



NATIONAL INSTITUTE OF TECHNOLOGY ROURKELA – 769 008, ODISHA

(ADVERTISED TENDER NOTICE NO.:_NITR/PW/EM/2020/15

Dated: 29/01/2020)

Electrical Work for Construction of 33/0.433 KV 750 KVA sub-station for GJB in NIT, Rourkela

Sealed tenders are invited through e-Procurement Portal of Ministry of HRD, Govt. of India <https://mhrd.euniwizarde.com/> from reputed electrical Contractors having valid registration with PWD (Odisha State) / CPWD / PSUs /Autonomous Institutions and Valid Electrical License with State of Odisha having sound financial status, machinery, resources and experience in execution of similar works.

Name of the work	Estimated Tender Value in Rs/-	Time of completion
Electrical Work for Construction of 33/0.433 KV 750 KVA sub-station for GJB in NIT, Rourkela	Rs. 59,15,614/- (GST extra as applicable)	10 months

1. Sealed tenders on percentage deviation basis are invited in the prescribed form for execution of **Electrical Work for Construction of 33/0.433 KV 750 KVA sub-station for GJB in NIT, Rourkela.**

The contractors who fulfil the following requirements shall be eligible to apply.

Should have successfully completed similar works during the last seven years ending 31st March 2019, as a prime contractor satisfying either of the following:-

- a) Three similar completed works each costing not less than ₹ 24 Lakhs
Or
- b) Two similar completed works each costing not less than ₹ 30 Lakhs
Or
- c) One similar completed work costing not less than ₹ 48 Lakhs

Similar work shall mean Electrical work in substations along with cable laying and termination. Preference will be given to firms who have done similar works in educational and research institutions of repute.

- (a) Validity of Tender : 120 days from the date of opening
(b) Pre-bid Conference : 14/02/2020 at 03:00 PM
(c) Last Date of Submission : 19/02/2020 by 11:00 AM
(d) Date & Time of Opening of Bid(Cover I & II) : 20/02/2020 at 11:00 AM

Questionnaire to tenders is given in the Annexure-I

2. A Pre-bid conference will be held at **14/02/2020; 03:00 PM** in the **Board Room, NIT, Rourkela** as per Schedule given above for clarifying issues and clearing doubts, if any, about the specification & other allied technical details. The prospective bidders may attend the pre-bid conference at the appointed date, time and place.
3. The tender papers may be downloaded from NIT website (i.e. https://nitrkl.ac.in/OldWebsite/Jobs_Tenders/7Construction/Default.aspx)
4. The submission of bids by the tenderer should be addressed to **The Registrar, National Institute of Technology, Rourkela-769008, Odisha** in three separate cover through e-Procurement Portal of Ministry of HRD, Govt. of India <https://mhrd.euniwizarde.com/>

(Electrical Work for Construction of 33/0.433 KV 750 KVA sub-station for GJB in NIT, Rourkela) Due Date: 19/02/2020 by 11:00 AM

Cover No-I: - To contain Bank Drafts towards **Tender Fee & EMD**

Cover no-II :- Technical bid

Cover no III:- Price bid

NOTE:

- a) Tenderers are advised not to make any alteration /modification in the Tender documents, item of work or any respect whatsoever. Violation of this requirement will make the tender liable for rejection.
 - b) In case schedule date becomes a holiday of NIT Rourkela, the next working date shall be the schedule date.
5. The tenderer must use only the tender forms issued for the purpose.
 6. Bid Security (EMD) and Tender Cost: EMD (Earnest Money Deposit) need to be submitted through online portal only for **INR 1,18,312/- (Rupees One Lakh Eighteen Thousand Three Hundred Twelve Only)** and Tender cost (Non-refundable) through online mode for **INR 1000.00/- (Rupees One thousand only)**. The EMD (Earnest Money Deposit) of unsuccessful bidders should be returned to them at the earliest and latest on or before the 30th days after the award of the contract. EMD shall bear no interest. Any bid without accompanying with EMD & Tender Cost is liable to be treated as non-responsive and rejected.
 7. The tender submitted on behalf of the firm shall be signed by its sole proprietor. However authorisations on behalf of the firm, subletting & sub-contracting are not allowed to this contract, otherwise the tender may be rejected.
 8. No consideration will be given to a tender received after the time stipulated above and no extension will be allowed for submission of tender.
 9. The NIT-Rourkela shall have the right to reject any tender not conforming to prescribed procedure (or all tenders) without assigning any reason.

10. The time allowed for completion of the work is **10 months**. The date of commencement of the work is reckoned from the date of Letter of Intent/Work Order. Time shall be considered the essence of the contract.
11. The rate quoted shall be firm throughout the tenure of the contract(including extension of time, if any, granted on request of the contractor) and will not be subject to any fluctuation due to increase in cost of materials, sales tax, octroi etc, unless specifically provided in the documents variation clause enclosed in the tender.
12. Water and electricity required for the completion of the construction shall be provided by the institute at free of cost. However, the contractor will have to make arrangement of pipe line for water and electric poles, wires, cable etc .for electricity.
13. **Labour rate** will be as per **GOI Ministry of Labour and Employment Notice** applicable for Group B City and will be revised as govt. Notification time to time. However contractor's profit will be remain unaltered throughout the contract period.
14. The tenderer shall submit his tender after carefully examining the whole of the tender document and the terms and conditions of contract, the drawing and specifications, the schedule of quantities etc. and also after examining the site and conditions prevailing in and around site.
15. This notice inviting tenders, the conditions of tender and the duly completed form of tender etc. will form part of the Agreement to be executed by the successful tenderer with the Owner.
16. The competent authority on behalf of National Institute of Technology, Rourkela does not bind him to accept the lowest or any other tender and reserves to himself the authority to reject any or all of the tenders received without the assignment of a reason. All tenders, in which any of the prescribed conditions is not fulfilled or any condition including that of conditional rebate is put forth by the tenderer, shall be summarily rejected.
17. Quotations shall remain valid for a period of 120 days from the date of opening of the tender, which period may be extended by mutual agreement and the tenderer shall not cancel or withdraw the tender during the initial validity period 120 days .
18. Tenderers must include in their rates, GST or any other tax & duty or other levy by the central and state government or any other tax & duty or other levy or to be levied in future by the central government or state government or local authority if applicable.
19. The Contractor has to pay building and other construction workers welfare cess @ 1% on the cost incurred on the construction work under BOCW (RE & CS) Act 1996.
20. The Contractor shall conform in all respects with the provision of any such Statue, Ordinance or Law as aforesaid and the rules, Regulations or Bye-Laws of any local or other duly constituted authority which may be applicable to the Works.
21. The Contractor shall comply with all rules framed from time to time by Government (Central or State) or other local authority and legislations governing labour for the protection or health, sanitary arrangements, wages, welfare (including EPF, ESI etc.) and safety of workers.
22. This contract shall be an item rate contract. The contractor shall be paid for actual quantity of work done, as measured at site including any deviation plus or minus. The rate of any non-schedule items (i.e. extra item) shall be derived as per conditions of this contract.
23. The tender drawings exhibited/enclosed are preliminary drawings intended for the guidance of the Contractor only. They may be subject to revision and alteration without vitiating any of the terms of the contract and the contractor shall be bound to execute the works as shown on the final drawings without claiming any extra payment.

24. No correspondence will be entertained in respect of this tender other than any clarification strictly pertaining to this tender.
25. All the correspondence and documents shall be in English only.
26. The tender price quoted by a tenderer shall be kept strictly confidential by them and shall not be divulged to any other party even approximately before the time limit for delivery of tender. The only exception be for obtaining an insurance quotation, you may give your insurance company or agent any essential information they ask for, so long as it is done in strict confidence. No information about others tender price should be obtained and no arrangement with anyone else should be made whether or not he submitted the tender.
27. For electrical works, tenderer must possess or obtain necessary license from the competent authority valid in Odisha, wherever applicable.
28. For some items, unit quantity has been indicated in the BOQ for various buildings which may be executed if found necessary. No claim however will be entertained for any variation or deletion.
29. List of approved Makes / Brands / Agencies is enclosed. However the final choice of brand will be as per the decision of the engineer-in-charge.
30. In case of any variation of rate for similar non schedule items for various buildings, the lowest indicated rate shall be followed.
31. In case of any typing error in the DSR item or rate, relevant item, and related Code number of DSR schedule shall be followed.
32. During course of actual execution, any item available in one building can be followed for other building also, if found necessary, under the complete scope of work.
33. Any clarification required by tenderer may be informed positively by **14/02/2020 at 03:00 PM** which will be clarified during Pre-bid meeting.
34. Tenderers are requested to be present at the time of opening of the bids for discussions, if any.
35. **Major items like Transformer, Cable, VCB, Panels will be dispatched from the works only after due inspection by NIT Rourkela at work site. Necessary arrangement for inspection has to be done by the successful bidder.**
36. Details including our prescribed format for prequalification, BOQ, General Conditions and Special Conditions of Contracts etc. are available in our website at https://nitrkl.ac.in/OldWebsite/Jobs_Tenders/7Construction/Default.aspx
37. GST will be extra as per applicable rate.

38. INSTRUCTIONS FOR ONLINE BID SUBMISSION

The bidders are required to submit soft copies of their bid electronically on the e-Wizard Portal (<https://mhrd.euniwizarde.com>) using valid Digital Signature Certificates. Below mentioned instructions are meant to guide the bidders for registration on the e-Wizard Portal, prepare their bids in accordance with the requirements and submitting their bids online on the e-Wizard Portal. For more information, bidders may visit the e-Wizard Portal <https://mhrd.euniwizarde.com>

38.1 REGISTRATION PROCESS ON ONLINE PORTAL

1. Bidders to enroll on the e-Procurement module of the portal <https://mhrd.euniwizarde.com> by clicking on the link "Bidder Enrollment". Enrolment on the e-wizard Portal.
2. The bidders to choose a unique username and assign a password for their accounts. 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 eWizard Portal. Bidders to register upon enrolment their valid Digital Signature Certificate

(Only Class III Certificates with signing + encryption key usage) issued by any Certifying Authority recognized by CCA India (e.g. Sify / TCS / nCode / eMudhra etc.), with their profile.

3. 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 DSCs to others which may lead to misuse. Foreign bidders are advised to refer "DSC details for Foreign Bidders" for Digital Signature requirements on the portal.
4. Bidder then logs in to the site through the secured log-in by entering their user ID / password and the password of the DSC / eToken.
5. Bidders must ensure that they have the latest version of Java installed in their local system.
6. The scanned copies of all original documents should be uploaded in pdf format on portal <https://mhrd.euniwizarde.com>
7. After completion of registration payment, you need to send your acknowledgement copy on our help desk mail id ewizardhelpdesk@gmail.com for activation of your account.

38.2 TENDER DOCUMENTS SEARCH

1. Various built in options are available in the e-Wizard Portal to facilitate bidders to search active tenders by several parameters. These parameters include Tender ID, organization, location, date, value, etc.
2. There is also an option of advanced search for tenders, wherein the bidders may combine a number of search parameters such as organization name, form of contract, location, date, other keywords etc. to search for a tender published on the Online Portal.
3. Once the bidders have selected the tenders they are interested in, they may download the required documents / tender schedules. These tenders can be moved to the respective 'My Tenders' folder. This would enable the Online Portal to intimate the bidders through SMS / e-mail in case there is any corrigendum issued to the tender document.
4. The bidder should make a note of the unique Tender ID assigned to each tender, in case they want to obtain any clarification / help from the Helpdesk.

38.3 BID PREPARATION

1. Bidder should take into account any corrigendum published on the tender document before submitting their bids.
2. Please go through the tender advertisement and the tender document carefully to understand the documents required to be submitted as part of the bid.
3. Please note the number of covers in which the bid documents have to be submitted, the number of documents - including the names and content of each of the document that need to be submitted. Any deviations from these may lead to rejection of the bid.
4. Bidder, in advance, should get ready the bid documents to be submitted as indicated in the tender document / schedule and generally, they can be in PDF / XLS / PNG etc. formats. Bid documents may be scanned with 100 dpi with black and white option.

38.4 BID SUBMISSION

1. Bidder to log into the site well in advance for bid submission so that he/she 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. The bidder to digitally sign and upload the required bid documents one by one as indicated in the tender document.
3. Bidder to select the payment option as Online" to pay the tender fee/ EMD wherever applicable and enter details of the instrument.
4. A standard BoQ format has been provided with the tender document to be filled by all the bidders. Bidders to note that they should necessarily submit their financial bids in the prescribed format and no other format is acceptable.

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 Colored (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.

5. 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.
6. All the documents being submitted by the bidders would be encrypted using PKI encryption techniques to ensure the secrecy of the data, which cannot be viewed by unauthorized persons until the time of bid opening.
7. The uploaded tender documents become readable only after the tender opening by the authorized bid openers.
8. Upon the successful and timely submission of bids, 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.
9. Kindly add scanned PDF of all relevant documents in a single PDF file of compliance sheet.

38.5 AMENDMENT OF BID DOCUMENT

At any time prior to the deadline for submission of proposals, the institutions reserve the right to add/modify/delete any portion of this document by issuance of a Corrigendum, which would be published on the website and will also be made available to the all the Bidder who have been issued the tender document. The Corrigendum shall be binding on all bidders and will form part of the bid documents.

38.6 ASSISTANCE TO BIDDERS

1. Any queries relating to the tender document and the terms and conditions contained therein should be addressed to the Tender Inviting Authority for a tender or the relevant contact person indicated in the tender.
2. e-Procurement support any queries relating to the process of online bid submission or queries relating to e-Wizard Portal in general may be directed to the **24x7 e-Wizard Helpdesk. The contact number for the helpdesk is 011-49606060, 23710092, 23710091, Er Sanjeet Kumar Jha (+91-8882495599), 9355030626. Amit Kumar Jha 9355030627, 9205898226**

Email Support:

For any eProcurement Application Service Requests and Technical issues related to Document Uploads, Tender Publishing, Issue of Corrigendum, Encryption/Decryption Key issues, Bid Evaluation, Bidder Login issues, New Registration issues, Key Uploads, DSC Key installation, Bid Submission, system users may please mail to Sanjeet Kumar Jha ewizardsanjeet.kumar@gmail.com

REGISTRAR
National Institute of Technology
Rourkela-769008 (Odisha)
Fax: 0661-2462022
Ph No: 0661-2462021

ANNEXURE - I

NAME OF WORK: Electrical Work for Construction of 33/0.433 KV 750 KVA sub-station for GJB in NIT, Rourkela

QUESTIONNAIRE / INFORMATION TO BE SUBMITTED BY THE PROSPERITY BIDDERS

Brief work plan (PERT/Bar Chart) for execution of the major projects within 6 months to be submitted.

1. What should be your site organization including engineers to be deployed at site?
2. Brief details of similar works executed by your firms during last 3 years. This should include cost, time of actual start/completion, analysis schedule, specifications adopted etc.

REGISTRAR

**National Institute of Technology
Rourkela-769008 (Odisha)
Fax: 0661-2462022
Ph No: 0661-2462021**

CHECK LIST FOR PRE-QUALIFICATION

Forms to be filled in properly.

1. Form-A: This form (check list)
2. Form-B: Letter of Transmit
3. Form-C
4. Form-D
5. Photocopy of documents to be attached.
 - a) Valid license should include valid Electrical license of State of ODISHA.
 - b) Work orders executed of last 3 years.
 - c) TAX Clearance Certificate, PAN Card & GST Registration
 - d) Performance report from authority/officer having rank not below Executive Engineer for Govt./PSUs and General Manager for private firms with specific mention about the project components, scheduled and actual time of completion, final project value etc. to be submitted.
 - e) List of equipment in possession.

(Signature of the Agency)

PRE-QUALIFICATION INFORMATION

LETTER OF TRANSMITTAL

(To be typed on the Agency's Letterhead)

To

**THE REGISTRAR
NATIONAL INSTITUTE OF TECHNOLOGY
ROURKELA - 769008**

**SUB: Electrical Work for Construction of 33/0.433 KV 750 KVA sub-station for GJB
in NIT, Rourkela**

Sir,

Having examined the details of pre-qualification document, I hereby submit the pre-qualification documents and other relevant information.

1. I hereby certify that all the statements made and information supplied in the enclosed forms A to D and accompanying statements are true and correct to the best of my knowledge. I understand that if any information found incorrect, the application is liable to be cancelled.
2. I have furnished all information and details necessary for pre-qualification and have no further pertinent information to supply.
3. I certify that my firm is not **blacklisted/ banned** from business by any organization.
4. I hereby accept the rules and procedures of the Institute for pre-qualification of Contractor and agree that the Institute has the right to accept or reject any application without assigning a reason thereto.

(Signature of the Agency)



NATIONAL INSTITUTE OF TECHNOLOGY, ROURKELA

APPLICATION FOR PRE-QUALIFICATION

1. NAME OF AGENCY/FIRM: - _____
2. ADDRESS: - _____
3. FAX/TELEPHONE NUMBER: - _____
4. DETAILS OF REGISTRATION _____
5. PAN CARD,GST No. TAX CLEARANCE CERTIFICATE
6. VOLUME OF BUSINESS IN LAST THREE FINANCIAL YEARS
2016-17 Rs _____
2017-18 Rs _____
2018-19 Rs _____
7. FIELD OF SPECIALIZATION
8. IMPORTANT JOBS EXECUTED IN GOVT./PSU INCLUDING SPECIFICATIONS,
MATERIALS USED ETC.
9. IMPORTANT JOBS IN HAND AND THEIR STATUS
10. ANY OTHER INFORMATION REGARDING TECHNICAL CAPABILITY

(Signature of the Agency)

FORM-D

Annexure to application for pre-qualification

WORKS COMPLETED AND IN PROGRESS DURING THE LAST 3 YEARS (INCLUDING ALL WORKS AWARDED)

{ADD ADDITIONAL SHEETS, IF NECESSARY}

SL.NO	Name of work and work order number	Date of Start	Date of completion		Tendered Cost	Complete address of the Authority for whom the work was done
			Scheduled	Actual		

APPROVED MAKE OF ELECTRICAL ITEMS

Sl. No.	Equipment description	Approved Make
01	ACB	Siemens (3WL), Schneider (MVS), Legrand (DMX3)
02	MCCB, MPCB	Siemens (3VL), Schneider (CVS), Legrand (DRX & DPX)
03	MCB, RCCB, RCBO, Surge Protectors, DB and other LT switchgear	Siemens (Betagard), Schneider (Acti9), Legrand (DXQ & Ekinox)
04	Change-over switch	Havells, Legrand, HPL
05	Motor Starter	Siemens, Kirloskar, Legrand
06	Push Buttons	Siemens, Esbee, Schneider
07	HT & LT XLPE Cable	Polycab, Havell's, V-guard, KEI, RR, Universal
08	FR & FRLS copper wires	Lapp, Polycab, Havell's, V-guard, KEI, RR
09	PVC Rigid Conduits	Berlia, Polycab, AKG, Anchor (Panasonic),
10	Piano reed type Switch and accessories	Anchor (Panasonic), Havell's, HPL
11	Modular Type Switches and Accessories	Legrand (Myris), Crabtree (Athena), Schneider (Zencello), Anchor (Ave),
12	FTL / CFL	Philips, CGL, Bajaj
13	LED Indoor Lights	Philips, CGL, Bajaj, Syska, Jaguar, Moserbear, Havells
14	Outdoor Lights	Philips, CGL, Bajaj, Syska
15	Energy Meters	Alstom, Secure, Schneider
16	Measuring Instruments	Siemens, Schneider, Esbee
17	Fans	Usha, CGL, Bajaj, Havell's, Almonard
18	Poles	Bajaj
19	CT & PT	Kappa, AE
20	Selector Switch	Kaycee, Esbee, Siemens, GE
21	Panel Builders	EAP, Konark Electronic, Swati Industries
22	Bus-trunking, risingmain	Legrand, Schneider, Godrej
23	Raceways and cable trays	Legrand Cablofil, Schneider
24	Cable Joint	3M, Raychem, Jonson
25	Cable Lugs	Dowels, Jonson
26	Cable gland	Dowels, Jonson
27	Astronomical Timer	Schneider, Siemens
28	Outdoor JB	Simtex, Hensel
Any other items as per the approval of the Engineer – in – Charge .		

Note :

1. Wherever makes have not been specified for certain terms as equivalent makes referred, the same shall be as per BIS and as per approved by Engineer in charge / Consultant.
2. Contractor shall be required to get the finishing items approved in respect of their make, finish, texture and colour etc.

General Conditions of Contract

1. DURATION OF THE CONTRACT

- 1.1 The Contract will be valid for a period of **06 months** starting from the date of issue of work order.

2. SCOPE OF THE WORK

Details are in the BOQ

3. PAYMENTS:

- 3.1 The Contractor should submit his claim for the services rendered showing distinctly the charges payable.
- 3.2 Payment will be made to the contractor on actual work done basis after ascertaining the satisfactory performance of contractual responsibility carried out in the previous period.
- 3.3 No other advance payment claims or running bills will be entertained.
- 3.4 Income Tax and any other statutory levies will be deducted at source as per the rules in force from time to time.

4. INDEMNITY BOND

Successful bidder shall indemnify NITR against any claim by any authority. In the event NITR has to pay any individual, statutory body or any agency for reasons directly or indirectly attributable to this contract, the contractor only should pay such claim/damages and even if NITR is called upon to pay such damages/penalties, the Contractor will reimburse the same. This is subject to the condition that NITR complies with various requirements in respect of the laws applicable to it.

5. TERMINATION OF THE CONTRACT

NITR alone reserves the right to terminate a contract by giving 30 days notice and without assigning any reasons thereof.

6. OTHER TERMS AND CONDITIONS

- 6.1 The contractor shall be responsible for the proper conduct of his staff. Any misconduct by the contractor's staff shall not be tolerated and appropriate action shall be taken by NITR.
- 6.2 The Contractor shall be responsible for payment of compensation and settlement of litigation arising out of dispute between employer and employees and before any including labour commissioner /labour courts relating to the present tender. NITR will no way be responsible on any account whatsoever relating to payment of wages and labour laws. There will be no relation of master and servant between NITR and labourers of the contractor employed for carrying out the day to day maintenance work.

- 6.3 NITR will not be responsible for any accident, death or injury to contractor's employees which would arise during the course of their duty nor shall be responsible or be liable to pay damage or compensation to such persons. The contractor should at all times indemnify and keep NITR indemnified against all claims which may be made under Workmen Compensation Act, 1923 or any statutory modifications thereof or otherwise for or in respect of any damages or compensation payable in consequence of any accident or injury sustained by any workman or other person whose entry into NITR premises has been authorized by the contractor.
- 6.4 If, at any time, during the performance of the contract, the contractor encounter conditions impeding timely performance of service, then they should promptly notify NITR, in writing, of the fact of the delay, the cause of delay and its likely duration. NITR shall evaluate the situation and at its discretion extend the suppliers time for performance and the decision of NITR would be final and binding.
- 6.5 INSPECTION: Materials on its arrival at NITR will be inspected by NITR Engineer in-charge and his/her decision in the matter will be considered final. The rejected materials will be returned to the Contractor for replacement and all charges on the same will have to be borne by the Contractor. Replacement should be carried out within 3 days.
- 6.6 The contractor should have proper telephone numbers and email enabling NITR to contact them at any time.
- 6.7 The Contractor shall have no right, title or interest in the site made available by the NITR for the execution of the work or in the building, structure or work executive in the said site or in the goods, articles or materials etc. brought to the said site (unless the same specifically belong to the contractor) and the contractor shall not have or deem to have any lien whatsoever charge for unpaid bill will not be entitled to assume or retain possession or control of site or structures or materials or equipment and the NITR shall have an absolute right to take full possession of the site and to remove the Contractor, their servants, agents, representatives, materials etc. belonging to the Contractor and lying on the site.
- 6.8 If any damage to any other person/persons at the premises or buildings of NITR, is attributable to the Contractor, such damages should be made good by the Contractor. The contractor shall be responsible for any insurance coverage of their employees.

7. PERFORMANCE BANK GUARANTEE/ SECURITY DEPOSIT

The Contractor should provide NITR with the Security Deposit through **Performance Bank Guarantee/ Demand Draft** equivalent to **5%** of **the contract value from any nationalized/ scheduled bank**, in the prescribed format valid for a period of 60 days beyond the date of completion of contractual obligation. The above Bank Guarantee should be submitted within 02 weeks from the date of award of contract and should be valid for over six months after the expiry of the period of the contract and extended in case of further renewals of the contract. NITR will be free to en-cash this Bank Guarantee in the event of any failure on the part of the Contractor to meet his obligations under the contract or in the event of any demand by the concerned Statutory Authorities for the dues from the Contractor at its sole discretion.

After acceptance of the contract if any/all the terms and conditions of the contract is/are violated, NITR reserves the right to terminate the contract. In such cases, the security deposit will be forfeited to NITR at its discretion.

8. DEDUCTIONS ON ACCOUNT OF NON-SATISFACTORY WORK

- a) Damage to NITR assets or equipment's etc., caused by the contractor's staff, the acquisition cost of assets, will be levied as penalty as decided by NITR. The amount of losses/damages will be recovered from either bills/security deposit of the contractor.
- b) In case of any misbehaviour like quarrelling, abusing etc., between the staff employed by the contractor, causing disturbance in the premises: ₹ 500/-penalty per occasion and replacement of such personnel immediately.
- c) In NITR Campus smoking & chewing tobacco etc. is prohibited. Worker who is habitual of these items is deputed in campus if any found violating this rule will be asked to leave the premises and should be replaced immediately.
- d) If specified quality work is not maintained for on account of non-satisfactory work performance, a proportionate deduction for that non-satisfactory work will be made from the bill of the contractor by the competent authority of **NIT, Rourkela**. No correspondence shall be entertained from the contractor if deductions are made due to non-satisfactory work.

9. LIQUIDATED DAMAGE:

- a) In case the firm fail to complete the work within the stipulated time period indicated in the contract, unless such failure is due to force majeure or due to Employer's fault, you shall pay to the Employer by way of compensation for delay and not as penalty, or a sum upto a maximum 10 % of the contract value at the discretion of NIT, Rourkela. The exact value of the delay will be worked out by the Institute following its procedure which shall be binding on you.
- b) LD clause will be applied to every step and will be implemented to every running bill. If the work is beyond schedule, upto 10 % of the bill amount will be retained by the Institute which may be released only if work is accelerated and satisfies the bar chart at a later date. If the completion of the work exceeds stipulated time the withheld money shall be adjusted against the final LD charges.
- c) In case of genuine reason for delay, the same should be brought in writing to the notice of the Institute and extension of time may be sought immediately after the hurdle is encountered. No request for extension of time may be sought after expiry of the completion date.

Annexure-II

SCOPE OF WORK FOR Electrical Work for construction of 33/0.433 KV 750 KVA sub-station for GJB in NIT, Rourkela

Estimate for construction of 33/0.433 KV 750 KVA sub-station for GJB						
Sl. No	DSR 2018	Description	Unit	Rate	Quantity	Amount
1		Laying of one number XLPE power cable of 33 KV grade of following size direct in ground including excavation, sand cushioning, protective covering and refilling the trench etc. as required.				
	8.5.2	Above 120 sq. mm and upto 400 sq. mm	Metre	486.00	500	243,000.00
2		Supplying and making indoor cable end termination with heat shrinkable jointing kit complete with all accessories including lugs suitable for following size of 3 core, XLPE aluminium conductor cable of 33 KV grade as required.				-
	10.7.3	240 sq. mm.	Set	28,214.00	1	28,214.00
3		Supplying and making outdoor cable end termination with heat shrinkable jointing kit complete with all accessories including lugs suitable for following size of 3 core, XLPE aluminium conductor cable of 33 KV grade as required.				-
	10.8.3	240 sq. mm.	Set	38,628.00	1	38,628.00
4		Supplying and making straight through cable jointing with heat shrinkable jointing kit complete with all accessories including ferrules suitable for following size of 3 core, XLPE aluminium conductor cable of 33 KV grade as required 80 mm dia nominal bore				
	10.9.3	240 sq. mm.	Each	78,693.00	1	78,693.00
5		Providing and fixing G.I. pipe complete with G.I fittings including trenching and refilling etc.				-
	2835	150 mm dia. G.I. pipe (medium class)	RM	1,187.00	3	3,561.00
6		Earthing with copper earth plate 600 mm X 600 mm X 3 mm thick including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe of 2.7 metre long etc. with charcoal/ coke and salt as required.				
	5.6		Set	11,794.00	2	23,588.00

7	5.9	Supplying and laying 25 mm X 5 mm G.I strip at 0.50 metre below ground as strip earth electrode, including connection/ terminating with G.I. nut, bolt, spring, washer etc. as required. (Jointing shall be done by overlapping and with 2 sets of G.I. nut bolt & spring washer spaced at 50mm)	Rm	131.00	100	13,100.00
8	5.1	Providing and fixing 25 mm X 5 mm copper strip in 40 mm dia G.I. pipe from earth electrode including connection with brass nut, bolt, spring, washer excavation and re-filling etc. as required.	Rm	1,224.00	25	30,600.00
9	5.15	Providing and fixing 25 mm X 5 mm G.I. strip on surface or in recess for connections etc. as required.	Rm	206.00	100	20,600.00
10		Supply and erection of 200 X 100mm R.S. joist pole (11 mtrs) including excavation of pole pit 500x500x1500 mm in all kind of soil and concreting with 1:3:6 mix and 40 mm size stone ballast	Each	37,170.00	2	74,340.00
11		Supply and erection of 100mm x 50mm x 6 mm (9.56 kg per meter) Hot Dip Galvanised Channel for 33 KV substation complete with through bolts and nuts for clamping to the poles with suitable GI clamps including drilling holes for insulators pins/ fittings, bolts, nuts, washers etc as required.	RM	937.00	90	84,330.00
12		Supply and erection of 75mm x 40mm x 6 mm (7.14 kg per meter) Hot Dip Galvanised Channel for 33 KV substation complete with through bolts and nuts for clamping to the poles with suitable GI clamps including drilling holes for insulators pins/ fittings, bolts, nuts, washers etc as required.	RM	700.00	30	21,000.00
13		Supply and fixing of 33 KV Pin insulator 90 KN type with suitable GI Pin	Set	1,090.00	6	6,540.00
14		Supply and fixing of 11 KV disc Insulator 90 KN type with hardware fittings in set of 3 insulators and one hardware (For 33 KV substation)	Set	6,600.00	9	59,400.00
15		Vertical Spike 50 mm GI Pipe 1.5 M Long	Each	1,500.00	2	3,000.00
16		Supply and erection of 33KV, 800A, 25KA/1 SEC centre rotating double break isolator without earth switch	Set	83,178.00	3	249,534.00
17		Supply and erection of 33KV 32 A HG Fuse	Set	28,262.00	1	28,262.00
18		Supply and fixing of 33 kV, 10 kA LA, 1 PHASE	Each	25,746.00	6	154,476.00
19		Supply and erection of 100 sq mm AAC Conductor for Connection Of 33/.433 KV Station Service transformer and Jumper/ Droppers/Terminations	RM	168.00	120	20,160.00

20		Supply, laying, jointing, testing and commissioning of ISI marked (IS : 14930, part 2) H.D.P.E. (DWC) Double wall Corrugated pipe for cable laying having corrugation on outer wall and plain smooth surface at inner side including transportation upto the site, jointing, providing and fixing all fittings i.e. sockets, couplers, reducers, end caps etc to complete the works in all respects.				-
	I	300 mm. ID	RM	803.00	10	8,030.00
	li	150 mm. ID	RM	546.00	10	5,460.00
21		Supply, Installation, testing, Commissioning of J K Maintenance Free Chemical Gel Earthing - Dual Pipe (GI) Technology of "JK CHENSODE" 3mtr long 80mm dia permanently sealed at both the ends with the lead terminal at the top along with 50 kgs of duly filled with metallic conducting compound permanently sealed at both the ends with the lead terminal at the top along with 50 kgs of "RESLOW" grounding minerals duly tested & certified by CPRI. The earth pit chamber shall be of heavy duty Polyplastic earth pit cover.	Each	15,000.00	4	60,000.00
22		H.V. PANEL (33 KV - VCB PANEL)				-
		Supply, installation, testing & commissioning of indoor type floor mounted metal clad, IP 52, 33 KV VCB panel with 1 no VCB (1 incomer), totally enclosed & fully interlocked with the existing ABB VCB having One number of incomer and two numbers of outgoing , horizontal drawout, horizontal isolation type breaker as per IS : 13118, as ammended upto date and additional specifications, having				-
		The panel should be suitable for connections for up to 3 x 300 sq.mm XLPE 33 KV cable (cable entry from bottom), end termination with heat shrinkable jointing material etc. as required. (The Cost of end termination not included in this item)				-

		power pack (1 working & 1 standby) with 220 Volt AC input & 24 Volt DC continuous output suitable for indicating lights & closing / tripping / indication of 3 Nos. HT panel boards with 2 Nos. 12 Volts each maintenance free batteries of suitable AH each, charging unit, capacitor bank for emergency delivering for trip system complete with suitable capacity of Ammeter & Voltmeter i/c connections with 2.5 sq.mm FRLS insulated copper conductor cable etc. including DC DB consisting of 8 nos 32 Amp DP MCB's for DC supply distribution to panels as required.					-
		Incoming - 1 No. 630 Amp. VCB with followings -					-
		(a) 1 no. of 33 KV / $\sqrt{3}$ / 110 / $\sqrt{3}$ Volts drawout type PT Class 0.5 accuracy and 100 VA burden with 1 No. Voltmeter (0-36 KV), analog type, selector switch for voltmeter and protection fuses/MCB for HT metering.					-
		(b) 3 nos. dual core dual ratio CTs of ratio 200/100/5/5A of 15 VA burden and accuracy class-0.5 for metering and class 5P10 for protection.					-
		(c) 1 No. - (0-200A) Ammeter, analog type with selector switches.					-
		(d) Master trip relay					-
		(e) Trip circuit supervision relay					-
		(f) Microprocessor based numerical relay with IDMT setting for O/L, E/F and S/C protection.					-
		(g) Restricted earth fault relay					-
		(h) Over and Under voltage relay.					-
		(i) Timer and TNC switch	Set	600,000.00	1	600,000.00	
23		SUPPLY OF 3C X 150 SQ MM 33 KV (UE) XLPE CABLE WITH STRANDED COMPACT CIRCULAR ALUMINIUM CONDUCTOR, CONDUCTOR SCREEN WITH EXTRUDED SEMI					-
		150 sq. mm 3 core	RM	2,359.00	500	1,179,500.00	

24		Design, manufacture, testing at works supply, installation, testing and commissioning at site 33 KV/440V, 3 phase, 50 Hz, delta/star connected, outdoor type following sizes of transformers, oil immersed ONAN cooled, complete with all fittings such as oil conservator, silica gel breather, thermometer, explosion vent, Local OFF LOAD tap changer with RTCC for +10% & -10% tappings in step of 1.25 bidirectional roller, diagram & rating plate, oil temperature indicator, winding temperature indicator and buccholtz relay with wiring upto marshalling box, lifting lugs, first filling of oil, weather proof LT cable box with LT bus duct disconnecting chamber minimum 8 mm thick non magnetic gland plate etc. complete as per specification including 10% extra oil in non returnable drum for topping up as required. (The transformer shall be subject to all tests specified in the specifications and test certificates shall be produced along with facilitation of Inspection at work site).				-
		750 KVA Make : Schneider, BHEL, ABB, Areva	No.	1,500,000.00	1	1,500,000.00
25		Supplying & making indoor end terminations with brass compression gland and aluminum lugs for following sizes of PVC insulated and PVC sheathed/ XLPE aluminium conductor cable of 1.1 KV grade as required.				
		3.5 X 300 sq. mm (38mm)	each	724.00	12	8,688.00
26		Supply and Installation of HT Cable Route Marker of concrete rectangular shape of dimension 240mm (W) X 160 mm (D) X 1500 mm(H) RCC (1:2:4)	No.	1,100.00	10	11,000.00
27		Laying of one number PVC insulated and PVC sheathed/ XLPE power cable of 1.1 KV grade of following size direct in ground including excavation, sand cushioning, protective covering and refilling the trench etc as required.				
A		Upto 35 sq.mm	mtr	167.00	10	1,670.00
B		Above 35sq.mm and upto 95sq.mm	mtr	173.00	10	1,730.00
C		Above 95sq.mm and upto 185sq.mm	mtr	179.00	10	1,790.00
D		Above 185sq.mm and upto 400sq.mm	mtr	106.00	100	10,600.00

28		Laying of one number pve insulated and pve sheathed/ XLPE power cable of 1.1 KV grade of following size direct in ground in the same trench in one tier horizontal formation including excavation, sand cushioning, protective covering and refilling the trench etc as required				-
A		Upto 35 sq.mm	mtr	115.00	10	1,150.00
B		Above 35sq.mm and upto 95sq.mm	mtr	121.00	10	1,210.00
C		Above 95sq.mm and upto 185sq.mm	mtr	127.00	10	1,270.00
D		Above 185sq.mm and upto 400sq.mm	mtr	144.00	100	14,400.00
29		Laying of one number PVC insulated and PVC sheathed/ XLPE power cable of 1.1 KV grade of following size in the existing masonry open duct required.				-
A		Upto 35 sq.mm	mtr	9.00	10	90.00
B		Above 35sq.mm and upto 95sq.mm	mtr	15.00	10	150.00
C		Above 95sq.mm and upto 185sq.mm	mtr	20.50	10	205.00
D		Above 185sq.mm and upto 400sq.mm	mtr	37.50	50	1,875.00
30		Design, fabrication, assembling, wiring, supply installation, testing and commissioning of Following Panels, fabricated out of 14/16 Gauge CRCA sheet steel in cubicle compartmentised modular construction complete with supporting rigid structure, interconnections, aluminium bus bar strip with heat strinkable colour coded current density of bus bar 0.8 A per sqmm Identification on all breakers & MCCB to indicate the area they serve. Degree of protection IP 42, earthing hinged doors with 2.5 sqmm tinned braded copper wire, free standing floor mounted with removable Gland Plates on top & bottom of the panel, all mounting plates shall be GI sheets. Panels shall be treated with all anticorrosive process before powder coating as per specifications and final approved shade. Galvanized hardwares with zinc passivation shall be used in fabrication of panels 2 Nos. earthing terminals shall be provided for all distribution panels. Panels shall be suitable for 415 V, 3 Phase, 4 Wire, 50Hz supply system.				

I		Main LT Panel				
		Incoming: (Transformer)				
		One (1) Nos. 1250A FP ACB EDO Type				
		Metering:				
		One (1) Nos. (0-500V) 96 x 96 Sq.mm voltmeter with control MCB & selector switch.				
		One (1) Nos. (0-1250A) 96 x 96 Sq.mm CT operated Ammeter with selector switch.				
		One (1) Set of Phase Indication Lamp with 2A SP MCB.				
		Incoming: (DG 1)				
		One (1) Nos. 1250A FP ACB EDO Type				
		Metering:				
		One (1) Nos. (0-500V) 96 x 96 Sq.mm voltmeter with control MCB & selector switch.				
		One (1) Nos. (0-800A) 96 x 96 Sq.mm CT operated Ammeter with selector switch.				
		One (1) Set of Phase Indication Lamp with 2A SP MCB.				
		Bus Bar:				
		1600A, TPN aluminium bus bar of suitable length with colour coded sleeves.				
		Outgoing:				
		Two (2) Each. 800A FP ACB EDO Type				
		Three (3) Each. 160A TPN MCCB				
		Four (4) Each. 100A TPN MCCB				
		Three (3) Each. 63A TPN MCCB	Set	1,268,000.00	1	1,268,000.00
31		Supply and fixing CO2 type fire extinguisher conforming to IS 2876 with cylinder duly charged of capacity 4.5 kgs including fixing clamps brackets, bolts and nuts etc. as required.	Nos.	3500.00	2	7,000.00
32		Supplying of fire buckets of 9 litres capacity quality painted white from inside and red from outside and having inscription "FIRE" in white conforming to IS 2546-1974 duly amended upto date as required.				
		Sand Buckets-Set of Four	Nos.	2,500.00	1	2,500.00

33		Supplying of first aid box with cover made out of 16 SWG MS sheet of size 450 mm x 600 mm x 200 mm and painted with two coats of enamel paint over one coat of steel primer and having inscription "FIRST AID BOX" in white and a red cross of suitable size with following items:				
		- 1 No. band-aid bandage 150mm				
		- 1 No. Savlon soap 100 ml				
		- 1 No. Bottle betadine 30 ml				
		- 1 No. Roll cotton				
		- 1 No. Packet dressing material	Set	1,070.00	1	1,070.00
34		Supply, installation of 1.1 KV grade ISI marked rubber mats of 1 meter width.	RM	1,200.00	11	13,200.00
35		Preparing and obtaining the approval from CEIG to carryout electrical installation and duly submitting the drawing for approval including necessary inspection fees for inspection and obtaining Safety certificate for entire new installation	LS	25,000.00	1	25,000.00
		Sub-Total				5,915,614.00
		GST @ 18 % EXTRA				1,064,810.52
		GRAND TOTAL				6,980,425.00

SPECIAL CONDITION OF CONTRACT

The contractor will take every step for implementation of Safety systems.

The Contractor should follow the following General Guidelines governing the safety rules as laid down under:

1. Smoking is strictly prohibited at workplace.
2. Nobody is allowed to work without wearing safety helmet. Chinstrap of safety helmet shall be always on. Drivers, helpers and operators are no exception.
3. No one is allowed to work at or more than three meters height without wearing safety belt and anchoring the lanyard of safety belt to firm support preferably at shoulder level.
4. No one is allowed to work without adequate foot protection.
5. Usage of eye protection equipment shall be ensured when workmen are engaged for grinding, chipping, welding and gas-cutting. For other jobs as and when site safety co-ordinator insists eye protection has to be provided.
6. All safety appliances like Safety shoes, Safety gloves, Safety helmet, Safety belt, Safety goggles etc. shall be arranged before starting the job.
7. All excavated pits shall be barricaded & barricading to be maintained till the backfilling is done. Safe approach to be ensured into every excavation.
8. Adequate illumination at workplace shall be ensured before starting the job at night.
9. All the dangerous moving parts of the portable / fixed machinery being used shall be adequately guarded.
10. Ladders being used at site shall be adequately secured at bottom and top. Ladders shall not be used as work platforms.
11. Material shall not be thrown from the height. If required, the area shall be barricaded and one person shall be posted outside the barricading for preventing the tress-passers from entering the area.
12. Other than electricians no one is allowed to carry out electrical connections, repairs on electrical equipment or other jobs related thereto.
13. All electrical connections shall be made using 3 or 5 core cables, having a earth wire.
- ~~13.~~ Inserting
14. Inserting of bare wires for tapping the power from electrical sockets is completely prohibited.
15. A tools and tackles inspection register must be maintained and updated regularly.
16. Debris, scrap and other materials to be cleared from time to time from the workplace and at the time of closing of work every day.
17. All the unsafe conditions, unsafe acts identified by contractors, reported by site supervisors and / or safety personnel to be corrected on priority basis.

18. No children shall be allowed to enter the workplace.
19. All the lifting tools and tackles shall be stored properly when not in use.
20. Clamps shall be used on Return cables to ensure proper earthing for welding works.
21. Return cables shall be used for earthing.
22. All the pressure gauges used in gas cutting apparatus shall be in good working condition.
23. Proper eye washing facilities shall be made in areas where chemicals are handled.
24. Connectors and hose clamps are used for making welding hose connections.
25. All underground cables for supplying construction power shall be routed using conduit pipes.
26. Spill trays shall be used to contain the oil spills while transferring / storing them.
27. Tapping of power by cutting electric cables in between must be avoided. Proper junction boxes must be used.