

# INDIANINSTITUTE OF SCIENCE EDUCATION AND RESEARCH (IISER) THIRUVANANTHAPURAM

## **VOLUME I**

NAME OF WORK: Installation, Testing and Commissioning of 160KVA

LT DG set & 380KVA LT DG set and associated electrical works in substation 1 and substation 4 at

IISER TVM campus, vithura, Thiruvananthapuram

NIT NUMBER: IISERTVM/EO/E&M/153/03/19-20 dated: 15-05-2019



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Installation, Testing and Commissioning of 160KVA LT DG set & 380KVA LT DG set and associated electrical works in

substation 1 and substation 4 at IISER TVM campus, vithura,

Thiruvananthapuram

NIT Number:

IISERTVM/EO/E&M/153/03/19-20 dated: 15-05-2019

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# INDIAN INSTITUTE OF SCIENCE EDUCATION AND RESEARCH THIRUVANANTHAPURAM

(An Autonomous Institution, Ministry of Human Resource Development, Govt. of India)
Near Jersey Farm, Maruthamala P.O, Vithura, Pin:
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### **Tender NOTICE INVITING e-TENDER (e-Procurement mode)**

Indian Institute of Science Education and Research, THIRUVANANTHAPURAM invites online ITEM rate bids in open bid system from approved and eligible contractors registered with CPWD, State PWDs, MES, departments in Electrical works category, found eligible as per clause 2 & 3 of NIT for the work mentioned below:

#### **Brief Details of Tender:**

						441 141
Sr. No.	Description of work in Brief  2 Installation,	Approx. Estimated cost put to bid (Rs.)	Earnest Money Deposit  (Rs.) 12,766/-	Period of Completion 4 months	Last date & time of online submission of bid	Time & date of openingof bids
	Testing and Commissioning of 160KVA LT DG set & 380KVA LT DG set and associated electrical works in substation 1 and substation 4 at IISER TVM campus, Vithura, Thiruvananathap uram	6,38,300/	12,7007-	4 months	27-05-2019 16.00hrs	28-05-2019 16.00hrs

The Tender Document can be downloaded from Central Public Procurement (CPP) Portal <a href="https://eprocure.gov.in/eprocure/app">https://eprocure.gov.in/eprocure/app</a> or Institute website <a href="www.iisertvm.ac.in">www.iisertvm.ac.in</a> and bid is to be submitted online only through the E-procurement portal up to the last date and time of submission of tender.

#### **Critical Dates of Tender**

Sr.No	Particulars	Date	Time in hrs.
1	Date of Online Publication	15-05-2019	10 00
2	Bid Submission Start Date	17-05-2019	10 00
3	Bid Submission Close Date	27-05-2019	16 00
4	Closing date & time for Submission of EMD	27-05-2019	16 00
5	Opening of Technical and Financial bids	28-05-2019	16 00

No manual bids will be accepted. All quotation (both Technical and Financial should be submitted in the E-procurement portal).

Any queries relating to the process of online bid submission or queries relating to CPP Portal in general may be directed to the 24x7 CPP Portal Helpdesk. The contact number for the helpdesk is 0120-4200462, 0120-4001002, and 91-8826246593. 0120-4001 062, 0120-4001 005, 0120-6277 787

#### 1) Information & Instructions for Online Bid Submission:

This tender document has been published on the Central Public Procurement Portal (<u>URL:https://eprocure.gov.in/eprocure/app</u>) & Institute website <u>www.iisertvm.ac.in</u>. The bidders are required to submit soft copies of their bids electronically on the CPP Portal, using valid Digital Signature Certificates. The instructions given below are meant to assist the bidders in registering on the CPP Portal, prepare their bids in accordance with the requirements and submitting their bids online on the CPP Portal. More information useful for submitting online bids on the CPP Portal may be obtained at:

- https://eprocure.gov.in/eprocure/app .
- 1.1. The intending bidder must read the terms and condition of NIT carefully. Bidder should submit his bid only if he considers himself eligible and he is in possession of all the required documents.
- 1.2 Bid documents should be submitted online complete in all respect along with requisite amount of tender fee (cost of bid documents). Cost of tender documents shall be remitted to IISER TVM by online payment through **State Bank Collect**. Complete set of tender documents comprising Volume I, II, III has been made available at e-tender portal (URL:https://eprocure.gov.in/eprocure/app)
- 1.3 The bidder -would be required to register at e-tender portal (<u>URL:http://eprocure.gov.in/eprocure/app</u> For submission of the bids, the bidder is required to have digital Signature Certificate (DSC) from one of the authorized Certifying Authorities.
- 1.4 Information and instruction for bidders posted on website shall form part of the bid document.
- 1.5 The bid document consisting of Vol.I Technical bid, Vol-II- Technical specifications, Vol-III- Financial Bid (BOQ) and the set of terms and conditions of the contract to be complied with and other necessary documents can be seen and downloaded from website (URL:https://eprocure.gov.in/eprocure/app) free of cost.
- 1.6 But the bid can only be submitted after uploading the mandatory scanned documents such as receipt of online payment towards tender fee, in favour of IISER THIRUVANANT AFTER SEA SCAN copies of other required documents as specified in the NIT. The tender fee should be deposited online with IISER THIRUVANANTHAPURAM within the period of bid submission as specified in the bid document.

- 1.7 Those contractors not registered on the website mentioned above, are required to get registered beforehand. If needed they can get imparted btraining on online tendering process as per details available on the website. The intending bidder must have valid class-III digital signature to submit the bid.
- 1.8 On opening date, the contractor can login and see the bid opening process. After opening of bids he will receive the competitor bid sheets.
- 1.9 Contractor can upload documents in the form of JPG format and PDF format. Certificate of Financial Turn over: At the time of submission of bid contractor may upload Affidavit/ Certificate from CAmentioning Financial Turnover of last 3 years or for the period as specified in the bid document and further details if required may be asked from the contractor after opening of technical bids. There is no need to upload entire voluminous balance sheet.
- 1.10 Contractor has to quote item rate the total estimated cost put to tender and in case bidder quote % rate in the BOQ, then tender shall be rejected.
- 1.11The tender document can be downloaded from <a href="http://eprocure.gov.in/eprocure/app">http://eprocure.gov.in/eprocure/app</a> and be submitted only through the same website.

#### 2. Registration of Bidder on e-Procurement Portal

- 2.1 Bidders are required to enroll on the e-Procurement module of the Central Public Procurement Portal (<u>URL:http://eprocure.gov.in/eprocure/app</u>) by clicking on the link "Click here to Enroll". Enrolment on the CPP Portal is free of charge.
- 2.2 As part of the enrolment process, the bidders will be required to choose a unique username and assign a password for their accounts.
- 2.3 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.
- 2.4 Upon enrolment, the bidders will be required to register their valid Digital Signature Certificate (Class II or Class III Certificates with signing key usage) issued by any Certifying Authorityrecognized by CCAIndia (e.g. Sify/TCS/nCode/eMudhraetc.), with their profile.
- 2.5 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 DSCs to others which may lead to misuse.
- 2.6 Bidderthenlogs into the site through the secured log-in by entering their user ID/password and the password of the DSC / eToken.
- 2.7 The CPPPortal also has user manual with detailed guidelines on enrollment and participation in the online bidding process. Any queries related to process of online bids or queries related to CPP Portal may be directed to the 24x7 CPP Portal Helpdesk.
- 2.8 The Institute will not be responsible for any type of technical issue regarding uploading of tender on website. <u>URL:http://eprocure.gov.in/eprocure/app</u> ) and any queries relating to the process of online bid submission or queries relating to CPP Portal in general may be directed to the 24x7 CPP Portal Helpdesk. The contact number for the helpdesk is 0120- 4200462, 0120-4001002, and 91-8826246593.

#### 3. SEARCHING FOR TENDER DOCUMENTS

- 3.1 There are various search options built in the CPP Portal, to facilitate bidders to search active tenders by several parameters. These parameters could include Tender ID, organization name, location, date, value, etc. 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 CPP Portal.
- 3.2 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 CPP Portal to intimate the bidders through SMS / e- mail in case there is any corrigendum issued to the tender document.
- 3.3 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.

#### 4. PREPARATION OF BIDS

- 4.1 Bidder should take into account any corrigendum published on the tender document before submitting their bids.
- 4.2 Please go through the tender advertisement and the tender document carefully to understand the documents required to be submitted as part of the bid. 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.
- 4.3 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 formats. Bid documents may be scanned with 100 dpi with black and white option.
- 4.4 To avoid the time and effort required in uploading the same set of standard documents which are required to be submitted as a part of every bid, a provision of uploading such standard documents (e.g. PAN card copy, annual reports, auditor certificates etc.) has been provided to the bidders. Bidders can use "My Space" area available to them to upload such documents. These documents may be directly submitted from the "My Space" area while submitting a bid, and need not be uploaded again and again. This will lead to a reduction in the time required for bid submission process.

#### 5. SUBMISSION OF BIDS

- 5.1 Bidder should 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.
- 5.2 The bidder has to digitally sign and upload the required bid documents one by one as indicated in the tender document.
- 5.3 A standard BOQ format has been provided with the tender document to be filled by all the bidders. Bidders are requested to note that they should necessarily submit their financial bids in the format provided and no other format is acceptable. 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.

- 5.4 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.
- 5.5 The uploaded tender documents become readable only after the tender opening by the authorized bid openers.
- 5.6 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.
- 5.7 Kindly add scanned PDF or JPG format files of all relevant documents in a single PDF file of compliance sheet.

#### **6 ASSISTANCE TO BIDDERS**

- 6.1 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.
- 6.2 Any queries relating to the process of online bid submission or queries relating to CPP Portal in general may be directed to the 24x7 CPP Portal Helpdesk. The contact number for the helpdesk is 0120-4200462, 0120-4001002, 91-8826246593, 0120-4001 005,0120-6277 787

For any technical related queries please call at 24 x 7
Help Desk Number 0120-4001 062 0120-4001 002 0120-4001 005 0120-6277 787
International Bidders are requested to prefix +91 as country code





## INDIANINSTITUTEOFSCIENCEEDUCATIONANDRESEARCH(IISER)THIRUVANANTHAPURAM

#### **SECTION I -NOTICE INVITING e-TENDERING**

1. Indian Institute of Science Education and Research, THIRUVANANTHAPURAM invites online ITEM rate bids in open bid system from registered contractors/ agencies, found eligible as per the minimum requirements defined inclause 2&3 of NIT for the work mentioned below:

Name of work & Location: Installation, Testing and Commissioning of 160KVA LT DG set & 380KVA LT DG set and associated electrical works in substation 1 and substation 4 at IISER TVM campus, Vithura, Thiruvananthapuram

NIT NUMBER: IISERTVM/EO/E&M/153/03/19-20 dated: 15-05-2019

Approx Estimated cost : Rs. 6,38,300/-

Period of completion : 4 (Four) months.

Cost of tender documents : Rs. 560 (Rupees Five hundred and Sixty

including GST) –(Non – Refundable)

Last Dates & time to fill/upload

the tender through e-tendering : 27-05-2019 up to 16.00 hrs

Time & date of opening of

Technical and financial bids : 28-05-2019 at 16.00 hrs

- 2. The applicant should be registered in appropriate class with CPWD, State PWD, Railways, MES, Govt. departments (Any One) in Electrical Works category. The bidder registration certificate should be valid till the last date of receipt of tender. The contractors shall have to fulfill the eligibility criteria of satisfactory execution of works as given below:
  - (i) Three similar works, each of value not less than 40% of the estimated cost put to tender, or
  - (ii) Two similar works, each of value not less than 60% of the estimated cost, or
  - (iii) One similar works, of value not less than 80% of the estimated cost, all amounts rounded off to a convenient full figure, in the last 7 years ending on the last day of the month previous to the one in which tenders are invited
- 3. The agency shall have valid GST/PAN/TAN/ESIC/PF numbers/certificates.
- 4. The time allowed for carrying out the work will be 4 (Four) months from the defined in schedule 'C' or from the first date of handing over of the site, which even in accordance with the phasing, if any, indicated in the tender.

5. The bid document is single stage two Envelope e-tendering system can be seen from the Central Public Procurement Portal (<u>URL:https://eprocure.gov.in/eprocure/app</u>) & Institute website www.iisertvm.ac.in .The contents of Envelope I & Envelope II are specified in the NIT.

#### 6. Submission of Bid Documents

Information and instruction for bidder for e-tendering forming part of bid document and posted on website <a href="URL:https://eprocure.gov.in/eprocure/app">URL:https://eprocure.gov.in/eprocure/app</a>. Last date and time of submission of bid, original EMD and deposition of original EMD and list of documents as detailed below at IISER THIRUVANANTHAPURAM and uploading the scan copies of the below mentioned documents:

#### List of Document to be scanned and uploaded within the period of bid submission:

- I. Transaction Receipt of online deposit of tender fee and EMD.
- II. Enlistment Order of the Contractor (Attested copy).
- III. Certificate of Registration for GST and acknowledgement of up to date filed return if required.
- 7. Tender documents should be submitted online complete in all respect along with requisite amount of tender fee (cost of bid document). Complete set of tender documents comprising Volume I, II, III and financial bids has been made available at e-tender portal <a href="http://www.eprocurement.epu.neg.">http://www.eprocurement.epu.neg.</a>
- 8. Director, Indian Institute of Science Education & Research, Thiruvananthapuram shall be the "Accepting Authority" hereinafter referred to as such for the purpose of this Contract.
- 9. Bids must be accompanied by tender fee and bid-security/EMD (Earnest Money Deposit) amount specified for the work in clause 10 payable at THIRUVANANTHAPURAM and drawn in favour of The Director; IISER THIRUVANANTHAPURAM Bid Security shall have to be valid for 90 days beyond the validity of the bid.

#### 10. Bid Security/EMD and Tender fee.

10.1 Bid Security/EMD amounting to Rs 12766/- and tender fee of Rs. 560/-(Including 12% GST charges) shall be deposited in IISER THIRUVANANTHAPURAM Bank account through State Bank Collect as detailed below failing which the bid will be declared non responsive. Bidder shall submit GST number along with payment receipt.

Payment through SBI Collect as detailed below:

https://www.onlinesbi.com/sbicollect/icollecthome.htm -> Accept Terms & Conditions then Click **Proceed** -> Select State- **Kerala** & Select Type of Corporate / Institution – **Educational Institute** -> Select Educational Institutions Name- **IISER THIRUVANANTHAPURAM**-> Select Payment Category – Works- Civil/Electrical -> Provide the details of payment along with the bank details of the bidder & proceed for payment page.

a) A part of earnest money is acceptable in the form of bank guarantee also. In such case, 50% of earnest money or Rs. 20 lakh, whichever is less, will have to be deposited in shape prescribed above and balance in shape of irrevocable Bank Guarantee from a Scheduled Bank and shall be valid 120 days from the last date of receipt of bid as per standard proforma attached.

Scanned copy of the net banking transaction receipt towards payment of tender fee shall be uploaded on the e-tendering website within the period of bid submission failing which the bid will be declared non responsive.

- 10.2 Bid Security/EMD of unsuccessful Bidders will be returned to them within 90 days from the date of acceptance of bid of the successful Bidder.
- 10.3 The Bid Security may be forfeited, if
  - a) The bidder withdraws / modifies his Bid or any item thereof after opening of bid.
  - b) The successful Bidder fails within the specified time limit to commence the work.
- 11. Bid shall be opened on the day fixed for opening of bids at 16.00 hours, in the presence of the Bidders who wish to attend. If the office happens to be closed on the date of receipt of the bids as specified, the bids will be received and opened on the next working day at the same time and venue.
- 12. Bidder's attention is also drawn to instruction of filling and submission of tender Attached herewith. You may forward your queries on tender documents and /or depute your technical representative for discussion on tender /drawings to clarify doubts, if any, at least two days before the date of submission mentioned in the website.
- 13. The Bidder may submit their questions/ queries/ clarifications if any, in writing or by email/ fax to reach the IISER THIRUVANANTHAPURAM at least two days before the date for bid submission. Bidders can send queries on their letter head referring tender on e-mail address registrar@iisertvm.ac.in at least five days before the start date and time of submission of the bids. Only relevant answers shall be answered and IISER THIRUVANANTHAPURAM shall not be responsible for delay in getting the answers.
- 14. If any amendment in the tender document uploaded on the website is necessitated due to any query raised by any bidder including the text of the questions raised (without identifying the source of enquiry) and the responses given will be uploaded as corrigendum on websites (URL:https://eprocure.gov.in/eprocure/app) and www.iisertvm.ac.in Bidders are requested to take note of the corrigendum and quote their rates accordingly.
- 15. In case revised BOQ is uploaded on website by IISER, tenderer /bidder has to quote in revised BOQ only. The uploading quotation in pre-revised BOQ shall be considered as a willful negligence by the bidder and his quotation shall be considered as non-responsive.

#### 16. Cost of Bidding

16.1 The Bidder shall bear all costs associated with the preparation and submission of his Bid, and the IISER THIRUVANANTHAPURAM will in no case be responsible and liable for these costs.

#### 17. Site visit & availability of site

- 17.1 The Bidder should inform the IISER in advance about the proposed site visit.
- 17.2 The Bidder, at his own responsibility and risk is encouraged to visit, inspect and Survey the Site and its surroundings and satisfy himself before submitting his Bid as to the form and nature of the Site, the means of access to the Site, the Accommodation he may require etc.
- 17.2 In general, Bidders shall themselves obtain all necessary information as to risks, contingencies and other circumstances which may influence or affect their bid. A Bidder shall be deemed to have full knowledge of the Site, whether he inspects it or not and no extra claims due to any misunderstanding or otherwise shall be allowed.
- 17.3 The costs of visiting the Site shall be at the Bidders' own expense. Any report shared at the site, by the IISER is subject to verification by the contractor. Any deviations of information in the report and the actual site will not be the responsibility of the IISER.
- 17.4 The site for the work is available for visit from the date of issue of the tender.
- 17.5 The architectural and structural drawings shall be made available in phased manner as per requirement of the same as per approved program of completion submitted by the contractor after award of the work.

#### 18 Content of Bidding Documents

- 18.1 Submission of a bid by a Bidder implies that he has read this notice and all other contract documents and has made himself aware of the scope and specifications of the work to be executed and local conditions and other factors having a bearing on the execution of the works.
- 18.2 The Bidder shall submit the Bid, which satisfies each and every condition laid down in the Bid documents, failing which, the bid is liable to be rejected.
- 18.3 Notice inviting e-Tender shall form part of the Contract document.
- 18.4 The documents listed below comprises one set of bid document that are issued to Bidders:

## PART – I Technical Bid Envelope –I

#### Volume I

- a) Notice Inviting Tender (Including eligibility criteria)
- b) Tender Form and General Rules and Directions for the Guidance of the Contractor
- c) Format of BG
- d) Schedule C

Volume-II: Special Conditions & Technical specifications

#### PART-II

Envelop II – (Financial bid)

Volume -III: Financial bid Schedule of quantity (BOQ).

#### 19 Amendment of BidDocuments

- 18.2 Before the deadline for submission of bids, the IISER THIRUVANANTHAPURAM may modify the bidding documents by issuing corrigendum.
- 19.1 Any corrigendum so issued shall be part of the bid documents as well as Contract document and shall be on uploaded website <a href="URL:https://eprocure.gov.in/eprocure/app">URL:https://eprocure.gov.in/eprocure/app</a> and <a href="www.iisertvm.ac.in">www.iisertvm.ac.in</a> Bidders should take note of the uploaded corrigendum and submit the tenders accordingly.

#### 20 Bid Validity

- 20.1 The bid submitted shall become invalid if:
  - (i) The bidders is found ineligible.
  - (ii) The bidder does not deposit online tender fee with IISER THIRUVANANTHAPURAM before the date and time fixed for opening of the bids.
  - (iii) The bidders does not upload all the documents (including GST registration) as stipulated in the bid document.
    - (iv) If any discrepancy is noticed between the documents as uploaded at the time of submission of bid and hard copies as submitted physically by the lowest tenderer in the office of tender opening authority.

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The bids submitted shall remain valid for acceptance for a period of 90 days from the date of opening of the technical bids. If any bidder withdraws his tender before the said period or issue of letter of acceptance, whichever is earlier, or makes any modifications in the terms and conditions of the tender which are not acceptable to the IISER, THIRUVANANTHAPURAM, then the IISER, THIRUVANANTHAPURAM shall, without prejudice to any other right or remedy, be at liberty to refelt 50% of the said earnest money as aforesaid. Further the bidder shall not be allowed to participate in the any tendering process of IISER TVM for a period of 3 years.

## 21 Bid Opening

- 21.1 Online bid documents submitted by intending bidders shall be opened only of those bidders, whose tender fee and EMD is deposited online with IISER THIRUVANANTHAPURAM and scanned their scanned copies i/c tender documents scanned and uploaded are found in order. On the due date and appointed time as specified in clause 11. IISER, THIRUVANANTHAPURAM will first open Envelope I of bid. Bidders satisfying conditions of 19.1, including amendment as per clause 17 if applicable, in the presence of the Bidders or their representatives who choose to attend In the event of the specified date for Bid opening being declared a holiday by the IISER, THIRUVANANTHAPURAM, and the Bids will be opened at the appointed time and location on the next working day.
- 21.2 Financial bids of the bidders who have submitted unconditional Bids together with requisite Bid security and meeting the eligibility criteria as specified in the NIT shall opened in the presence of representatives of intending bidders on the date and time specified in the NIT for opening of the financial bid.

#### 22. Clarification of Bids

- 21.3 To assist in the examination and comparison of Bids, the IISER, THIRUVANANTHAPURAM may, at its discretion, ask any Bidder for clarification of his Bid, including breakdown of unit rates. The request for clarification and the response shall be in writing or by email / fax, but no change in the price or substance of the Bid shall be sought, offered, or permitted except as required to confirm the correction of arithmetic errors discovered by the IISER, THIRUVANANTHAPURAM in the evaluation of the bids.
- 21.4 No, Bidder shall contact the IISER, THIRUVANANTHAPURAM on any matter relating to his bid from the time of the bid opening to the time the contract is awarded.
- 21.5 Any effort by the Bidder to influence the IISER's bid evaluation, bid comparison or contract award decisions, may result in the rejection of his bid.
- 21.6 Indian Institute of Science Education and Research THIRUVANANTHAPURAM, does not bind itself to accept the lowest or any other bid, and reserves the right to reject any or all of the tenders received without assigning any reasons. Bids in which any of the prescribed conditions are not fulfilled or any conditions including that of the conditional rebate put forth by the bidder shall be summarily rejected.
- 21.7 If the Bid of the successful Bidder is seriously unbalanced in relation to the Engineer-in- charge or his representative's estimate of the cost of work to be executed under the contract, the IISER, THIRUVANANTHAPURAM may require the Bidder to produce detailed rate analyses for any or all items of the Bill of Quantities, to demonstrate the internal consistency of those rates with the implementation/construction methods and schedule proposed.

#### 24 Award Criteria

- 24.1 IISER THIRUVANANTHAPURAM reserves the right without being liable for any damages or obligation to inform the bidder to:
  - a) Amend the scope and value of the contract to the bidder
  - b) Reject any or all applications without assigning any reasons
- 24.2 IISER, THIRUVANANTHAPURAM shall award the contract to the Bidder whose evaluated offer / bid has been determined to be the technically suitable and financially lowest and is substantially responsive to the Bidding Document, provided further that the Bidder is determined to be qualified to execute the contract satisfactorily. The Board of Governors of IISER reserves the right to accept or reject any application and to annul the pre-qualification process and reject all applications at any time, without thereby incurring any liability to the affected applicants or specifying the grounds for the Employer's action
- Contractor whose tender is accepted will be required to furnish Performance guarantee of 5% (Five Percent) of the tendered amount within the period specified in Schedule C. This guarantee shall be in accordance with the prescribed form. In case the contractor fails to deposit the said performance guarantee within the period as indicated in Schedule 'C' including the extended period if any, the Earnest Money deposited by the contractor shall be forfeited automatically without any notice to the contractor and without prejudice to any other right or remedy. The Earnest Money deposited along with tender shall be returned after receiving the aforesaid performance guarantee. The earnest money deposited along with bid shall be returned after receiving the aforesaid performance guarantee.
- The contractor whose bid is accepted will also be required to furnish either copy of the applicable licenses/registrations or proof of applying for obtaining labour licenses, registration with EPFO, ESIC, and Kerala Building & other Construction Workers Welfare Board, Provident Fund Code No. if applicable and also ensure the compliance of aforesaid provisions by the sub- contractors, if any engaged by the contractor for the said work and program chart (Time and Progress) within the period specified in Schedule C.
- For execution of Electrical & Mechanical (E&M), firefighting & lift components of works, the main agency has to associate with specialized agency as per the laid down minimum eligibility criteria in tender document and submit the details of MOU of such agencies to Engineer in charge.
- 27.1 Entire work under the scope of Composite bid including Civil, Electrical & Mechanical (E&M), firefighting & lift shall be executed under one agreement.

- 27.2 The main contractor has to enter into MoU in **Form** 'H' with his associate agency(s) for E & M component conforming to eligibility criteria as defined in the bid document and has to submit details such agency(s) to Engineer-in-charge of minor component(s) within prescribed time.

  Name of the agency(s) to be associated shall be approved by Engineer- in-charge.
- 27.3 If the main contractor fails to associate agency/agencies for execution of for Electrical & Mechanical (E&M), firefighting & lift component of work within prescribed time or furnishes incomplete details or furnishes details of ineligible agencies even after the tenderer is given due opportunity, the entire scope of such component of works shall be withdrawn from the tender and the same shall be got executed by the Engineer-in-Charge at the risk and cost of the main contractor.
- 27.4 In case the main contractor intends to change any of the above agency/agencies during the operation of the contract, he shall obtain prior approval of Engineer-in-charge. The new agency/agencies shall also have to satisfy the laid down eligibility criteria. In case Engineer-in-charge is not satisfied with the performance of any agency, he can direct the contractor to change the agency executing such items of work and this shall be binding on the contractor.
- 27.5 Running payment for the work shall be made to the main contractor. In case main contractor fails to make the payment to the contractor associated by him within 15 days of receipt of each running account payment then on the written complaint of contractor associated Engineer in charge shall serve the show cause to main contractor and after considering the reply of the same he may make the payment directly to the contractor associated as per the terms & conditions of the agreement drawn between main contractor and associate contractor fixed by him, if reply of main contractor either not received or found unsatisfactory. Such payment made to the associate contractor shall be recovered by the Engineer in charge from the next RA/final bill due to main contractor as the case may be.
- 27.6 The Composite work shall be treated as complete when all the components of the work are completed to the satisfaction of the Engineer in charge.
- 28 Bidder shall quote rates for all items in the BOQ (i.e. Civil, Electrical, LIFTs, firefighting) of work in the financial bid document. It will be obligatory on the part of the tenderer to sign the tender document for all the components (The schedule of quantities, conditions and special conditions etc.)

#### 29 Disclosures

Any change in the constitution of the contractor's firm, where it is a partnership firm, as declared in the prequalification documents submitted by the bidders at the time of submission of prequalification documents, should be disclosed to the IISER, THIRUVANANTHAPURAM, at any time between the submission of bids and the signing of the contract.

Superintending Engineer (Civil)
IISER TVM



#### **SECTION I**

#### II) ADDITIONALINFORMATION AND INSTRUCTION TO APPLICANTS

#### 1.0. GENERAL

#### 1.1 STATEMENT OF OBJECTIVES, BRIEF SCOPE & PARTICULARS OF THE WORK

The entire Project Installation, Testing and Commissioning of 160KVA LT DG set & 380KVA LT DG set and associated electrical works in substation 1 and substation 4 at IISER TVM campus, Vithura, Thiruvananthapuram will be executed under a Single Point Responsibility system under composite contract system. In general scope of work shall be as per BOQ and includes Project Installation, Testing and Commissioning of 160KVA LT DG set & 380KVA LT DG set and associated electrical works in substation 1 and substation 4 at IISER TVM campus, Vithura, Thiruvananthapuram complete as per BOQ and architectural drawings.

- Work shall in general be executed as per, general conditions of the contract for CPWD Works 2014 with correction slips issued up to last date of submission of bids, particular Technical Specifications, CPWD Specifications, National Building code of India, relevant Indian Standard (IS) Codes, etc.
- ❖ After acceptance of the tender the lowest bidder should submit the general conditions of the contract as said above along with the contract agreement.
- ❖ As these buildings will have green building features, Contractors are expected to provide adequate and complete documentation, towards obtaining certification from GRIHA.
- ❖ Particulars given above are provisional and liable to change and must be considered only as advance information to assist the bidder.
- 1.2 Letter of transmittal and other forms for pre-qualification are attached (Annexure I)
- 1.3. All information called for in the enclosed forms should be furnished against the respective columns in the forms. If information is furnished in a separate document, reference to the same should be given against respective columns. Such separate documents shall be chronologically placed at the end of the prescribed application. If information is 'nil' it should also be mentioned as 'nil' or 'no such case'. If, any particulars/query is not applicable in case of the applicant, it should be stated as 'not applicable'. However, the applicants are cautioned that not giving complete information called for in the application forms required, not giving it in clear terms or making change in the prescribed forms or deliberately suppressing the information may result in the applicant being summarily disqualified. Applications made by Fax and those received late will not be entertained.
- 1.4. References, information and certificates from the respective clients certifying suitability, technical know-how or capability of the applicant should be signed by an officer not below the rank of Executive Engineer or equivalent.
- 1.5 The Tenderer is advised to attach any additional information which the thinks is

necessary in regard to his capabilities to establish that the applicant is capable in all respects to successfully complete the envisaged work. He is however, advised not to attach superfluous information. No further information will be entertained after prequalification document is submitted, unless it is called for by Employer.

1.6 The applicant may engage sub vendors for execution of Electrical, Lifts, and HVAC as mentioned below, or may execute the same on their own. In either case, the eligibility criteria given below shall be satisfied.

The applicant Principal Contractor shall associate (Association through MOU / Subsisting agreement) with contractors for Electrical/ HVAC /Fire Detection / Lifts who shall satisfy the eligibility criteria/ given below for each type of specialized Electrical Mechanical agency. For this purposes, the applicant principal contractor shall give at least 2 (Two) names for each category of associates. IISER will approve associates after verifying their credentials and experience. However, responsibility of getting the work done efficiently will rest with the Principal contractor. The consent letter from different associates shall also be enclosed along with tender.

The Principal contractor or Associates shall be required to possess valid license for respective trade for executing the specialized services.

#### 1.7 LETTER OFTRANSMITTAL

The applicant should submit the letter of transmittal attached with tender document duly signed by the agency.

1.8 INTEGRITY AGREEMENT duly signed by the agency along with letter is required to be submitted by the agency.



#### LETTER OF TRANSMITTAL

From

To
THE DIRECTOR
INDIAN INSTITUTE OF SCIENCE EDUCATION & RESEARCH (IISER)
THIRUVANANTHAPURAM
Near Jersey Farm, Maruthamala P.O, Vithura, Pin: 695551, Trivandrum, Kerala, India

Sub: SUBMISSION OF TENDER DOCUMENTS FOR THE WORK OF "
Name of work & Location: Installation, Testing and Commissioning of 160KVA LT DG
set & 380KVA LT DG set and associated electrical works in substation 1 and
substation 4 at IISER TVM campus, Vithura, Thiruvananthapuram

NIT NUMBER: IISERTVM/EO/E&M/153/03/19-20 dated: 15-05-2019

Having examined the details given in press notification and the tender document for the above work, I/we hereby submit the tender documents and other relevant information. I/we agree with all the terms and conditions given in the bid document.

- 1. I/We hereby certify that all the statements made and information supplied in the enclosed forms and accompanying statements are true and correct.
- 2. I/We have furnished all information and details necessary for eligibility criteria and have no further pertinent information to supply.
- 3. I/We submit the requisite certified solvency certificate and authorize the Director, IISER, and THIRUVANANTHAPURAM to approach the Bank issuing the solvency certificate to confirm the correctness thereof. I/We also authorize Engineer In charge, THIRUVANANTHAPURAM to approach individuals, employers, firms and corporation to verify our competence and general reputation.
- 4. I/We submit the following certificates in support of our suitability, technical know- how & capability for having successfully completed the following works.

Name of Work:	Certificate from
1. 2. 3.	1. 2. 3.
Enclosures:	
Seal of applicant Date of submission	Signature(s) of applicant(s)



# Undertaking to sign the integrity Agreement

To,					
•••••	,				
	•••••••••••••••••••••••••••••••••••••••				
Sub: S	UBMISSION OF	TENDER DOCUM	ENTS FOR THE	WORK OF "	
	DG set & 380K\		sociated electrica	ommissioning of 160KVA al works in substation 1 a nanthapuram	
	NIT NUMBER:	IISERTVM/EO/E&N	I/153/03/19-20 dat	ed: 15-05-2019	
Dear S	ir,				
		IISER is committed to blic procurement.	o follow the princip	le oftransparency, equity a	ind
Bidder failing w	will sign the inte	grity Agreement, wh r/bidder will stand dis	ich is an integral p	made on the condition that to part of tender/bid documer tendering process and the	nts,
		•		ement and signing of the sa eement on behalf of the IISE	
Yours f	aithfully				
Sd/-					
Engine	er in Charge				



### Forwarding letter for Integrity Agreement

To

# INDIAN INSTITUTE OF SCIENCE EDUCATION & RESEARCH (IISER) THIRUVANANTHAPURAM

Near Jersey Farm, Maruthamala P.O, Vithura, Pin: 695551, Trivandrum, Kerala, India.

Sub: SUBMISSION OF TENDER DOCUMENTS FOR THE WORK OF "

Name of work & Location: Installation, Testing and Commissioning of 160KVA LT DG set & 380KVA LT DG set and associated electrical works in substation 1 and substation 4 at IISER TVM campus, Vithura, Thiruvananthapuram

NIT NUMBER: IISERTVM/EO/E&M/153/03/19-20 dated: 15-05-2019 Dear Sir,

I/Weacknowledge that IISER is committed to follow the principles thereof as enumerated in the Integrity Agreement enclosed with the tender/bid document.

I/We agree that the Notice Inviting Tender (NIT) is an invitation to offer made on the condition that I/We will sign the enclosed integrity Agreement, which is an integral part of tender documents, failing which I/We will stand disqualified from the tendering process. I/We acknowledge that THE MAKING OF THE BID SHALL BE REGARDED AS AN UNCONDITIONAL AND ABSOLUTE ACCEPTANCE of this condition of the NIT.

I/We confirm acceptance and compliance with the Integrity Agreement in letter and spirit and further agree that execution of the said Integrity Agreement shall be separate and distinct from the main contract, which will come into existence when tender/bid is finally accepted by IISER. I/We acknowledge and accept the duration of the Integrity Agreement, which shall be in the line with Article 1 of the enclosed Integrity Agreement.

I/We acknowledge that in the event of my/our failure to sign and accept the Integrity Agreement, while submitting the tender/bid, IISER shall have unqualified, absolute and unfettered rightto disqualify the tender rbidder and reject the tender/bid is accordance with terms and conditions of the tender/bid.

Yours faithfully

(Duly authorized signatory of the Bidder)



# To be signed by the bidder and the signatory competent / authorized to sign the relevant contract on behalf of IISER

#### **INTEGRITY AGREEMENT**

This Integrity Agreement is made at on this Day of. 20
BETWEEN
IISER represented through its Director, (Hereinafter referred as the 'Principal/Owner', which expression shall unless repugnant to the meaning or context hereof include its successors and permitted assigns)
AND
(Name and Address of the Individual/firm/Company)
Through (Hereinafter referred to as the (Details of duly authorized signatory)
"Bidder/Contractor" and which expression shall unless repugnant to the meaning or context hereof include its successors and permitted assigns)
Preamble
WHEREAS the Principal / Owner has floated the Tender (NIT No
(Name of work) hereinafter referred to as the "Contract".
AND WHEREAS the Principal/Owner values full compliance with all relevant laws of the land, rules, regulations, economic use of resources and of fairness/transparency in its relation with its Bidder(s) and Contractor(s).
ANDWHEREAS to meet the purpose aforesaid both the parties have agreed to enter into this Integrity Agreement (hereinafter referred to as "Integrity Pact" or "Pact"), the terms and conditions of which shall also be read as integral part and parcel of the Tender/Bid documents and Contract between the parties.

#### Article 1: Commitment of the Principal/Owner

hereby agree as follows and this Pact witnesses as under:

1) The Principal/Owner commits itself to take all measures necessary to prevent corruption and to observe the following principles:

NOW, THEREFORE, in consideration of mutual covenants contained in this Pact, the parties

(a) No employee of the Principal/Owner, personally or through any of his/her family members, will in connection with the Tender, or the execution of the Contract,

- demand, take a promise for or accept, for self or third person, any material or immaterial benefit which the person is not legally entitled to.
- (b) The Principal/Owner will, during the Tender process, treat all Bidder(s) with equity and reason. The Principal/Owner will, in particular, before and during the Tender process, provide to all Bidder(s) the same information and will not provide to any Bidder(s) confidential / additional information through which the Bidder(s) could obtain an advantage in relation to the Tender process or the Contract execution.
- (c) The Principal/Owner shall endeavour to exclude from the Tender process any person, whose conduct in the past has been of biased nature.
- 2) Ifthe Principal/Owner obtains information on the conduct of any of its employees which is a criminal offence under the Indian Penal code (IPC)/Prevention of Corruption Act, 1988 (PC Act) or is in violation of the principles herein mentioned or if there be a substantive suspicion in this regard, the Principal/Owner will inform the Chief Vigilance Officer and in addition can also initiate disciplinary actions as per its internal laid down policies and procedures.

#### **Article 2: Commitment of the Bidder(s)/Contractor(s)**

- 1) It is required that each Bidder/Contractor (including their respective officers, employees and agents) adhere to the highest ethical standards, and report to the Government / Department all suspected acts of fraud or corruption or Coercion or Collusion of which it has knowledge or becomes aware, during the tendering process and throughout the negotiation or award of a contract.
- 2) The Bidder(s)/Contractor(s) commits himself to take all measures necessary to prevent corruption. He commits himself to observe the following principles during his participation in the Tender process and during the Contract execution:
  - a) The Bidder(s)/Contractor(s) will not, directly or through any other person or firm, offer, promise or give to any of the Principal/Owner's employees involved in the Tender process or execution of the Contract or to any third person any material or other benefit which he/she is not legally entitled to, in order to obtain in exchange any advantage of any kind whatsoever during the Tender process or during the execution of the Contract.
  - b) The Bidder(s)/Contractor(s) will not enter with other Bidder(s) into any undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to cartelize in the bidding process.
  - The Bidder(s)/Contractor(s) will not commit any offence under the relevant IPC/PC Act. Further the Bidder(s)/Contract(s) will not use improperly, (for the purpose of competition or personal gain), or pass on to others, any information or documents provided by the Principal/Owner as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.

- d) The Bidder(s)/Contractor(s) of foreign origin shall disclose the names and addresses of agents/representatives in India, if any. Similarly Bidder(s)/Contractor(s) of Indian Nationality shall disclose names and addresses of foreign agents/representatives, if any. Either the Indian agent on behalf of the foreign principal or the foreign principal directly could bid in a tender but not both. Further, in cases where an agent participates in a tender on behalf of one manufacturer, he shall not be allowed to quote on behalf of another manufacturer along with the first manufacturer in a subsequent/parallel tender for the same item.
- e) The Bidder(s)/Contractor(s) will, when presenting his bid, disclose any and all payments he has made, is committed to or intends to make to agents, brokers or any other intermediaries in connection with the award of the Contract.
- 3) The Bidder(s)/Contractor(s) will not instigate third persons to commit offences outlined above or be an accessory to such offences.
- The Bidder(s)/Contractor(s) will not, directly or through any other person or firm indulge in fraudulent practice means a willful misrepresentation or omission of facts or submission of fake/forged documents in order to induce public official to act in reliance thereof, with the purpose of obtaining unjust advantage by or causing damage to justified interest of others and/or to influence the procurement process to the detriment of the Government interests.
- The Bidder(s)/Contractor(s) will not, directly or through any other person or firm use Coercive Practices (means the act of obtaining something, compelling an action or influencing a decision through intimidation, threat or the use of force directly or indirectly, where potential or actual injury may befall upon a person, his/her reputation or property to influence their participation in the tendering process).

#### **Article 3: Consequences of Breach**

Without prejudice to any rights that may be available to the Principal/Owner under law or the Contract or its established policies and laid down procedures, the Principal/Owner shall have the following rights in case of breach of this Integrity Pact by the Bidder(s)/Contractor(s) and the Bidder/ Contractor accepts and undertakes to respect and uphold the Principal/Owner's absolute right:

If the Bidder(s)/Contractor(s), either before award or during execution of Contract has committed a transgression through a violation of Article 2 above or in any other form, such as to put his reliability or credibility in question, the Principal/Owner after giving 14 days' notice to the contractor shall have powers to disqualify the Bidder(s)/Contractor(s) from the Tender process or terminate/determine the Contract, if already executed or exclude the Bidder/Contractor from future contract award processes. The imposition and duration of the exclusion will be determined by the severity of transgression and determined by the Principal/Owner. Such exclusion may be forever or for a limited period as decided by the Principal/Owner.

- Profesture of EMD/Performance Guarantee/Security Deposit: If the Principal/Owner has disqualified the Bidder(s) from the Tender process prior to the award of the Contract or terminated/determined the Contract or has accrued the right to terminate/determine the Contract according to Article 3(1), the Principal/Owner apart from exercising any legal rights that may have accrued to the Principal/Owner, may in its considered opinion forfeit the entire amount of Earnest Money Deposit, Performance Guarantee and Security Deposit of the Bidder/Contractor.
- 3) **Criminal Liability:** If the Principal/Owner obtains knowledge of conduct of a Bidder or Contractor, or of an employee or a representative or an associate of a Bidder or Contractor which constitutes corruption within the meaning of IPC Act, or if the Principal/Owner has substantive suspicion in this regard, the Principal/Owner will inform the same to law enforcing agencies for further investigation.

#### 4) Article 4: Previous Transgression

- The Bidder declares that no previous transgressions occurred in the last 5 years with any other Company in any country confirming to the anticorruption approach or with Central Government or State Government or any other Central/State Public Sector Enterprises in India that could justify his exclusion from the Tender process.
- 2) If the Bidder makes incorrect statement on this subject, he can be disqualified from the Tender process or action can be taken for banning of business dealings/holiday listing of the Bidder/Contractor as deemed fit by the Principal/Owner.
- If the Bidder/Contractor can prove that he has resorted / recouped the damage caused by him and has installed a suitable corruption prevention system, the Principal/Owner may, at its own discretion, revoke the exclusion prematurely.

#### Article 5: Equal Treatment of all Bidders/Contractors/Subcontractors

- 1) The Bidder(s)/Contractor(s) undertake(s) to demand from all subcontractors a commitment in conformity with this Integrity Pact. The Bidder/Contractor shall be responsible for any violation(s) of the principles laid down in this agreement/Pact by any of its Subcontractors/ sub-vendors.
- 2) The Principal/Owner will enter into Pacts on identical terms as this one with all Bidders and Contractors.
- 3) The Principal/Owner will disqualify Bidders, who do not submit, the duly signed Pact between the Principal/Owner and the bidder, along with the Tender or violate its provisions at any stage of the Tender process, from the Tender process.

#### **Article 6- Duration of the Pact**

This Pact begins when both the parties have legally signed it. It expires for the Contractor/Vendor 12 months after the completion of work under the contract or till the continuation of defect liability period, whichever is more and for all other bidders, till the Contract has been awarded.

If any claim is made/lodged during the time, the same shall be binding and continue to be valid despite the lapse of this Pacts as specified above, unless it is discharged/determined by the Competent Authority.

#### **Article 7- Other Provisions**

- 1) This Pact is subject to Indian Law, place of performance and jurisdiction is the **Headquarters of the** Principal/Owner, who has floated the Tender.
- 2) Changes and supplements need to be made in writing. Side agreements have not been made.
- 3) If the Contractor is a partnership or a consortium, this Pact must be signed by all the partners or by one or more partner holding power of attorney signed by all partners and consortium members. In case of a Company, the Pact must be signed by a representative duly authorized by board resolution.
- 4) Should one or several provisions of this Pact turn out to be invalid; the remainder of this Pact remains valid. In this case, the parties will strive to come to an agreement to their original intensions.
- 5) It is agreed term and condition that any dispute or difference arising between the parties with regard to the terms of this Integrity Agreement / Pact, any action taken by the Owner/Principal in accordance with this Integrity Agreement/ Pact or interpretation thereof shall not be subject to arbitration.

#### Article 8- LEGAL AND PRIOR RIGHTS

Dated:

All rights and remedies of the parties hereto shall be in addition to all the other legal rights and remedies belonging to such parties under the Contract and/or law and the same shall be deemed to be cumulative and not alternative to such legal rights and remedies aforesaid. For the sake of brevity, both the Parties agree that this Integrity Pact will have precedence over the Tender/Contact documents with regard any of the provisions covered under this Integrity Pact.

IN WITNESS WHEREOF the parties have signed and executed this Integrity Pact at the place and date

first above mentioned in the presence of follo	
(For and on behalf of Principal/Owner)	
(For and on behalf of Bidder/Contractor)	
WITNESSES: 1(Signature, name and address) 2(Signature, name and address) Place:	

Science Educ

<u>CHECKLIST:</u> Details of Enclosures/documents required to be uploaded on website <a href="https://eprocure.gov.in/eprocure/app">https://eprocure.gov.in/eprocure/app</a> through the E-procurement portal up to the last date and time of submission of tender.

S.N.	Description of item	Scanned copies Uploaded on website	Not uploaded
1.	Eligibility documents- Empanelment/Registration certificate		
2.	Power of attorney as required		
3.	Certificate of Registration as required		
4.	Memorandum of Articles of association as required	·	
5.	C A certificate for Audited Balance Sheet and Profit & Loss statement for the past five financial years		
6.	Consent letter from associates if Electro-Mechanical services are proposed to be done through Associates, under reference to Para 1.6 A to D under Section-II. Information and Instructions to applicants		
7.	Supporting certificates for technical and financial capability from relevant authorities.		
8	Organization Chart with responsibilities, Curriculum Vitae of personnel proposed for this project.	and the second s	
9	INTEGRITY AGREEMENT duly signed by the agency along with letter of Transmittal		
10	Any other important information.		
.11	Scan copies of net banking receipt towards payment of Tender fee		-
12	Letter of transmittal duly signed by the bidder.		
13	Uploading of the tender document Vol-I, Vol-II, Vol-III and financial bids		
14	Any other relevant document required to be uploaded on website as per tender conditions.		

Note: - All documents should be arranged as Per S.N. while submitting and mentioned S.N. on right most top corner.



# INDIAN INSTITUTE OF SCIENCE EDUCATION AND RESEARCH IISER THIRUVANANTHAPURAM

Name of work & Location: Installation, Testing and Commissioning of 160KVA LT DG set & 380KVA LT DG set and associated electrical works in substation 1 and substation 4 at IISER TVM campus, Vithura, Thiruvananthapuram

NIT NUMBER: IISERTVM/EO/E&M/153/03/19-20 dated: 15-05-2019

# SECTION - II

**ITEM RATE & CONTRACT FOR WORKS** 



#### SECTION-II

#### **Tender Form**

#### **ITEM Rate Tender & Contract for Works**

Name of work &Location: Installation, Testing and Commissioning of 160KVA LT DG set & 380KVA LT DG set and associated electrical works in substation 1 and substation 4 at IISER TVM campus, Vithura, Thiruvananthapuram

NIT NUMBER: IISERTVM/EO/E&M/153/03/19-20 dated: 15-05-2019

- (a). Tender(s) to be submitted online by (time) **15.30 hours on 28-05-2019** (URL:https://eprocure.gov.in/eprocure/app
- (b). Tender(s) to be opened in presence of tenderers who may be present at **16.00 hours on 28-05-2019** in the office of the Superintending Engineer(Civil), Indian Institute of Science Education and Research, THIRUVANANTHAPURAM

#### **TENDER**

I/We have read and examined the notice Inviting Tender, Schedule, Specifications applicable, Drawings & Designs, General Rules and Directions, Conditions of Contract, clauses of contract, special conditions & other document and Rules referred to in the conditions of contract and all other contents in the tender document for the work.

I/We hereby tender for the execution of the work specified for the Director Of Indian Institute of Science Education and Research THIRUVANANTHAPURAM (IISER-THIRUVANANTHAPURAM) within the time specified in Schedule 4 (Four) months viz, schedule of quantities and in accordance in all respects with the specifications, designs, drawings and instructions in writing referred to the Conditions of contract and with such materials as are provided for and in respects in accordance with such conditions so far as applicable.

We agree to keep the tender valid for (90) ninety days from the due date of its opening and not to make any modifications in its terms and conditions.

A sum of Re (fi	aure)	 (in word	s)
A sulli of its (ii	guic)	(111 11010	
		 · · · · · · · · · · · · · · · · · · ·	

has been deposited in Deposit at call Receipt of a Schedule bank/demand draft of a scheduled bank/bank guarantee issued by a Schedule Bank as earnest money. If I/we, fail to furnished the prescribed performance guarantee within prescribed period, I/we agree that the said Director Of Indian Institute of Science Education and Research THIRUVANANTHAPURAM or his successors in office shall without prejudice to any other right or remedy, be at liberty to forfeit the said earnest money absolutely, if I/we fail to commence

work as specified, I/we agree that Director of Indian Institute of Science Education and Research THIRUVANANTHAPURAM(IISER-THIRUVANANTHAPURAM) or his successors in office shall without prejudice to any other right or remedy available in law, be at liberty to forfeit the said earnest money and the performance guarantee absolutely.

The said Performance Guarantee shall be a guarantee to execute all the works referred to in the tender documents upon the terms and conditions contained or referred to those in excess of that limit at the rates to be determined in accordance with the provision contained in Clause and 12.3 of the tender form. Further, I/We agree that in case of forfeiture of Earnest Money or Performance Guarantee as aforesaid, I/We shall be debarred for participation in the retendering process of the work.

I/We hereby declare that I/we shall treat the tender documents drawings and other records connected with the work as secret/ confidential documents and shall not communicate information / derived there from to any person other than a person to whom I/We am/are authorized to communicate the same or use the information in any manner prejudicial to the safety of the state or IISER THIRUVANANTHAPURAM.

Dated	Signature	of Contractor Seal
		•
		3
Postal Address		
 		er emile
Witness: Address: Occupation:		



# ACCEPTANCE

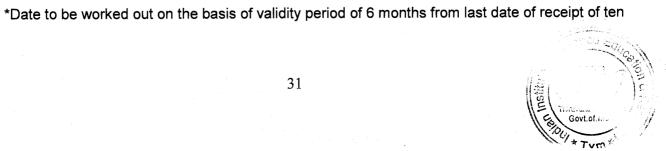
accepted by me for and	dified by you as provided in the letters mentioned hereunder) is on the Director IISER, THIRUVANANTHAPURAM for sum of (Rupees	
	).	
The letters referred to	below shall form part of this contract Agreement:-	
(a)		
(b)		
	and the second of the second o	
(c)		
(c)		
(c)	For & on behalf of the Director, IISER THIRUVANANTHAPURAM	
(c)		



## Appendix 'l'

# Form of Earnest Money Deposit Bank Guarantee Bond

submitted his tender dated (date) for the constru (name of work) (hereinafter called "the Tender")	
KNOW ALL PEOPLE by these presents that we	er called "the Bank") are bound unto xecutive Engineer) (hereinafter called (Rs. in words and truly to be made to the said
SEALED with the Common Seal of the said Bank this CONDITIONS of this obligation are:	day of 20 THE
<ul><li>(1) If after tender opening the Contractor withdrawalidity of tender (including extended validity Tender;</li></ul>	
(2) If the contractor having been notified of the accordin-Charge:	eptance of his tender by the Engineer-
(a) fails or refuses to execute the Form Instructions to contractor, if required OR	•
(b) fails or refuses to furnish the Perform the provisions of tender document a	
We undertake to pay to the Engineer-in-Charge either up upon receipt of his first written demand, without the Engine his demand, provided that in his demand the Engineer- claimed by his is due to him owing to the occurrence of specifying the occurred condition or conditions.	eer-in-Charge having to substantiates -in-Charge will note that the amount
This Guarantee will remain in force up to and including th submission of tender as such deadline is stated in the Ins extended by the Engineer-in- Charge, notice of which exte Any demand in respect of this Guarantee should reach the	tructions to contractor or as it may be nsion(s) to the Bank is hereby waived.
DATE	SIGNATURE OF THE BANK
WITNESS (SIGNATURE, NAME AND ADDRESS)	SEAL



# Appendix 'II'

# Form of Performance Security (Guarantee)

#### **Bank Guarantee Bond**

۱.	THIRUVANANTHAPURAM") having offered to accept the terms and conditions of the proposed agreement between
	andand (hereinafter called "the said
	Contractor(s)") for the work
	(hereinafter called "the said agreement") having agreed to production of an irrevocable Bank Guarantee for Rs(Rupees(Rupees
	We (hereinafter referred to as "the Bank") hereby (indicate the name of the Bank) Undertake to pay to the IISER THIRUVANANTHAPURAM an amount not exceeding Rs (Rupeesonly) on demand by IISER THIRUVANANTHAPURAM
2.	Wedo hereby undertake to pay the amounts due and
	payable (indicate the name of the Bank) under this Guarantee without any demure, merely on demand from the IISER
	THIRUVANANTHAPURAM stating that the amount claimed as required to meet the
	recoveries due or likely to be due from the said contractor(s). Any such demand made on the
	bank shall be conclusive as regards the amount due and payable by the bank under this
	Guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding Rs(Rupees(Rupees
	only)
3. ·	We, the said bank further undertake to pay the IISER THIRUVANANTHAPURAM any money so demanded notwithstanding any dispute or disputes raised by the contractor(s) in any suit or proceeding pending before any court or Tribunal relating thereto, our liability under this present being absolute and unequivocal.
: V	The payment so made by us under this bond shall be a valid discharge of our liability for payment there under and the Contractor(s) shall have no claim against us for making such payment.
1.	We, further agree that the guarantee herein contained shall (indicate the name of the Bank) remain in full force and effect during the period that would be
	taken for the performance of the said agreement and that it shall continue to be enforceable till all the dues of the IISER THIRUVANANTHAPURAM under or by virtue of the
	said agreement have been fully paid and its claims satisfied or discharged or till Engineer-in-
	Charge on behalf of the IISER THIRUVANANTHAPURAM certified that the terms and conditions of the said agreement have been fully and properly carried out by the said Contractor(s)andaccordinglydischargesthisguarantee.
5.	We, further agree with the IISER THIRUVANANTHAPURAM
	that the IISER THIRUVANANTHAPURAM (indicate the name of the Bank) shall have the

fullest liberty without our consent and without affecting in any manner our obligation hereunder to vary any of the terms and conditions of the said agreement or to extend time of performance by the said Contractor(s) from time to time or to postpone for any time or from time to time any of the powers exercisable by the

IISER THIRUVANANTHAPURAM against the said contractor(s) and to forbear or enforce any of the terms and conditions relating to the said agreement and we shall not be relieved from our liability by reason of any such variation or extension being granted to the said Contractor(s) or for any forbearance, act of omission on the part of the IISER THIRUVANANTHAPURAM or any indulgence by the IISER THIRUVANANTHAPURAM to the said Contractor(s) or by any such matter or thing whatsoever which under the law relating to sureties would, but for this provision, have effect of so relieving us.

<b>5</b> .	This guarantee will not be discharged due to the change in the constitution of the Bank or the Contractor(s).
7.	We, lastly undertake not to revoke this guarantee except (indicate the name of the Bank) with the previous consent of the IISER THIRUVANANTHAPURAM in writing.
3.	This guarantee shall be valid up tounless extended on demand by the IISER THIRUVANANTHAPURAM. Notwithstanding anything mentioned above, our liability against this guarantee is restricted to Rs (Rupeesonly) and unless a claim in writing is lodged with us within six months of the date of expiry or the extended date of expiry of this guarantee all our liabilities under this guarantee shall stand discharged.
	Detail the second of the Pank)



## Appendix 'III'

#### **Proforma of Agreement**

-	LE OF A	GREEM	ENT is made a	t THIRU	JVANANTHAP	URAM	on the	da
between Indian Institutes Of Science Education and Research THIRUVANANTHAPURAM, (IISER THIRUVANANTHAPURAM) (Herein after referred to as the employer which expression shall includes its successors and assigns where the context so admits) of the one part and								
			he "contractor(s) rators and assign					
			employer	is	desirous	of	getting	the
and specialled comple	ecification "the work etion and o	describir (s")and h guarantee	eandcaused ng the work to it has accepted a e of such works. actor has deposit	e exec	uted and comp of the CONTI	leted ma	nintained (here	einafter ecution,
	With employer as security							
forthe	due perfor	mance of	fthis agreement	as provid	ded in the said C	ondition	<b>s.</b>	
NOWI	TISHERE	EBYagre	ed and declared	by and b	etween the part	ies as fol	lows.	
(a) 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	contract condition further conspections	or shall on sexecuted on the sexecute of the s	of the paymen upon and subjeted and completed and completed in the said priced ommence the v	ect to the te the w may be I schedu	e condition he ork shown upor furnished to h	rein con nthe sai im and c	itained and th ddrawings ar lescribed in t	ne said nd such he said
(b)	•	-	llpaytothecontra he manner spec				payablehereu	ınder at
(c)			of this agreemer use 2 of general		_	rees to p	oay compensa	ation for
(e)	The doc	uments n	nentioned below	under (	g) shall form the	e basis c	of this agreem	ent and

(f) The employer through the Engineer-in-Charge reserves to himself the right of altering the drawings and the adding to or omitting any items of works or of having portions of the same carried out departmentally or otherwise and such alterations or variations shall not violate agreement.

to material and workmanship shall be final and binding on both the parties.

the decision Engineer or the Engineers in Charge, in reference to all matters of dispute as

(g) This agreement comprises the work said above and the entire subsidiary work connected there with, even though work may not be shown on the drawings or described in the said specifications or the priced schedule of quantities.

This agreement contains the following documents in addition to pages of articles of agreement.

- (a) NIT/WORK ORDER
- (b) Item rate tender form & contract for works.
- (c) General Rules and Directions
- (d) Condition of contracts
- (e) Clauses of contracts
- (f) Safety code
- (g) Models rules for the protection of health, sanitary arrangements for workers employed by IISER THIRUVANANTHAPURAM or its Contractors.
- (h) Contractors labour regulations
- (i) Proforma of agreement
- (j) Proforma of Schedule A to C
- (k) Special Condition of contracts
- (l) Technical specifications
- (m) Tenders drawings

Signed by for and on behalf of the employer.

- (n) Price Schedule/Schedule of Quantities
- (o) All corresponds between the parties until award of contract.
- (p) Prequalification document

In witness whereof the parties hereto have their respective hands the day and the year herein above written.

Engineer In Charge	
	Witness (1)
	Witness (2)
Signed by the said contractor	
Address	Witness (1)
Countersigned	Witness (2)



# Appendix 'IV'

# PROFORMA BANK GUARANTEE IN LIEU OF BID SECURITY

(On Non Judicial Stamp paper to be stamped in accordance with stamp act, the stamp paper to be in name of Executing Bank)

Ref		Date		
		Bank GuaranteeN	o	
To <b>INDIA</b> I	N INSTITUTE OF SCIENCE	EDUCATION & RESEAR	RCH, THIRUVANAN	THAPURAM
Dear Sir,			the control of the second	
In accordan	ce with your Notice Inviting	Tender for	under your	tender
No	dated	_M/s	(hereinafter ca	lledthe
Tenderer) w	vith following directors on t	heir Board of Directors	/Partners of the firm	1.
	1	2	# 3	_
	3	4		_
	5	6		_
	7	8		_
	9			_
Wish to par	ticipate in the said tender f	or the following:	en er	
1				
	· · · · · · · · · · · · · · · · · · ·			•
2				•
				and the state of t

Whereas it is a condition in the tender documents that the tenderer has to deposit Bid Security with respect to the tender, with Indian Institute of Science Education & Research, THIRUVANANTHAPURAM amounting to Rs.................................. or alternatively the tenderer is required to submit "Bank Guarantee" from a nationalized bank irrevocable and operative till 28 days after the validity of the offer. (i.e. 120 days from the last date of receipt of bid), for the like amount which amount is likely to be forfeited on the happening of contingencies mentioned in the tender documents. And whereas the tenderer desires to secure exemption from deposit of Bid Security and has offered to furnish a Bank Guarantee for a sum of Rs................................. to the IISER, THIRUVANANTHAPURAM for the purpose of securing exemption from the deposit of Bid Security.

- 2. We, the aforesaid Bank, further agree that the IISER, THIRUVANANTHAPURAM shall be the sole judge of and as to whether the tenderer has committed any breach or breaches of any of the terms and conditions of the tender and the extent of loss, damage, costs, charges and expenses caused to or suffered by or that may be caused to or suffered by the IISER, THIRUVANANTHAPURAM on account thereof the extent of the bid security required to be deposited by the Tenderer in respect of the said Tender document and the decision of the IISER, THIRUVANANTHAPURAM that the Tenderer has committed such breach or breaches and as to the amount or amounts of loss, damage, costs, charges and expenses caused to or suffered by or that may be caused to or suffered by the IISER, THIRUVANANTHAPURAM shall be final and binding on us.
- 3. We, the said Bank further agree that the Guarantee herein contained shall remain in full force and effect until it is released by the IISER, THIRUVANANTHAPURAM and change in the constitution, liquidation or dissolution of the Tenderer shall not discharge our liability guaranteed herein.
- 4. It is further declared that it shall not be necessary for the IISER, THIRUVANANTHAPURAM to proceed against the Contractor before proceeding against the Bank and the Guarantee herein contained shall be enforceable against the Bank notwithstanding any security which the IISER, THIRUVANANTHAPURAM may have obtained or shall obtain from the Contractor at the time when proceedings are taken against the Bank for whatever amount may be outstanding or unrealized under the Guarantee.



liability Rsin force up made on us	ibunal or arbitrator(s) etc. Nunder this guara (Rupeesand unless o toand unless in writing within three month all your rights under th and discharged from all liabiliti	ntee sha ) s a demand o is after the afo eguarantees!	ll be res and our guaranted r claim under the presaid date i.e. of nall be forfeited ar	tricted to e shall remain e guarantee is n orbefore the
Date	•••			
place	••			
	(Signature)			
	(Printed Name)			
	(Designation)			
	(Bank's Common seal			
W 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	(Authorisation No.)	- · · · .	ganka sumon in general sumo	en e
In the presence of:				
Witness				
1)				
2)				
<b>-</b> /			e e e e e e e e e e e e e e e e e e e	
	Accepted		te Samuella (gr	
	Accepted			
	(Signature of the Officer)			
	For and on behalf of the			
	INDIAN INSTITUTE OF SCIENT AND RESEARCH, THIRUVANANTHAPURAM	NCE EDUCATIO	ON .	



## **APPENDIX (IV) -CLAUSE 25**

Notice for appointment of Arbitrator [Refer Clause 25 of General Conditions of Contract]

To
The Director
IISER THIRUVANANTHAPURAM.

#### Dear Sir.

In terms of clause 25 of the agreement, particulars of which are given below, I/we hereby give notice to you to appoint an arbitrator for settlement of disputes mentioned below:

- 1. Name of applicant
- 2. Whether applicant is Individual/Prop. Firm/Partnership Firm/Ltd. Co.
- 3. Full address of the applicant
- 4. Name of the work and contract number in which arbitration sought
- 5. Name of the Division which entered into contract
- 6. Contract amount in the work
- 7. Date of contract
- 8. Date of contract Date of initiation of work
- 9. Stipulated date of completion of work
- 10. Actual date of completion of work (if completed)
- 11. Total number of claims made
- 12. Total amount claimed
- 13. Date of intimation of final bill (if work is completed)
- 14. Date of payment of final bill (if work is completed)
- 15. Amount of final bill (if work is completed)
- 16. Date of request made to SE for decision
- 17. Date of receipt of SE's decision
- 18. Date of appeal to you
- 19. Date of receipt of your decision.

Specimen signatures of the applicant

(only the person/authority who signed the contract should sign)

I/We certify that the information given above is true to the best of my/our knowledge. I/We enclose following documents.

1. Statement of claims with amount of claims.

2.

Yours faithfully

Copy in duplicate to: Engineer in Charge.



# PROFORMA OF SCHEDULES

(Operative Schedules to be supplied to each intending tenderer)

SCHEDULE 'A'

Schedule of quantities

Enclosed as Financial bid document

# SCHEDULE 'B'

Schedule of materials to be issued to the contractor.

S.No	Description of item	Quantity	Rates in figures & words at which the material will be charged to the contractor	Placeofissue
1	2	3	4	5
			Section 1995 and Section 1995	
	NIL			

Tools and plants to be hired to the contractor

S.No	Description	Hire charges per day	Placeofissue
1	2	3	4
		14 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
	NIL	to the state of th	
	INIE		
			-
		The state of the s	

Extra schedule for specific requirements/document for the work, if any. -- NIL-



# Reference to General Conditions of contract.-

Name of work & Location: Installation, Testing and Commissioning of 160KVA LT DG set & 380KVA LT DG set and associated electrical works in substation 1 and substation 4 at IISER TVM campus, Vithura, Thiruvananthapuram

NIT NUMBER: IISERTVM/EO/E&M/153/03/19-20 dated: 15-05-2019

Estimated cost put to tender : Rs. 6,38,300/-

(i) Earnest money : Rs. 12766/-

(To be returned after receiving

Performance guarantee)

(iii) Performance Guarantee : 5% of tendered value.

(iv) Security Deposit : 2.5 % of tendered/accepted value.

SCHEDULE 'C'

(ii)

GENERAL RULES & DIRECTIONS:

Officer inviting tender Superintending Engineer,

IISER, THIRUVANANTHAPURAM.

Maximum percentage for quantity of items of work

To be executed beyond which rates are to be Determined in accordance with Clauses 12.2 & 12.3:

See below

**Definitions:** 

2(v) Engineer-in-Charge Engineer as authorized

by IISER TVM

2(viii) Accepting Authority Director, IISER THIRUVANANTHAPURAM

2(ix) Percentage on cost of materials and labour 15%

to cover all overheads and profits

2(x) Standard Schedule of rates CPWD Delhi Schedule of Rates 2018

plus cost Index enhancement & market rates

2(viii) Department Indian institute of Science Education &

Research, IISER, THIRUVANANTHAPURAMOS

# 2(ix) Standard contract Form

#### Item rates contract

#### Clause 1

- (i) Time allowed for submission of Performance Guarantee from the date of issue of letter of acceptance 15days
- (ii) Maximum allowable extension with late fee @ 0.1% per day of Performance Guarantee amount beyond the period provided in (i) above 7 days

#### Clause 2

Authority for fixing compensation under clause 2.

The Director Indian institute of Science Education & Research, IISER THIRUVANANTHAPURAM

#### Clause 2 A

Whether Clause 2A shall be applicable

Not Applicable

#### Clause 5

Number of days from the date of issue of letter of award works for reckoning date of start

15 days

# Mile stone(s) as per table given below:-

SI Description of Time allowed in days/months Amount to be with-held in case					
No. Milestone (Physical) (From o	date of start)	of non-achievement of Milestone			
1. Complete work as per NIT	120days	5.00 % of tender value			

#### Time allowed for execution of

4(Four)months

## Authority to decide:

(i) Extension of time(ii) Rescheduling of mil

Engineer in Charge

Rescheduling of mile stones Engineer in Charge

(iii) Shifting of date of start in case of delay inhanding over of site: Director IISER THIRUVANANTHAPURAM

## Clause 6, 6 A

Clause applicable - (6 or 6 A)

6A Applicable



No running account bill shall be paid for the work till the applicable labour licenses, registration with GST, EPFO, ESIC and BOCW Welfare board, whatever applicable are submitted by the contractor to the Engineer in charge.

#### Clause 7

Gross work to be done together with net payment
/adjustment of advances for material collected, if
any, since the last such payment
for being eligible to interim payment
Rs. 5.00 Lakhs

Clause 7A

Whether clause 7A shall be applicable:

Yes.

Clause 10

List of testing equipment to be provided by the contractor at site lab.

As per work requirements

Clause 10 A

Whether Clause 10 A shall be applicable: Applicable

Clause 10 B

-Whether Clause 10 B shall be applicable

: applicable

Clause 10B(i)

Whether Clause 10B (i) shall be applicable.

: Applicable.

Clause 10B(ii)

Whether Clause 10B (ii) shall be applicable.

: NotApplicable.

Clause 10 C

Component of labour expressed as percent of value of work: Applicable

## Clause 10 CA

: Applicable

	S.	Materials covered under	Base price and its	Nearest Materials (other than
-	No.	this	corresponding period of	cement*,
		Clause	all ,	reinforcement bars,
			the materials covered	the structural steel and POL)
			under clause 10CA i/c	for which All India whole sale
			GST	Price Index to be
		·	(In Rupees) March,	Followed
			2017	

**CLAUSE 10 CC** 

**NOT APPLICABLE** 

Clause 10 CC to be applicable in contracts with stipulated period of completion exceeding the period shown in next column ......

12 months

 $Schedule\, of component\, of other\, Materials, Labour, POL\, etc.$ 

for price escalation.

Component of civil (except materials covered under Clause 10 CA/Electrical Construction materials expressed as percent of total value of work

Xm -- %

Component of Labour expressed as percent of total value of work.

Y -- %

Component of P.O.L-expressed as percent of total value of work.

Z...... 0..... %

#### Clause 11

Specifications to be followed for execution work

- 1) Technical specification given in Tender documents.
- 2) CPWD standard specification 2009 Volume

1& Il with up to date correction slips for civil works.

- 2a) CPWD standard specification for internal Electrical works 2013, external electrical services- 2007, DG set & Wet riser, sprinkler, specification-2006, Substation works Part IV-2013.
  - 3) Indian Standard Specification
  - 4) Manufactures specification
  - 5) Engineer In charge decision.

#### Clause 12

Typeofwork	Project and original work	
12.2&12.3	Deviation Limit beyond which clauses 12.2 & 12.3 shall apply for building Super structure work & other Associated Electro-mechanical works	30 %
12.5	(i) Deviation Limit beyond which clauses 12.2 & 12.3 shall apply for foundation work	30%



(Except items mentioned in earth work sub head in DSR and related items)

(ii) Deviation Limit for items mentioned in earth work Sub head of DSR or related items 100

%

#### Clause 16

Competent Authority for deciding Reduced rates
THIRUVANANTHAPURAM

The Director Indian institute of Science Education & Research, IISER

#### Clause 18

List of mandatory machinery, tools & plants - To be deployed by the contractor at site at his cost:

As per Annexure-II in the NIT Condition of Contract.

#### Clause 25

Constitution of Dispute Redressal Committee- Building and Works Committee

#### Clause 34 (i)

Requirement of Technical Representative(s) and recovery rate to be affected from Contractor bill for non-deployment of technical staff at site of work:

S.N	Technical Representative(s)	Qualification & Discipline of the Technical representati ve(s)	Minimum Experienc e of the Technical represent ative(s)	Minimum Numbers to be employed at site for full duration of the project	recovery made to contracto event	or in the of not provision of
-			-		Figure	Words
1	Site Engineer Planning and billing Engineers (Full duration of the project)	BE/Diploma in Electrical Engineering	5 years	1	30000	Thirty thousand only

#### Note:

1. Assistant Engineers retired from Government services who are holding Diploma will be treated at par with Graduate Engineers. Diploma holder with minimum 10 years' relevant experience with a reputed construction company can be treated at par with Graduate Engineers for the purpose of such deployment subject to the condition that such diploma holders should not exceed 50% of requirement of degree engineers.

- 2. The contractor shall submit a certificate of employment of the technical representative(s) (in the form of copy of Form -16 or CPF deduction issued to the Engineers employed by him) along with every account bill/final bill and shall produce evidence if at any times so required by the Engineer-in-charge.
- 3. The CV of technical persons shall be presented to Engineer in charge before deployment in above work for approval. Once inducted they will not be transferred or removed without the permission on Engineer in Charge. Exempted

  Note:
  - 1. Assistant Engineers retired from Government services who are holding Diploma will be treated at par with Graduate Engineers. Diploma holder with minimum 10 years' relevant experience with a reputed construction company can be treated at par with Graduate Engineers for the purpose of such deployment subject to the condition that such diploma holders should not exceed 50% of requirement of degree engineers.
  - 2. The contractor shall submit a certificate of employment of the technical representative(s) (in the form of copy of Form -16 or CPF deduction issued to the Engineers employed by him) along with every account bill/final bill

and shall produce evidence if at any times so required by the Engineer-in-charge. 3. The CV of technical persons shall be presented to Engineer in charge before deployment in above work for approval. Once inducted they will not be transferred or removed without the permission on Engineer in Charge. Exempted



# INDIANINSTITUTE OF SCIENCE EDUCATION AND RESEARCH (IISER) THIRUVANANTHAPURAM

# **VOLUME II**

NAME OF WORK:

Installation, Testing and Commissioning of 160KVA LT DG set & 380KVA LT DG set and associated electrical works in substation 1 and substation 4 at IISER TVM campus, vithura, Thiruvananthapuram

NIT NUMBER:

IISERTVM/EO/E&M/153/03/19-20 dated: 15-05-2019



# SPECIAL CONDITIONS AND TECHNICAL SPECIFICATIONS

- 1. Contractor shall have a valid contract license issued by Electrical Inspectorate(EI)
- 2. Contractor shall obtain necessary permit/approval from EI before commencement of work. All documents/drawings required for such permit/approval shall be prepared by the contractor.
- 3. All fees payable to Kerala State Electricity Board Ltd (KSEB), El and other local bodies shall be paid by the contractors and the same shall be reimbursed by department on production of documentary evidence.
- 4. The works will be executed to comply with the CPWD General Specifications for Electrical works Part-I Internal (2013), Part II External (1994), Part III Lifts & Escalators (2003), Part-IV Substation (2013), Part-VII DG Set (2013) and with up to date amendments and to confirm to the Indian Electricity Act & rules, BIS& Direction of Engineer-in-charge.
- 5. This contract holds the contractor responsible for the entire job as per relevant CPWD specifications. If any item is left out within the schedule of work but if it is considered essential for the completion of the job, the contractor has to carry out the items as extra substituted item.
- 6. The items of work shall be executed as per detailed specifications and scheme. In case of contradiction between schedule of work with its Technical Specification and the General Specification, the former shall prevail.
- 7. The work will be executed as per general arrangement drawing and detailed fabrication drawings duly approved by the Engineer-in-charge. The various items of equipment will be ordered only after the drawings are approved and quantities in detail of various items are ascertained as per actual requirements. Therefore the actual quantities / measurement may vary from the stipulated quantities, which are only estimate.
- 8. The firm shall deploy only licensed personnel as required under IE Rules, for execution of the electrical works. The firm shall be liable to submit the list of such personnel along with the attested copy of the licenses at the time of execution. Required special tools to be operated in the execution of the job.
- 9. The work will be performed as per the day to day instruction and approval of the engineer-in-charge. All materials/ equipments will be used after taking approval of the Engineer-in-charge.
- 10. Equipments will be duly inspected in the manufacturer's works / premises before dispatch to the site, as per instructions of Engineer-in charge.
- 11. The rates are to be inclusive of all taxes, levies, insurance, freight, octroi etc.. Nothing extra will be paid.
- 12. The work will be executed as per the programme of completion of the project. The delivery & erection schedule of various materials equipments will be as per approval of Engineer-in-charge.

- 13. The contractor shall have to make arrangements, at his own risk and cost, for transportation of materials from the point of issue of stores to site of work, if any. It's the duty of contractors to verify, all material collected from Department store presence of concern persons before transport.
- 14. The contractor shall ensure that the staff employed by him for execution of the electrical work, possess the valid electrical license issued by competent authority. Consequences arising due to the default of the contractor in not complying with the above condition shall be the entire responsibility of the contractor.
- 15. All concealed work and earthing shall be done in the presence of the Engineer-in-charge or his authorized representative.
- 16. The schematic diagram/dimensional drawings of the various electrical cubical panels shall be got approved from the Engineer-in-charge before fabrication and shall comply with CPWD specifications and Indian Electricity Rules. The panels shall conform to IS: 8623/1993. All panels shall be powder coated inside out, in shade approved by the Engineer-in-charge.
- 17. All model of modular accessories required for the work shall be got approved from the Engineer-in-charge among the approved makes. The base plate shall be preferably in sheet steel or otherwise in unbreakable polycarbonate. The cover plates shall be screw less type in shade approved by the Engineer-in-charge. The uPVC / GI box shall be of the same make as the modular accessories.
- 18. The MCB shall be of the same make as that of MCB DB's. Contractor shall obtain approval of the Engineer-in-charge before procurement of MCB DB's. All DB's shall be double door type confirming to minimum IP-43 degree of protection.
- 19. Miniature Circuit Breaker shall comply with IS -8828-1996 / IEC 898 with latest amendments up to date. Miniature Circuit Breakers shall be quick make and break type for 230 / 415 V A.C. ,50Hz application with magnetic thermal release for over current and short circuit protection. The breaking capacity shall not be less than 10KA at 415V A.C. The MCB shall be DIN mounted. The MCB shall be current limiting type (class 3).
- 20. MCB shall have the minimum power loss (watts) per pole defined as per the IS / IEC and the manufacturer shall publish the values.
- 21. The MCB housing shall be heat resistant and having high impact strength. The terminal shall be protected against finger contact to IP20 degree of protection.



- 22. All the MCCB's shall have microprocessor based trip unit for reliable protection and accurate measurement. The rated Service breaking capacity (kArms) shall be 100% of Ultimate breaking capacity (kArms). All MCCB's shall be current limiting type with features as per relevant IS codes and CPWD specification. All MCCB's shall be rated for minimum operating voltage of 690 V and minimum insulation voltage of 750 V. There has to be total discrimination between the incoming and outgoing MCCB's and MCB's, as required, at the MDB's and DB's level.
- 23. MCCB's shall be used with rotary handle and terminal spreaders and all terminals shall be shrouded to avoid direct contact.
- 24. All measuring CT's, unless otherwise specified shall be cast resin CT's with class 0.5 accuracy. All digital measuring meter shall be with class 0.5 accuracy unless specified otherwise.
- 25. Mechanical Castle key interlock shall be provided among the incomer MCCB's, wherever, as applicable, two different incomer sources are provided in the panel as per the directions of the Engineer in charge. The same is deemed included in the scope of work.
- 26. All measuring and indicating instruments shall be protected through MCB's of 2 Amps rating.
- 27. Ratings, sizes and quantities shall be checked and considered for satisfactory operation of electrical system complete in all respect. Ratings, sizes and quantities mentioned in Bill of Quantities and drawings are indicative and minimum.
- 28. General arrangement drawing of the switchboard shall be got approved the Engineer-in-Charge before commencement of manufacturing.
- 29. It is important that every equipment is tested fully before dispatch.
- 30. All materials for the work shall be supplied from approved list of manufacturer and any item, not covered in approved list, shall be supplied after getting approval from Engineer- in-charge or his authorized representative.
- 31. Any materials brought for work which is not matching with specification will be rejected and the rejected materials shall be removed from site on the same day.
- 32. Test certificates both type test and routine tests wherever required shall be furnished along with supply for all Electrical/Mechanical items.
- 33. Balance works including final alignment, installation, testing and commissioning works are the responsibility of contractor.
- 34. The contractor can visit the site and asses the nature and quantities of work involved for successful completion of work in time, on all working days between 10.00 Hrs. to 16.00 Hrs. before submitting the tender. After submission of tender no claims in this regards will be considered.
- 35. For all installation works nuts, bolt, washer, screws, PVC/steel fastener, wire lug, and other accessories required for completion of work shall be in contractor's scope without any additional charges.

- 36. For all items Contractor has to complete all associated minor civil work/cleaning for making good as per direction of engineer in charge without any additional charges.
- 37. In all installation/test works, if any component/equipment has to be replaced, that shall be arranged by the contractor at his own risk and cost. A proper rate analysis with proof of invoice/Chelan shall be submitted for additional claim.
- 38. Any damage to the component/equipment/material due to mistake from the part of contractor has to be rectified/ replaced by the contractor as per the direction of Engineer in charge without any additional charge.
- 39. Contractor shall have to check the site order Book for any instructions of Engineer-in-charge or his authorized representative and sign the site order book. He shall be bound to ensure compliance with the instructions recorded there in.
- 40. Contractor has to do the work in co-ordination with other contractors, agencies, and systems as required and as directed by the engineer in charge.
- 41. All necessary equipment for testing and commissioning shall be arranged by the contractors without any additional charges.
- 42. The contractor has to do necessary arrangement for uncoiling of the LT cables from the cable drum kept in the cable yard and transport the cables upto the respective site.
- 43. The agency shall have the following testing/measuring equipments in addition to standard tools.

Digital Multi-meter for Direct and alternating voltages from  $100\mu V$  ... 1000V, Direct and alternating currents from  $10\mu A$  ... 10.00A, Resistance from  $1\Omega$ ...  $60.00M\Omega$ , Capacitance from 1pF ... 40.00 mF with zero correction, Frequencies from 10.00Hz ... 10MHz, Diode measurement and continuity testing, Duty cycle (%) measurement, Temperature measurement with K type Thermocouple, Peak value measurement.

Insulation Tester for measuring range from 10KOhm to 1TOhm, Test voltages: 100V, 250V, 500V, 1000V, 1500V, 2000V, 2500V, 5000V.

Earth tester with kit, 0-100 ohms with multiple ranges and selector switches.

Tong tester (clamp meter) of range 0 to 1000 A with multiple ranges and selector switches.

Phase sequence tester

Frequency meter 45 to 55 Hz.

Portable PF meter of range Lead 0.5 to 1.0 to 0.5 lag

Lux meter to measure up to 2000 lux with selector switches.



# Digital Micrometer and Digital Vernier Caliper

44. The contractor shall quote his rates / supply on the basis of the price of best quality product of the brand/make as per the List of approved makes. In any case particular brand of item is not acceptable to the client the contractor shall supply items of other approved brands at no extra cost.

LIST OF APPROVED MAKES FOR ELECTRICAL WORKS			
SL NO.	ITEM	NAME OF BRAND/MAKE	
1	ARMOURED/UNARMOURED HV / LV / CONTROL CABLE	GLOSTER/POLYCAB/FINOLEX/RR KABLE	
2	CABLE LUG & CABLE GLAND	DOWELLS / RAYCHEM /COMET/JAISON	
3	CHANGE OVER SWITCHES & ATS	L&T / SIEMENS / LEGRAND / / SCHNEIDER	
4	CONTACTORS - AIR BREAK TYPE (POWER / CONTROL)	L&T / SIEMENS / CROMPTON GREAVES	
5	DIGITAL TYPE INSTRUMENTS: AMMETER / VOLTMETER / FREQUENCY METER / PF METER / MFM ETC.	L&T / RISHAB / GE DIGITAL/ SCHNEIDER	
6	ELECTRICAL GRADE FRP LAMINATES	ELECTRO FIBRES OR EQUIVALENT	
7	ELECTRONIC TIME SWITCH	L&T / SIEMENS / BCH-ELECTRIC	
8	FRLS PVC ISULATED SINGLE/MULTI CORE STRANDED COPPER CONDUCTOR WIRES	FINOLEX / RR KABLE / L&T/GLOSTER	
9	HEAT / COLD SHRINKABLE TERMINATION & JOINT KITS (LT)	RAYCHEM / M-SEAL / 3M	
10	INDICATING LIGHTS	L&T / SCHNEIDER / SIEMENS	
11	LT CURRENT / VOLTAGE TRANSFORMERS	KAPPA / AE / NIPPEN / INTRANS / PARAS / PGR	
12	MCBS	L&T / SIEMENS / LEGRAND/ SCHNEIDER	
13	MCCBS	L&T / SIEMENS / LEGRANDING SCHNEIDER	

	LIST OF APPROVED MAKES FOR ELECTRICAL WORKS				
SL NO.	ITEM	NAME OF BRAND/MAKE			
14	PROTECTIVE RELAYS (EM AND NUMERIC)	L&T / SIEMENS			
15	PUSH BUTTON STATIONS AND KEY ACTUATORS	L&T / SIEMENS / SCHNEIDER			
16	ROTARY SWITCH	L&T / GE / SIEMENS / SCHNEIDER			
17	SELECTOR SWITCH / TOGGLE SWITCH	L&T / GE / SIEMENS			
18	TERMINAL BLOCKS	WAGO & CONTROLS / PHOENIX CONTACTS/			
19	EARTH ENHANCING MINERAL	CAPE OR EQUIVALENT WITH TEST CERTIFICATE			
20	LT PANEL FABRICATION	CPRI APPROVED PANEL FABRICATOR WITH BETTER INFRASTRUCTURE AND TESTING FACILITY.			
21	TIMER	L&T / GE / SIEMENS			

