time. Bidder will be responsible for any delay due to other issues.
- 2.3 The bidder has to digitally sign and upload the required bid documents one by one as indicated in the tender document.
- 2.4 Bidder has to select the payment option as "offline" to pay the tender fee / EMD as applicable and enter details of the instrument.
- 2.5 Bidder should prepare the EMD as per the instructions specified in the tender document. The original should be posted/couriered/given in person to the concerned official, latest by the last date of bid submission or as specified in the tender documents. The details of the DD/any other accepted instrument, physically sent, should tally with the details available in the scanned copy and the data entered during bid submission time. Otherwise the uploaded bid will be rejected.
- 2.6 Bidders are requested to note that they should necessarily submit their financial bids in the format provided and no other format is acceptable. If the price bid has been given as a standard BoQ format with the tender document, then the same is to be downloaded and to be filled by all the bidders. Bidders are required to download the BoQ file, open it and complete the white coloured (unprotected) cells with their respective financial quotes and other details (such as name of the bidder). No other cells should be changed. Once the details have been completed, the bidder should save it and submit it online, without changing the filename. If the BoQ file is found to be modified by the bidder, the bid will be rejected.
- 2.7 The server time (which is displayed on the bidders' dashboard) will be considered as the standard time for referencing the deadlines for submission of the bids by the bidders, opening of bids etc. The bidders should follow this time during bid submission.
- 2.8 All the documents being submitted by the bidders would be encrypted using PKI encryption techniques to ensure the secrecy of the data. The data entered cannot be viewed by unauthorized persons until the time of bid opening.
- 2.9 The uploaded tender documents become readable only after the tender opening by the authorized bid openers.
- 2.10 Upon the successful and timely submission of bids (i.e. after Clicking "Freeze Bid Submission" in the portal), the portal will give a successful bid submission message & a bid summary will be displayed with the bid no. and the date & time of submission of the bid with all other relevant details.
- 2.11 The bid summary has to be printed and kept as an acknowledgement of the submission of the bid. This acknowledgement may be used as an entry pass for any bid opening meetings.
- 2.12 Bidders shall have to quote all the items mentioned under BOQ / Item Description.

## 3 Important Dates & Bid Validity:

- 3.1 Date of commencement of downloading of bid documents from the portal <https://etenders.gov.in/eprocure> w.e.f 18:00 Hrs of 22/05/2021.
- 3.2 Last date & time for submission of bids online: 13:00 Hrs of 24/06/2021.
- 3.3 Date & time for opening of bids online: 15:00 Hrs of 26/06/2021.
- 3.4 Bid validity: 180 (One Hundred Twenty) days from the date of opening of bids.

In case 26/06/2021 is a holiday, the bid shall be opened on the next working day at the appointed times. Quotations received through any Off-Line Mode shall not be considered.

Bidders are requested to visit e-tendering portal <https://etenders.gov.in/eprocure>, NEEPCO website <http://www.neepco.co.in> and CPP portal <https://etenders.gov.in> regularly for any modification/ clarification of bid document.

- 4 **Bid Security Declaration:** The bidder shall submit the **Bid security declaration** along with techno-commercial bid. In case the bidder withdraws bids, found in engages in corrupt, fraudulent, collusive, coercive practices during bidding process; his/her bid shall not be considered and suitable departmental proceeding will be initiated against such default bidders. Default bidders shall be debarred to participate in any tender of the Corporation for next 2(Two) years from the date of opening of the techno-commercial bid. Prescribed format of bid security declaration is attached.

5 **BANK DETAILS FOR TENDER FEE SUBMISSION:**

Name of the Bank	Indian Overseas Bank
Name of the Account Holder	NEEPCO LTD
Account Number	183702000000001
Branch	Ramchandra Nagar
IFSC Number	IOBA0001837

- 6 **Tender fees/ Bid Document Fee:** A non-refundable Tender Fee of ₹ 1000/- (Rupees One Thousand) only shall be submitted **ONLINE** failing of which their bid shall not be considered. After making payment of the tender fee, bidder shall attach the computer generated payment slip along with bid documents. The payment slip shall be duly certified by the bidder mentioning tender number and its date before submission on the e-portal.

**Address of the undersigned :** General Manager(C), C&P  
AGTCCPP, NEEPCO Ltd.,  
R.C. Nagar, Agartala - 799008, Tripura(W).

- 7 **Evaluation of Tender:** Techno-commercial bid shall be opened on online. Tenderers' authorized representative shall be permitted to attend the tender opening only on submission of authorization letter. Purchaser will examine the Tender document to determine whether they fulfilled the qualifying requirement, whether they are complete and meet the requirements of this Tender specification. Tender submitted without fulfilling the qualification criteria shall be rejected and shall not be considered for price bid evaluation. Price bid of those tenderers meeting the qualifying requirement and requirements of Tender specification shall be opened on completion of Techno-commercial Evaluation. Date for price bid opening shall be notified at a later date through system-generated email.

- 8 **Reverse Auction:** The tender shall be finalized through reverse auction (e-RA). Regarding time and date of e-RA, system generated emails will be sent to all eligible bidders after opening of price bid.

**INSTRUCTION TO BIDDER**

The intending bidders who fulfill the eligibility / qualifying criteria as given below should participate in the on-line Bidding process. Fulfillment of criteria as mentioned is essential, as non-compliance will lead to rejection of the Bid, without any further communication.

**Qualifying Criteria:** The bidders must fulfill the following qualifying criteria:

1. The Tenders of the bidders must accompany tender fee and Bid Security declaration. The bid without Tender Fee and Bid Security declaration will be rejected.
2. The bidder must have the experience of having successfully completed similar nature or allied works during last 7 (Seven) years in any Govt. of India organization/State Govt. organization /PSU/any other reputed institutes. Documentary evidence to that effect shall be submitted.
  - a) Three similar completed works, each of value not less than 40% of the estimated cost.  
OR
  - b) Two similar completed works, each of value not less than 50% of the estimated cost.  
OR
  - c) One similar completed work of value not less than 80% of the estimated cost.

For the purpose of this clause, similar supply/ work shall mean:

"Supply, Installation, Testing and Commissioning of DGA monitoring equipment to any Govt. Dept./ PSU / IPP.

3. Copy of Bidder's PAN Card, Proprietor's Name, Legal Business Address, **GST Registration**, PF registration, Copy of Income Tax and Professional Tax Certificate clearance of current validity should be submitted along with their bids.
4. The quoted price must be authenticated with relevant supporting documents and uploaded online.
5. The Bidder shall furnish an undertaking (self-certification) that the Tenderer has not been blacklisted / debarred by any Central / State Government institution including electricity boards. The Bidders should also confirm that there is no pending litigation on account of executing similar orders.
6. Bidder should have after the sales and service facility in India and especially North East India for quick response and service.
7. **Provision for EMD and Tender fee exemption for the Bidders who are registered as Micro/ Small Enterprises:** Complying with the Public Procurement Policy for Micro and Small Enterprises (MSE) 2012, the following benefits shall be applicable to bidders registered as Micro/ Small Enterprises
  - a. Exempted from payment of applicable EMD
  - b. Exempted from payment of applicable Bid fee.

The bidders participating as Micro/ Small Enterprises shall submit an Undertaking in the prescribed format declaring the status of their firm under the provisions of Micro and Small Enterprises along with a copy of the relevant documents/ certificates issued by the Competent Authority i.e.

- i) District Industries Centre
  - ii) Khadi and Village Industries Commission
  - iii) Khadi and Village Industries Board
  - iv) Coir Board
  - v) National Small Industries Corporation
  - vi) Directorate of Handicraft and Handloom or
  - vii) Any other Body specified by Ministry of Micro, Small & Medium Enterprises) as evidence to their applicability of Micro and Small Enterprise.
8. The registration certificate submitted by MSEs issued from any one of the above agencies must be valid as on close date of the tender. The successful bidder should ensure that the same is valid till the end of the contract period.
  9. The MSEs who have applied for registration or renewal of registration with any of the above agencies/bodies but have not obtained the valid certificate as on close date of the tender are not eligible for exemption/preference.
  10. The MSE bidder/Entrepreneurs claiming to belong to Schedule Cast (SC) or Schedule Tribe (ST) shall furnish necessary SC/ST certificate issued by Competent Authority in support of their caste/tribe in addition to certificate of registration with any one of the agencies mentioned above at Sl. No. 4. MSE owned by SC/ST shall satisfy any of the following:
    - i) In case of proprietary MSE, proprietor(s) shall be SC/ST.
    - ii) In case of partnership MSE, the SC/ST partners shall be holding at least 51% shares in the enterprise.
    - iii) In case of Private Limited Companies at least 51% share shall be held by SC/ST promoters.
  11. **Condition for Startups:** The definition of "Startups" is as per the Gazette Notification of the Ministry of Commerce and Industry (Department of Industrial Policy and Promotion i.e DIPP) dated 17<sup>th</sup> February 2016 and all other subsequent directives/guidelines thereof. The Startup Enterprises shall submit Startup India recognition certificate issued by Department of industrial Policy and Promotion under Ministry of Commerce & Industry, Govt. of India. For more details may visit the website [www.startupindia.gov.in](http://www.startupindia.gov.in)
  12. **Relaxation of Prior experience and Prior turnover norms for Startups and Micro & Small Enterprises in Public Procurement:** In exercise of Para 16 of Public Procurement Policy for Micro and Small Enterprises Order 2012 Central Ministries/Departments/ Central Public Sector Undertakings may relax condition of prior turnover and prior experience with respect to Micro and Small Enterprises in all public procurements subject to meeting of quality and technical specifications. This has as per the Policy Circular No. 1(2)(1)/2016-MA Dt. 10th March 2016 of the Ministry of Micro, Small & Medium Enterprises, Govt. of India.
  13. **Bid capacity:** The available Bid Capacity of the Bidder at the time of submission of Bid, calculated as under should not be less than the estimated cost of the work put to tender: Bid Capacity = A x N x 2 - B Where,

A = Maximum value of works executed in any one year during last 7 (seven) years (at current price level). N = Completion time of the proposed work in years. B = Value at current price level of existing commitments and on-going works (as on the latest date for bid submission) to be completed in next "N" years. Bid capacity shall be assessed at the time of submission of Techno-commercial Bid, for which the Bidder shall have to submit documentary evidence in support of "A" & "B" above along with their Bid.

14. **Minimum Average Annual Turnover (MAAT):** Minimum Average Annual Turnover of the bidder, in the best three Financial Year out of the last 5(Five) Financial year, ending 31st March of the previous financial year should not be less than ₹ 60 lakhs.
15. **Liquid asset requirement:** The bidder should have liquid assets or / and evidence to availability of unutilized credit facilities of not less than the value as calculated below: Liquid Asset = (Estimated Cost x 2.5)/Completion period in months. The Certificate of Banker regarding the availability of unutilized credit facilities (Fund based and non-fund based) shall not be dated earlier than 30 (thirty) days prior to the latest date for submission of bids. Liquid Asset = Current Asset - (Inventory + Pre-paid expenses).
16. L-1 will be decided by considering the highest annual turnover of current financial year, if two or more bidders / agencies/ firms quote the same amount.
17. **Electronic Reverse Auction (e-RA):**
  - 17.1 "Electronic reverse auction" is an online real-time purchasing technique to select the successful bid, which involves presentation by bidders of successively lowered bids during a scheduled period of time.
  - 17.2 In e-RA, all those bidders who are ascertained to be Qualified & Responsive to the bidding conditions, unless otherwise restricted, shall be invited to participate in the e-RA process.
  - 17.3 The e-RA shall be conducted for procurement where Bids (including Price Bids) have already been submitted and opened subject to guidelines as may be approved from time to time.
  - 17.4 The minimum value of decrement in price for the e-RA shall be 0.5% or value deemed to be fit depending upon various aspects pertaining to procurement in question, of the L1 price evaluated on the basis of Price Bid.
18. The tender shall be finalized through "Tender cum Auction" i.e through the tender followed by e-Reverse Auction (e-RA). After opening the financial bids, Reverse Auction shall be conducted amongst the techno-commercially qualified bidders. The date and time of e-RA shall be conveyed to the techno-commercially qualified bidders via system-generated email.
19. **BOQ format in the price bid is fixed and is exclusive of GST. The quoted rate shall be treated as per the BOQ Format and no change is permissible irrespective of what is written in the techno-commercial bid document of the bidder.**
20. **e-RA process:**
  - A) The tender shall be finalized through "Tender cum Auction" i.e through the tender followed by e-Reverse Auction(e-RA). After opening the financial bids, Reverse Auction shall be conducted amongst the techno-commercially qualified bidders. The date and time of e-RA shall be conveyed to the techno-commercially qualified bidders via system-generated email. NEEPCO will declare its Opening Price (OP), Reserve price (RP), which shall be visible to the all bidders during the start of the Reverse Auction. The Bidder will be required to start bidding after announcement of Opening Price and decrement amount. The start price of an item in online reverse auction is open to all the participating bidders. Any bidder can start bidding, in the online reverse auction, from the start price with decrement value. The Bidder shall note that, the first online bid that comes in the system during the online reverse auction shall be equal to the auction's start price - (minus) decrement value, or lesser than the auction's start price by multiples of decrement. The second online bid and onwards will have to be lesser than the last Accepted bid rate by one decrement value, or lesser than the last Accepted Rate by multiples of the decrement value.
  - B) Reverse Auction shall be for a period of 1 Hour (60 minutes). If a bidder places a Bid in the last 5 minutes of Closing of the Auction, the auction shall get extended automatically for another 5 minutes. In case, there is no Bid in the last 5 minutes of closing of Auction, the Auction shall get closed automatically without any extension. The bidder shall note that if there are more than one item in a single auction, the auto-extension will be applicable to the entire event i.e. whenever a bidder places an acceptable bid in the last 5 minutes of the closing of the auction, the auction shall get extended automatically for another 5 minutes from the time of this bid for all the items in the auction.
21. Offline bids shall not be considered.

## GENERAL TERMS & CONDITION OF CONTRACT

(All prospective Bidders are requested to go through these instructions carefully)

- 1. Scope of Tender:** These specifications are intended to cover supply, includes packing, forwarding, transit insurance, transportation and delivery, installation, testing and commissioning of offline and Online DGA Testing Kit upto NEEPCO Ltd., AGTCCPP, Ramchandranagar, Agartala - 799008. Bidders should specifically mention the Make/Brand of offered materials along with relevant IS specifications.
  - Offline Stationary / Portable DGA Testing Kit having capability to detect all major dissolved Gas.
  - Online DGA Testing Kit having capability to detect single Gas i.e. Hydrogen along with moisture and oil temperature on real time basis.
  - The System must be secured from any hacking activities in web-based application also.
- 2. Time of completion:** The time of completion of supply including commissioning of the system is 3(Three) Months from the date of issue of the order.
- 3. Submission of Tender:** Online bids (Single-Stage Two-Envelope) with 180 (One Hundred Eighty) days validity shall be submitted by the bidder at NEEPCO's online portal <https://etenders.gov.in> having the following two parts

**Part-I (Techno commercial bid):** Technical Bid should contain technical specifications in details as well as brief write-up of various components, drawings etc.

- 3.1 The intending bidder should have experience in execution of contract for supply, installation, testing and commissioning of offline and Online DGA Testing Kit. The above experience should be preferably with any Government department / PSU/ IPP (Independent Power Producer)/ reputed Private Organization. Global experience is also acceptable. Documentary evidence in support of experience and successful execution of supply order and during last 3(Three) years ending March 2021 should be submitted.
- 3.2 The bidder shall have to submit at least 1(One) performance certificate of the offered item for at least 1(one) year of successful operation of any Government department / PSU/ IPP (Independent Power Producer)/ reputed Private Organization.
- 3.3 Bid from authorized business associates / dealer should be supported with valid dealership certificate/ authorization letter issued by the manufacturer. Any bid submitted by a dealer without valid Authorization Certificate from the OEM shall be summarily rejected.
- 3.4 Bidders shall submit certificate / documentary evidence from their users regarding satisfactory performance of the equipment supplied by them.
- 3.5 Performance certificate in the name of OEM is also acceptable for bidder who is quoting with OEM's authorization. Submitted performance report should not be older than 03(three) years from the scheduled date of bid opening.
- 3.6 The bidder shall have to submit the offer of only one make.
- 3.7 A job/supply executed by a bidder for its own organization/subsidiary cannot be considered as experience for the purpose of meeting Bid Rejection Criteria/ Bid Evaluation Criteria.
- 3.8 Bidder shall have to submit documentary proof of having 'After Sales Service' facility in North-Eastern Region of India.
- 3.9 Information / document required with the bid
  - a. The bidder shall provide all the technical details of the DGA testing kit and accordingly furnish in the technical data sheet.
  - b. The bidder shall submit Reports of all the Type Tests in accordance with the latest applicable standards.

**Part-II (Price bid):** Price bid should clearly indicate group-wise price and submitted On-Line.

The technical bid shall be opened first to judge/evaluate the technical specifications. Thereafter the price bid of only technically qualified bidders will be opened. Un-successful Technical Bid shall be considered as stands cancelled. Price Bid of such bidder shall not be opened.

- 4. Price Basis:** Bidder shall quote the price as FOR, AGTCCPP basis. Bidder shall quote item-wise prices showing commissioning charges separately. Quoted Rates shall remain **FIRM** till the completion of the contract.

**5. Taxes and Duties:**

5.1 The bidders must quote the rate, which should be **exclusive of GST**.

5.2 All the taxes, duties, levies etc. which are payable/ reimbursable by the Corporation shall be paid/ reimbursed to the supplier as per prevailing laws, rules, and regulations. The income tax and any other taxes, duties, levies etc. and surcharge thereof which the bidder by law is liable to pay are excluded from the provision of this contract. Such taxes, duties, levies along with surcharge shall be deducted from the payment and shall be deposited to the concerned authority. However, deduction certificate, if required by the contractor, shall be issued by the Corporation.

**6. Payment terms:****(A) Supply Part:**

**90% (Ninety percent) payment along with 100% (Hundred percent) taxes and duties on supply part** shall be paid after receipt of materials at site in full and good condition against submission of following documents:

- a) Invoice in triplicate.
- b) Delivery Challan
- c) Excise Gate pass/Excise Invoice etc. as applicable.
- d) Test certificate.
- e) Warranty certificate of Manufacturer as per warranty clause.
- f) Bank details for E payment.

**Balance 10% (Ten percent) payment of supply** shall be payable only after expiry of the Warranty/ Guaranty period or CPG of equivalent amount valid for 15 (fifteen) months.

**Alternatively**, 100% (Hundred percent) payment of supply along with 100% (Hundred percent) taxes and duties shall be paid on submission of Security cum Performance BG for an amount equivalent to 3% (Three percent) of the billed amount with a validity of fifteen (15) months. The BG shall be issued from any Nationalized Scheduled Bank of India and to be submitted within 01 (One) month from the date of issue of Supply order.

**(B) Installation and Commissioning Part:**

**100% (Hundred percent)** shall be payable only after successful installation & commissioning on submission of the invoice(s).

**Part-payment shall not be allowed at any condition if materials are not supplied fully.**

7. **Freight & Insurance:** The bidder quoted price should be inclusive of Freight & insurance showing transportation & insurance charges separately. The consignments shall be duly insured against possible damage/loss during Transportation. Any loss/damage during transit shall be intimated to the suppliers within a reasonable time from the date of receipt of the consignment by the consignee. The supplier shall take immediate action for replacement/rectification of the loss/damage. The suppliers shall have sole liability/responsibility for settlement of claim with the insurer towards transit loss/damage if any. Replacement/rectification of the loss/damage during the transit shall be made immediately without waiting for settlement of the claims. Necessary storage insurance coverage after receipt of material at AGTCCPP site till commissioning will be under the scope of the contractor/supplier.
8. **LD clause:** If the Bidder fails to deliver all the materials within the delivery time, NEEPCO'S standard LD-clause shall be applicable. Reduce the contract price by  $\frac{1}{2}\%$  (half percent) per week for the un-delivered portion of the material subject to maximum of 10% (Ten percent) of the contract value.
9. **Completion Period of the Installation and commissioning:** The work shall be executed and completed within **15 (Fifteen) days** from the receipt of the materials and handing over the site to the supplier. Site clearance shall be informed on approval of shut down from the competent authority. On the completion of work(s), minutes shall be drawn between NEEPCO and the supplier. Date of such minutes shall be the starting date of calculation of 12(Twelve) months for warranty coverage.
10. **Statutory Deduction:** These will be made at source as per the rules prevalent in the area of work. If the bidder is eligible for any kind of exemption/concession from state Govt. /Central Govt. they shall have to furnish documentary evidence for consideration of the same.
11. **Issue of formal order/ Award of Contract:** The purchaser shall consider placement of formal orders for commercial supplies on those bidders whose offers have been found technically and commercially acceptable and are lowest. However, technical feasibility shall be the foremost criteria for award of the contract. Issue of

formal orders shall constitute the award of contract on the bidder. The bidder shall, within 10(Ten) days of issue of formal orders, give his/her acceptance along with Bank Guaranty (BG).

12. **Clause wise Compliance:** Clause wise compliance statement of the Technical Specifications and Commercial Terms & Conditions shall be enclosed with the offer along with technical literature of the material and other document. Deviations if any from the tender requirements must be stated in a separate sheet with relevant clause for consideration of NEEPCO Ltd. Deviation mentioned in the general tender document without highlighting the same in **Deviation statement** shall not be accepted.
13. **Dispatch clearance:** No materials shall be dispatched without dispatch clearance issued by the purchaser in writing to the supplier.
14. **Operational Manual:** The supplier / contractor shall provide 2 (Two) sets of operational/Instruction manual of the materials/equipment's both in the form of CDs and hard copies.
15. **Demonstration:** The supplier shall arrange 2(Two) days free demonstration at AGTCCPP at free of cost.
16. Any bid containing false statement(s) will be rejected and action shall be taken as per Terms and conditions of the tender documents
17. Bidders shall prepare and submit their bids in the electronic form in <https://etenders.gov.in>. Online bidding forms will be available in the above website. Failing to comply above or without submission of any one of the above-mentioned documents or criteria, the bid shall not be considered for any evaluation and shall be summarily rejected.
18. **Arbitration**
  - (a) Except as otherwise provided, if at any time any question, dispute or difference whatsoever shall arise between the Contractor and the Purchaser upon or in relation to or in connection with the Contract, either of the parties may give to the other notice in writing of the existence of such questions, dispute or differences and if the matter is not amicably settled and on rejection of the matter, the dispute or difference shall be mutually settled under the Indian Arbitration and Conciliation Act 1996 and amendment thereto.
  - (b) The Contractor will ensure that the work under the Contract shall continue during Arbitration proceedings and no payment due from the Purchaser shall be withheld on account of such proceedings except to the extent that may being dispute.
  - (c) In the event of the Contractor being an Indian party, that is to say, a citizen and / or a firm incorporated in India, the arbitration may be conducted by a sole Arbitrator. Such sole Arbitrator shall be appointed by the Chairman and Managing Director of NEEPCO or by his duly authorized representative out of a panel of three Arbitrators, proposed by him and selected by the Contractor. If both the parties fail to arrive at decision regarding the selection of the sole Arbitrator the matter will be referred to the Chief Justice of High Court having jurisdiction on the issue for a competent decision.
  - (d) The venue of the Arbitration shall be Agartala, India.
  - (e) The expense of the Arbitration shall be paid, as may be determined as specified in the award of Arbitrators.
  - (f) The Arbitrator shall have the full powers to review and / or revise any decision, opinion, directions, certification or valuation of the Purchaser in consonance of the Contract, and neither party shall be limited in the proceedings before such Arbitrators to the evidence or arguments put before the Purchaser for the purpose of obtaining the said decision.
  - (g) The language of Arbitration proceedings and of all documents and communications between the Bidders shall be in English.
  - (h) The guidelines of the Government of India in respect of arbitration issued from time to time shall also be followed.
19. **Force Majeure:** Force Majeure is defined as any cause which is beyond the control of either the Corporation or the Contractor and is defined as below:
  - (a) War (Whether declared or not), hostilities invasion, act of Foreign enemies, rebellion, revolution, insurrection of military or usurped power, or civil war.
  - (b) Contamination by Radioactivity from any nuclear fuel or from any nuclear waste or radioactive materials.
  - (c) Pressure waves caused by air craft or other aerial devices travelling at sonic or supersonic speeds.
  - (d) Acts of God (Like floods, inundation, tornadoes, storm/tempest/hurricane/ typhoon/cyclone/lightning, earthquake, landslides/rockslide/subsidence or any loss or damage caused by forces of nature).
  - (e) Damages due to any political and religious incidence.
  - (f) Act of terrorism.
  - (g) Riots or commotion or disorder, unless solely restricted to employees of the Contractor or his sub-contractors and arising from the conduct of the works.

- (h) Martial law, damage from aircraft, nuclear fission, nuclear reaction, nuclear radiation or radioactive contamination.
- (i) Epidemics.
- (j) Fire (not caused by negligence of the contractor/its sub-contractors/ their personnel) and
- (k) Other such causes over which, the contractor has no control and are accepted as such, by the Engineer in-charge, whose decision shall be final and binding.

In the event of either part being rendered unable by "Force majeure" to perform any obligation required to be performed by them under the Contract, the relative obligation of the party affected by such "Force majeure" shall be treated as suspended for the period during which such "Force majeure" cause lasts, provided the party alleging that it has been rendered unable, as aforesaid, thereby, shall notify within 10 (ten) days of the alleged beginning and ending thereof giving full particulars and satisfactory evidence in support of such causes.

Loss to any party due to occurrence of "Force majeure" risk shall be borne by the respective party. If however, the "Force majeure" events causing such damage are insurable, removal of debris and reconstruction/repair shall also be done by the contractor upon receiving instruction from the Engineer in-charge at owner's cost and claim proceeds received from the Insurer against such damage shall be passed on to the owner.

Should there be a request for extension of time arising out of "Force majeure" the same shall be considered under the provision of the contract. No compensation, whatsoever, will be allowed to the Contractor for the delay arising out of the "Force majeure" conditions.

20. **Termination for Default:** The purchaser may without prejudice to any other remedy for breach of contract, by written notice of default sent to the supplier, terminate this contract in whole or in part thereof.
  - a) If the supplier fails to deliver any or all of the goods within the time period(s) specified in the contract.
  - b) If the supplier fails to perform any other obligation(s) under the contract; and
  - c) If the supplier, in either of the above circumstance(s) does not remedy his failure within a period of 30 days after receipt of the default notice from the purchaser.
  - d) In the event the purchaser terminates the contract in whole or in part, due to nonperformance of the contractor, the Purchaser may proceed to procure upon such items, works in such manner as deem fit to the purchaser. In such case(s) the PBG and security deposit shall be forfeited.
21. The bid should be submitted online. Each and every page of bid should be stamped and signed by authorized representative of the firm. **Power of attorney in favour of the signatory duly authorizing the signatory shall be enclosed in the bid.** Un-signed bids / documents would not be considered.
22. The Corporation reserves the right to change/modify the requirements and/or to postpone/accept or reject this NIT in full or in part without assigning any reason thereof and is not bound to accept the lowest offer.
23. Bidders are requested to visit NEEPCO's online portal <https://neepco.co.in> and <https://etenders.gov.in> regularly for any modification/clarification of the bid document.
24. **WITHHOLDING PAYMENT:** The purchaser may withhold the whole or part of any payment of the contractor, which in the opinion of the purchaser is necessary to protect himself from loss or account of.
  - i) Defective work not remedied or guarantees not met;
  - ii) Damage or loss of property or equipment of the Purchaser.
  - iii) Non-return of material/equipment supplied by the Purchaser when the same is due.
  - iv) If legal case is instituted against the bidders by the purchaser or the contractor.
25. **Consignee:** The materials with accessories shall be delivered **FOR AGTCCPP** site at the address of consignee i.e. Senior Manager (E/M), Store, NEEPCO Ltd, AGTCCPP, Ramchandranagar, Dist: Agartala, Tripura, PIN - 799008.
26. **Paying Authority:** The Head of Department, Finance, NEEPCO/AGTCCPP, Ramchandranagar, Agartala-799008
27. **Court of Competent Jurisdiction:** Any legal action taken or proceeding initiated or any of the terms of the agreement shall be only in the jurisdiction of local court of this Power Station area in Agartala, Tripura.
28. NEEPCO is not bound to accept the lowest tender and reserves the right to waive any formality in regards to submission of tenders or to reject any or all tenders without assigning reasons thereof.
29. The contract must not be sub-let without the permission of the Corporation.
30. The bidders shall submit all the information and documents as sought for in relevant clauses of the tender documents, both in Technical Specification & Commercial conditions. Tenders without the requisite information and documents shall be considered as incomplete and are liable for rejection.
31. All information shall be furnished by the bidders in good faith and with full satisfaction. The bidder shall print or type his name and that of his company in the schedule of prices and each subsequent continuation sheets thereof, on which he makes any entry. Overwriting or changes should be dated and initiated by the bidder.

32. NEEPCO reserves the right to verify bidders' capability and capacity both in terms of technically and commercially to perform the contract as well as to verify the authentication of any or all documents produced/submitted by bidders.
33. NEEPCO may allow purchase and other preferences to Govt./PSU/SSI/NSIC units as per Govt. policy and guidelines.
34. NEEPCO reserves the right to accept/reject any or all offers in part or full and also the right to relax qualifying requirements whenever and wherever required without assigning any reasons thereof.
35. Submission of bids shall not automatically construe qualification for evaluation. NEEPCO reserves the right to reject any or all bids. Or to annul the bidding process and reject all the bids, without thereby incurring any liabilities 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 Purchaser.

Bidders shall submit their bids online in electronic form in <https://etenders.gov.in>. Online bidding forms are available in above website. Manual offline Bids shall not be accepted. However, the document submitted by the bidder must be signed and sealed at each page by the bidder with signature before scanning and uploading.

The bidders are requested to note that participation in the bid shall be taken as acceptance of the terms & conditions as stated above. Bidders are requested to visit the website (<https://etenders.gov.in>) for any future change/ modification/ corrigendum/addendum to this tender. The Corporation reserves the right to change/modify the requirements or to postpone/accept or reject the tender in full or part of this Notice or cancel without assigning any reason thereof and is not bound to accept the lowest offer.

For & on behalf of North Eastern Electric Power Corporation Ltd.

  
22/05/2021

(Santanu Deb)  
Dy.General Manager(E/M), C&P  
AGTCCPP, NEEPCO Ltd.  
Ramchandranagar  
Ramchandranagar

**FORM-C: Bid Security Declaration**

(Bidders shall submit this DECLARATION online)

I/We ..... (Name of the Bidder) .....do hereby solemnly affirm and declare that if I/We withdraw or modify my/our bid after the bid opening during the period of bid validity and extension thereof, I/We will be suspended from participating in future tenders of the Corporation for a period of 2 (two) years from the date of issue of notice of such suspension by the Corporation.

\_\_\_\_\_

Place, Date

\_\_\_\_\_

(Signature)

(Name of Signatory, duly authorized to sign the bid  
On behalf of the Bidder..... (in block letters))

(Designation / Title of Signatory)  
(Seal of the Bidder)





ISO 9001:2015  
ISO 14001:2015  
ISO 45001:2018  
Miniratna Category-I

# नॉर्थ ईस्टर्न इलेक्ट्रिक पावर कॉर्पोरेशन लिमिटेड North Eastern Electric Power Corporation Limited

(भारत सरकार का उद्यम) / (A Govt. of India Enterprise)

135 मे.वा. अगरतला गैस टरबाइन कंबाईंड साइकिल पावर प्लांट  
135 MW Agartala Gas Turbine Combined Cycle Power Plant  
अनुबंध एवं प्रापण, व्पू.एस.एच.ई. एवं जोखिम प्रकोष्ठ / Contract & Procurement : QSHE & Risk Cell  
रामचन्द्र नगर, त्रिपुरा (प) / Ramchandra Nagar, Tripura (W) - 799008



## NOTICE INVITING TENDER (E-TENDER)

e-NIT No. 09 /NEEPCO/AGTCCPP/C&P/2021-22 Dated 22.05.2021

### SECTION – II : TECHNICAL SPECIFICATION

#### Specification For Single Gas DGA

1. The online DGA must measure the following parameters in the transformer oil
  - Moisture
  - Hydrogen
  - Temperature of the oil
2. The measurement must take place inside the transformer (directly in oil flow within transformer) without the need to extract the oil into the sensor body.
3. The online DGA must have no moving parts such as mechanical pumps or membranes.
4. The online DGA must not require any regular factory calibration or consumables during its service lifetime.
5. Measurement of the required parameters must occur in real time.
6. The online DGA must have on-site data logging capability and stored in a non-volatile memory.
7. The online DGA enclosure must be rated to IP66 and shall be further protected with a radiation shield.
8. A factory calibration test report for the online DGA must be included during the delivery. Calibration test report must include report for moisture, hydrogen and temperature measurement.
9. Sensor Specifications

#### For Moisture

Measurement Range : 0 to 100 %RS /  
Water Activity 0 to 1

Accuracy (including non-linearity, hysteresis and repeatability) at 0 ... 60 °C

0 to 90 %RS : ±2 %RS (aw ± 0.02)

90 to 100 %RS : ±3 %RS (aw ± 0.03)

Sensor : Capacitive Polymer

#### For Hydrogen

Measurement range (in oil) : 0 to 5000 ppm  
Accuracy (in oil temp. range -20 ... +60 °C) : ±20 %of reading or ±25 ppm  
(whichever is greater)

Repeatability : ±10 %of reading or ±15 ppm  
(whichever is greater)

Minimum detection limit : 25 ppm

Typical long-term stability : 3 %of reading / year

Cross Sensitivity to Other gases : < 2 % (CO<sub>2</sub>, C<sub>2</sub>H<sub>2</sub>, C<sub>2</sub>H<sub>4</sub>, CO)

Sensor : Catalytic Solid-State Sensor

**For Temperature**

Measurement range	: -40 ... +120 °C
Accuracy at +20 °C (+68 °F)	: ± 0.2 °C
Sensor	: Pt1000 RTD Class F0.1 IEC 60751

10. The online DGA shall be must able to operate in the following environment

Oil Type	: Mineral Oil
Operating humidity range	: 0 to 100%RH
Operating Temperature Range	: -10 to +60 °C

Manufacturer's test reports and Ingress Protection reports must be submitted with the proposal.

11. The online DGA must have the following outputs

- 3 x isolated 4-20mA outputs
- 1 x isolated RS485 outputs (with user selectable either Standard ASCII and Modbus RTU)

12. Warranty: 18 (Eighteen) months from the date of delivery or 12 (Twelve) months from the date of successful & complete commissioning at end user sub-station, whichever is earlier. All the materials, including accessories, cables etc. are to be covered under warranty / guarantee. If the kit needs to be shifted to supplier's works for repairs within warranty / guarantee period, suppliers will have to bear the cost of repairs, spares and transportation of kit for repair at service center / works

13. It is desirable to have after sales & service facility in North-East India.

**Specification for Multi Gas DGA (Offline DGA)**

SL. NO.	DESCRIPTION	PARAMETER
1	Functional Requirement	The equipment must be capable to analyze dissolved gases, both organic & inorganic, in the transformer oil. The equipment should be suitable to perform the analysis of gases which have been extracted from transformer oil. It should be able to record and maintain the results of tests carried out in the computer-based data station which should be supplied along with the machine.
2	Main Characteristics	The instrument should be suitable for indoor use and operate satisfactorily under normal polluted atmospheric conditions and subjected to normal vibrations and shocks encountered in a machine testing shop. It should operate satisfactorily up to a temperature of 50°C and relative humidity of 100%.
3	Applicable Standards	ASTM D 3612 Section C and IEC 60567 Section D for DGA Analysis.
4	Application & Construction	This equipment should be able to be used to detect the incipient fault in the transformer and to arrest deterioration/damage to the transformer insulation by analyzing gases dissolved in the transformer oil and adopt preventive measures. The process is involved of separation, identification and quantitative determination of gases.

	<p>The Gas Chromatograph should be calibrated by injecting known amount of standard gas and after that extracted gases of known sample will be injected in gas chromatograph for Separation and analysis. The Gas Chromatograph will determine Hydrogen, Oxygen, Nitrogen, Methane, Ethane, Ethylene, Acetylene (C<sub>2</sub>H<sub>2</sub>), CO<sub>2</sub> &amp; CO using argon as carrier.</p>
	<p>Some of the lower limit detection of the Gas Chromatograph for dissolved gases in oil are Hydrogen 10 ppm, Hydrocarbon 1ppm +, Carbon monoxide 25ppm and Carbon dioxide 25ppm.</p>
	<p>For determination of above gases Argon carrier gas and columns will be used. The output of the column is connected to Thermal Conductivity Detector and Flame Ionization Detector, and the amplified signals generated by TCD and FID should be passed on to a Data Processor for calculation of the results and report generation. The instrument must be suitable for indoor use and operate satisfactorily under normal polluted atmospheric conditions and subjected to normal vibrations and shocks encountered in a machine testing shop. It must operate satisfactorily up to a temperature of 50°C and relative humidity of 95% NCRH.</p>
	<p>The detector modules, power supply units, are in one compact unit. The gas circuit should be designed so as to have four separate inlet connections, for carrier gases and fuel gases. Only one recorder should be used by inter-changing the connecting leads with the help of selector switch. To ensure sturdy and leak proof operation, stainless steel gas tubing connections shall be used for internal gas circuit.</p>

5	Basic Unit - Main Frame	<p>The system must be portable type micro system built especially for DGA applications and a compact system built using latest microcontroller design. The system should be having all the components integrated within it and offers unrivalled performance and stability. TCD and FID must have separate controls and therefore no switching is required for analysis.</p> <p>Micro FCV - Manual - Micro Flow Controller - Five Numbers for FID Carrier, TCD1 Carrier, TCD2 Carrier, FID Hydrogen &amp; FID Air.</p> <p>These are specially manufactured valves used for flow control of gases in GC system. Each valve is connected to a Pressure gauge for easy readability and display.</p>
6	2 Temperature zones	Two Isothermal Zones for The Mol. Sieve & Porapak N Column & Methanizer Using Heating Technique.
7	Dual Packed Injector	Dual Packed Injector with One Specialized Splitter System for Single Injection Profile. The Other Injector should be for stand by using a Mol. Sieve. The injectors use a standard Silicon Septa. It should be having Low Volume Injectors designed for horizontal Injections.
8	Sensitive Methaniser Optimized for DGA Application for doing CO & CO <sub>2</sub> Analysis.	Without Methanizer low level CO & CO <sub>2</sub> cannot be analyzed as per IS 10593. The methanizer is connected in series with the FID to give CO & CO <sub>2</sub> along with hydrocarbons.

9	FID - Single - High Sensitivity FID Built for DGA Application	It is of parallel plate type for high collection efficiency, and ease of maintenance. Material of construction Block should be made of stainless steel with Quartz Jet. These are connected with Silica Gel or Haysep A or Porapak N column for analysis of CO, CO <sub>2</sub> & Hydrocarbons. The FID utilizes an OP AMP with input impedance greater than or equal to 10E14. It should have two Pressure Gauges and two Flow Control Needle Valves - one each for Hydrogen and Carrier.
10	TCD1	High Sensitivity TCD With Pre-Set Gain for Low Hydrogen Detection in DGA Using Nitrogen Carrier Gas Or H, O, N Using Argon Carrier Gas. The Column should be Mol. Sieve 5A. Optimized for analytical performance It should be flow through type for high sensitivity and internal volume is less than 300 micro liters. Tungsten / Rhenium (RH) Filaments (GOW-MAC USA MAKE) is used. Material of construction stainless steel.
11	TCD2	High Sensitivity TCD used as a Spared Channel with Porapak Q or Mol. Sieve or Silica Gel Column
12	Column	i. 3mtr X 1/8" OD SS Porapak N / Haysep A. ii. 3mtr X 1/8" OD Mol. Sieve 5A. iii. 2mtr X 1/8" OD SS Porapak Q / Silicagel.
13	Dual Channel Data Processor with Computer	Dual Channel Chromatography USB Power Interface, PC/Laptop with Application Software having following features:  i. Real time collection and processing of data from GC. ii. Interface to be connected with USB 2.0 Port of PC. iii. Snap shot features during real time analysis of all channels. iv. Direct conversion of data files to .pdf and .xl format post run analysis. v. Inbuilt facilities to add/subtract two runs post run analysis.
14	Calibration Gas Mixture, 0.5 Liter WC Canisters	Methane 1000ppm, Ethane 1000ppm, Ethylene 1000ppm, Acetylene 1000ppm, Hydrogen 1000 ppm, Carbon monoxide 2500 ppm, Carbon dioxide 2500 ppm, O <sub>2</sub> 1%, N <sub>2</sub> 3%, Balance Argon.
15	Standard Accessories for GC installation	Tubing for gases - 10 meter Brass nut & ferrule - 20 Nos. Soap bubble flow meter - 1 No. Set of Tools - 1 set UHP grade Hydrogen with regulator - 1 set UHP grade Argon with regulator - 2 sets UHP grade Zero Air with regulator - 1 set Servo Controlled Stabilizer of 3 KVA - 1 Set
16	Extraction System	Manual Head Space System with Pump, Stirrer, Syringe and Vials.

*S. Deb*  
22/05/2021

(Santanu Deb)  
Dy. General Manager (E/M), C&P  
AGTCCPP, NEEPCO Ltd.  
Ramchandranagar



ISO 9001:2015  
ISO 14001:2015  
ISO 45001:2018  
Miniratna Category-I

# नॉर्थ ईस्टर्न इलेक्ट्रिक पावर कॉर्पोरेशन लिमिटेड North Eastern Electric Power Corporation Limited

(भारत सरकार का उद्यम) / (A Govt. of India Enterprise)

135 मे.वा. अगरतला गैस टरबाइन कंबाईंड साइकिल पावर प्लांट  
135 MW Agartala Gas Turbine Combined Cycle Power Plant  
अनुबंध एवं प्रापण, क्यू.एस.एच.ई. एवं जोखिम प्रकोष्ठ / Contract & Procurement : QSHE & Risk Cell  
रामचन्द्र नगर, त्रिपुरा (प) / Ramchandra Nagar, Tripura (W) - 799008



## NOTICE INVITING TENDER (E-TENDER)

e-NIT No. 09 /NEEPCO/AGTCCPP/C&P/2021-22 Dated 22.05.2021

### SECTION – III: PLANT INFORMATION

#### INFORMATION FOR BIDDERS

- Plant Location:** NEEPCO, The Agartala Gas Turbine Combine Cycle Power Plant is located at R.C Nagar under west Tripura Sub Division of Tripura state. The distance from project site to Agartala (Capital of Tripura) is 14 km. Agartala is connected with other North Eastern States by National Highway (NH-44). The Project site is Connected to NH -44 by a connecting road of 4 Km.
  - ❖ **Connectivity by Air:** The main Airport of the State is located at Agartala, which is at a distance of 25 Km from the Project site. Many public and private airlines operate regular flights from Agartala to Kolkata, Guwahati, Delhi, Bengaluru, Chennai
  - ❖ **Connectivity by Rail:** Nearest railway station is Jirania Station Which is about 20 Km from project site.

The Geodetic co-ordinates of the project area at R.C Nagar, West Tripura District are as follows:

Latitude 23° 50' 09" (N)  
Longitude 91° 16' 45" (E)

- HOTELS:** Both budget hotels and premium hotels with Four-star facilities are available. The reputed amongst them are Hotel Polo Towers, Ginger, Rajdhani, Sonar Tori, and Welcome Palace etc.
- VEHICLES:** Hired vehicles are available.
- LOGISTICS:** ABC, Safe-Express, TCI and other transport agencies ply with all India permit. Courier companies such as Blue Dart, DTDC, Goodluck apart from speed post serve NEEPCO.
- ACCOMODATION:** Limited accommodations are available at NEEPCO/AGTCCPP subject to availability on chargeable basis. Supervisory and workmen category can be provided with temporary quarters subject to availability. Fooding etc. are to be arranged. Basic amenities like potable water, electricity are available on 24X7 basis.
- ADVICE TO BIDDERS:** All bidders are directed to visit the plant and visit the locations where the equipments are placed prior to their bid submission and make themselves aware of the existing system.

*Santanu Deb*  
22/05/2021

(Santanu Deb)  
Dy.General Manager(E/M), C&P  
AGTCCPP, NEEPCO Ltd.  
Ramchandranagar