

ESTATE (E & M) WORKS SECTION
INDIAN INSTITUTE OF TECHNOLOGY, KHARAGPUR

Notice Inviting Quotation

Quotation No: - IIT/E/E&M/2020-21/Qtn./10 Date: 09.10.2020

Sealed quotations on item rate basis are invited by Sr. EE (EW) from registered Electrical contractors of IIT Kharagpur/CPWD/MES/WBPWD/Kharagpur municipality and other bonafide contractors having valid GST, PAN and updated Electrical contractor license for below mentioned work. The approximate cost of the work is ₹ 1,27,862/- (**Rupees One lakh Twenty seven thousand Eight hundred Sixty two only**)

NAME OF THE WORK: Annual maintenance contract (AMC) for each 100 kWp roof top solar power point located on LLR Hall and Mathematics department roof top at IIT Kharagpur

ISSUE OF QUOTATION : FROM 9.10.2020 to 21.10.2020.

LAST DATE OF SUBMISSION OF :- 21.10.2020 UPTO 11.30AM
QUOTATION

QUOTATION OPENING DATE :- 21.10.2020 at 11.30AM

TENDER DOCUMENTS can be downloaded from the Institute website www.iitkgp.ac.in & <https://eprocure.gov.in>. Requisite Earnest Money amounting to **Rs. 2557/- (Rupees Two thousand Five hundred and Fifty seven only)** to be paid by in demand draft in favour of "Indian Institute of Technology Kharagpur" on any nationalized Bank of India payable at Kharagpur Branch at the time of submission of Bid. **Tenders without Earnest Money shall be summarily rejected.** For any amendment /corrigendum please visit the Institute website www.iitkgp.ac.in & <https://eprocure.gov.in>.

The following documents to be submitted at the time of submission of bid:

- i) GST
- ii) PAN
- iii) Experience of Electrical maintenance works.
- iv) Updated Electrical contractor License

ELIGIBILITY CRITERIA

- 1.1.1.** The bidder must be registered in appropriate class of works with Government organization like CPWD/ PWD/ MES or PSUs or OEM or Authorized supplier and installer of OEM (Authority must be signed by OEM official not lower than General Manager or equivalent in corporate structure or those having experience in similar nature of works awarded by Government / Semi Government Organizations/ Government Funded Autonomous Organization.
- 1.1.2.** The bidder must have done at least 1 (ONE) similar work of value of 80% of the estimated cost or 2 (TWO) similar works for projects each of value 60% of the estimated cost or 3 (THREE) similar work for projects each of value 40% of the estimated cost with Government/ Semi-government/ PSU/ Government Funded Autonomous Organization during last **7 (seven) years** preceding last date of the month of tender submission.

Note:

- (i) The estimated cost is **Rs. 1,27,862 / - (Rupees One lakh Twenty seven thousand Eight hundred Sixty two only)**
- (ii) The value of executed works shall be brought to current costing level by enhancing the actual value of work at simple rate of 7% per annum; calculated from the date of completion to the last date of receipt of applications for tender.

Signature of contractor

(iii) Similar works shall mean: Electrical maintenance works.

- 1.1.3. The bidder or the specialized agency the bidder intends to associate with must be registered with appropriate government authority as a bonafide business entity and must have GST registration certificate, Permanent Account Number of income tax and updated Electrical contractor license.
- 1.1.4. Electrical work shall be executed by selected bidder through agency holding electrical contractor license valid on date of execution.
- 1.1.5. The validity of the registrations and licenses should be valid as on the date of tender submission.

(S. Ghosh)

Sr. Executive Engineer (EW)

Copy to:

- 1) Chief Engineer
- 2) Chief System Manager
- 3) SE(E&M)
- 4) SE (Civil)
- 5) Mr. M. Kumar, Sr Executive Engineer(EW)
- 6) Engineer (EW)
- 7) Sr. Assistant/Assistant / Junior Engineer (E&M)
- 8) Notice Board
- 9) Office file



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1. INFORMATION TO BIDDERS

1.1. SCOPE OF WORK

1.1.1. The IITKGP intends to award the work of **“Annual maintenance contract (AMC) for each 100 kWp roof top solar power point located on LLR Hall and Mathematics department roof top at IIT Kharagpur”**. The scope of work will also include Testing and commissioning of Transformer at factory after repairing and at site as per CPWD General Specifications for electrical works, Part-IV- Substation with up to date amendments.

1.1.2. Constraint: The job needs to be executed in Academic/Main building area without causing any disturbances to the normal functioning of offices/classes/departments and also road networks.

1.1.3. The vendor shall work out execution sequence and methodology so as to complete the project within the envisaged time and the estimated cost, duly handling the constraint mentioned above.

1.2. GENERAL INSTRUCTIONS

1.2.1. Bidding documents are to be obtained electronically through websites: on <http://www1.iitkgp.ac.in/topfiles/tenders.php> or <https://eprocure.gov.in/epublish/app>

1.2.2. This bid document shall be read in conjunction with GCC (General Conditions of Contract) available on <http://www1.iitkgp.ac.in/topfiles/tenders.php>.

1.2.3. The bidder shall visit and inspect the site and obtain all information on his own responsibility and at own cost, which may be necessary for the purpose of quoting and submitting the tender. No excuse or ignorance as to site conditions and local information shall be accepted after awarding of the contract. Access to the site will be granted by the Engineer-in-charge on all working days within working hours.

1.2.4. IITKGP shall not provide any space at site for labour hutments.

1.2.5. All clarifications about the tender shall be sought by bidder on or before **21.10.2020 UPTO 11.30AM** through e-mail to the Engineer-in-charge, **Mr. S. Ghosh, Senior Executive Engineer**
Tel: 03222-282522, Email: sghosh@hijli.iitkgp.ernet.in

1.2.6. Completion certificate issued by Competent Authority will only be considered as credential. If the Completion certificate issued by Competent Authority does not reflect the type of work, then Final bill / Schedule of Quantity of the qualifying works also to be attached along with the Completion certificates. Certificate from private individuals / organizations for whom such works have been executed shall not be accepted.

1.2.7. The bidding document (consisting of specifications, the schedule of quantities of various types of items to be executed, the set of terms and conditions of the contract and other documents / drawings, if any), Addendum/Corrigenda, Clarifications to Pre-bid queries can be downloaded from the websites: <http://www1.iitkgp.ac.in/topfiles/tenders.php> or <https://eprocure.gov.in/epublish/app> Corrigenda, if any shall be published only on these websites *at any time before the closing time of tender*.

1.2.8. The institute shall not be responsible for any delay / difficulties / inaccessibility of downloading facility for any reason whatsoever. *The tenderers who have downloaded the tender documents from website must visit the website and ensure that such addendum(s)/corrigendum(s) (if any) is also downloaded by them. This shall be the responsibility of the prospective registered bidders to check the web site for any such corrigendum/addendum before closing time of tender and ensure that bid submitted by them are in accordance with all the corrigendum's/addendums.*

1.2.9. All costs, charges & expenses that may be incurred in connection with the preparation of his tender shall be borne by him and the Institute accepts no liability whatsoever therefore.

1.2.10. **Rates quoted by the bidders shall be inclusive of GST (Goods and Services Tax - Central, State and Interstate) and all applicable taxes. Income Tax and all other statutory deductions like labourcess etc. will be deducted from the bill as per prevailing rules.**

1.2.11. Exemption to IITKGP against any tax/ duty/ fee/ surcharge/ charge/ cost, if any, found applicable or sought later from IITKGP after award shall be passed on to IITKGP by the contractor without dispute.

1.2.12. IITKGP reserves the right to reject any or all of the bids without assigning any reason.

Signature of contractor

1.2.13. **Bid Validity:** Bid shall remain valid for 120 days from the date of submission.

1.2.14. **Firm Price: Bidder's quoted Rates/Prices for executing the activities under the Contract shall remain firm till completion of the entire work & shall not attract any escalation under any circumstances whatsoever.**

1.2.15. If any information furnished by the bidder is found as false / fabricated, then his bid will be rejected and treated as cancelled. Even if the manipulation is detected at any stage after signing of the contract, it would lead to termination of the contract besides forfeiture of Earnest Money Deposit and liabilities towards prosecution. In such cases the bidder will be debarred from participation in future tendering process in IITKGP for next 05 (Five) years.

1.2.16. **Earnest Money Deposit (EMD)** of requisite amount and that in prescribed mode or proof of payment thereof shall be enclosed with the Technical Bid explained in following section.

1.2.17. **Refund / Conversion of Earnest Money Deposit:** The Earnest Money received shall be refunded to the unsuccessful bidders without any interest after the opening of financial bids. The Earnest Money Deposit of successful bidder shall be retained and converted into part of Security Deposit.

1.2.18. **Forfeiture of Earnest Money Deposit:** Earnest Money Deposit will be forfeited in any of the following cases:

- (i) The bidder withdraws / modifies his tender during the period of Bid Validity.
- (ii) The bidder, in case of tie between lowest bids, refuse to submit revised offer.
- (iii) The bidder does not accept the correction of arithmetical errors of his tender.

Tender Document

Sealed quotations on item rate basis are invited by Sr. EE (EW) from enlisted and approved Electrical contractors of IIT Kharagpur /CPWD/MES/WBPWD/Kharagpur municipality and Other bonafide contractors having valid GST, PAN and updated Electrical contractor license

The work to be completed within **365 days** from the date of acceptance of work order placed by IIT Kharagpur

1. The Bidders are required to complete quotation, quote rate as per the schedule of quantities and sign on each page of tender documents before submission. The quotation will not be accepted other than our format. The completed set is to be enclosed in a sealed envelope addressed to:

**Sr. Executive Engineer (EW).
Indian Institute of Technology, Kharagpur
Kharagpur -721302 (WB)**

Tenders will be received 21.10.2020 UPTO 11.30AM with all necessary documents i.e. GST, PAN and Electrical contractor license in the office of Estate (E & M), Old Building, IIT Kharagpur.

Agency has to submit the self-attested copy of the documents .Without these documents tender will not be accepted.

2. No tender will be received after the expiry of the date and time notified for receiving tenders under any circumstances whatsoever.
3. **The tender will be opened at 11.30 AM on 21.10.2020** at above address in the presence of authorized representative of Bidder and Tender opening committee of IIT Kharagpur
4. Tender shall remain valid for acceptance for a period of 120 days from the notified last date of tender submission.

5. The price should be for the complete finished item of work and include all labour charges, material,

Signature of contractor

taxes, overhead, duties, cess etc. **Earnest Money, amounting to Rs. 2557/- (Rupees Two thousand Five hundred and Fifty seven only)** in Demand Draft in favour of “Indian Institute of Technology Kharagpur” payable at Kharagpur must accompany each tender and each tender is to be in a sealed cover **super scribed** with “**Annual maintenance contract (AMC) for each 100 kWp roof top solar power point located on LLR Hall and Mathematics department roof top at IIT Kharagpur.**” and the NIQ No. IIT/E/E&M/2019-20/Qtn./78.

6. All tenders in which any of the prescribed conditions are not fulfilled or incomplete in any respect are liable to be rejected.
7. The Institute reserves the right to reject any or all bid without assigning any reason .If any information furnished by the applicant is found incorrect at a later stage, he shall be debarred from tendering and taking up of any work in IIT Kharagpur.
8. The quantities given in BOQ against each items may vary i.e. increase or decrease as per site requirement, but rate will be firmed.
9. This tender notice shall form part of the contract documents.
10. Penalty will be imposed against delay of work as per the Institute rule.
11. The agency is fully responsible for the safety of working personnel and has to follow all government safety rules.
12. All the Govt. labour rules, regulations and latest Indian Electricity Rule are followed by the contractor while executing the Electrical work.
13. All statutory deduction will be deducted as per government rules.
14. Rates quoted by the contractors in item rate tender in figures and words shall be accurately filled in so that there is no discrepancy in the rates written in figures, and in word. However, if a discrepancy is found the rates which correspond with the amount worked out by the contractor shall be taken as correct.
15. If the amount of an item is not worked out by the contractor or it does not correspond with the rate written either in figures or in words that the rate quote by the contractor in words should be taken as correct.
16. Where the rate quoted by the contractor in figures and in words tally but the amount is not worked out correctly, the rate quoted by the contractor will be taken as correct, not the amount.
17. The Tenderer whose tender is not accepted shall not be entitled to claim any costs, charges and expenses incidental to or incurred by him through or in connection with his submission of tender or its consideration by the Purchaser, even though the Purchaser may elect to modify/withdraw the Invitation to Tender or does not accept the tender.
18. Bidders are requested to witness the bid opening.
- 1.2.19. **EVALUATION OF Financial Bids:** The Financial Bid should contain the complete bid document with duly filled in Schedule of Financial Quote. Financial Bids opened as above will be checked for arithmetical errors.
- 1.2.20. **Letter of Award (Work Order)** shall be issued to the successful bidder only after receipt of the Program Schedule with specific Milestones to be achieved as to complete the work within the stipulated time limit, details of his Technical Staff to be deployed as per ANNEXURE-I, and complaint handling arrangement for the Defect Liability Period and Complaint Redressal Mechanism **as per following para.**
- 2.4.8 (a) Contractor shall submit Complaint redressal arrangement with name & contact number of the contractor’s authorized representative for the purpose.

Signature of contractor

1.2.21. **Agreement (Contract)** consisting of complete tender document including conditions, bill of quantities, technical proposal and specialized services, drawings, if any, and acceptance thereof together with any correspondence leading thereto, shall be drawn and signed with the awardee **within 10 days** of the Letter of Award.

1.2.22. **Date of start** of work shall be reckoned from **the 07th day** of the issue of the Work Order.

1.2.23. **Defect Liability Period (DLP):** In partial modification to clause no.16 of General Conditions of Contract (GCC), the Defect Liability Period shall be 12 months after the certificate final or otherwise of its completion of work or till the final bill has been prepared.

1.3. COMPLAINT REDRESSAL MECHANISM

1.3.1. All maintenance complaints shall be got addressed by the contractor to the satisfaction of Engineer-in-charge within 3 days from the date of issuance of the "Job Card" from IIT Kharagpur.

1.3.2. Complaints requiring completion time more than 3 days shall be responded specifically by the contractor with the scheme, in consultation with Engineer-in-charge, and timeline for compliance, to the Engineer-in-charge within 3 days from the date of issuance of the "Job

1.3.3. Any complaint left unattended by the contractor beyond 3 days without specific reasons on record shall attract levy of penalty of Rs 50/- per complaint per day from 4th day to 7th day and Rs 100/- per complaint per day thereafter recoverable from dues to the contractor.



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ANNEXURE-I

TECHNICAL STAFF OF CONTRACTOR

Name of Work: Annual maintenance contract (AMC) for each 100 kWp roof top solar power point located on LLR Hall and Mathematics department roof top at IIT Kharagpur

DISCIPLINE	NAME	QUALIFICATION	EXPERIENCE	CONTACT NUMBER
Overall Project In-charge				
Engineer - Structure and Civil Works				
Engineer - Electrical & Mechanical Works				
In-charge - Safety, Health & Environment				



Seal & Signature of Contractor

Signature of contractor

Schedule of Quantities

Name of work: Annual maintenance contract (AMC) for each 100 kWp roof top solar power point located on LLR Hall and Mathematics department roof top at IIT Kharagpur

Sl. No.	Description of item	Unit	Quantity	Rate(Rs.)	Amount
1	Solar Panel cleaning work of two(02) nos 100 kWp plant, each plant cleaning once in a week for 52 week (01 year) and also as and when required during emergency.	Job	1		
		TOTAL			

Total amount in words inclusive GST (Please mention applicable GST %):

Note:-

- 1) Institute will provide water & electricity in the vicinity of solar panel with free of cost.
- 2) The required pump will be supplied by this Institute.
- 3) The cleaning materials like liquid soap, mopper/wiper are in the scope of the contractor.
- 4) The contractor should have adequate experience in cleaning of solar panels so that no damage to the solar panels occurred.



Signature of contractor

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Signature of contractor

Special Condition for Electrical work

1. The work shall be carried out as per national code or C. P. W. D specifications for works with correction slips issued up-to date unless otherwise specified in the schedule of quantities for the works.
2. The following Indian Standard Specifications and Codes of Practice will apply to the equipment and the work covered by the scope of this contract. In addition the relevant clauses of the Indian Electricity Act 1910 and Indian Electricity Rules 1956 as amended upto date shall also apply. Wherever appropriate Indian Standards are not available, relevant British and/or IEC Standards shall be applicable.

BIS certified equipment shall be used as a part of the Contract in line with Government regulations. Necessary test certificates in support of the certification shall be submitted prior to supply of the equipment.

It is to be noted that updated and current Standards shall be applicable irrespective of those listed below.

Low voltage Switchgear and Controlgear specifications IS 13947 : 1993

Part I – General

Part 2 – Circuit Breakers

Part 3 – Switch Fuse Units

Part 4 – Contactors and Motor Starters

Part 5 – Control Circuit Devices

Electrical Relays for power system protection IS 3231 : 1986

Low voltage Switchgear and Control gear assemblies IS 8623 : 1993

Marking of Switchgear busbars IS 11353 : 1985

Degree of Protection of Enclosures for low

voltage switchgear IS 2147 : 1962

Code of Practice for selection, installation and

maintenance of Switchgear IS 10118 : 1982

4. No under-ground work or above the false ceiling shall be covered until the same has got approved by the Engineer-in-charge. The contractor will supply the drawings of specific works for approval, if required
5. All the old wiring has to be dismantled with proper care. The reusable old materials if any are to be handed over to departmental store with proper documentation and the other non reusable (nil reselling value) will be disposed by the contractor. The contractor shall clear the site thoroughly of all scaffolding materials & rubbish etc. left out of his work & dress the site around the building to the satisfactions & his decision in writing shall be final & binding on all concerned
6. Special care to be taken to avoid any theft of electrical fittings and fixtures while executing the work.
7. The location of Panel / DB / Switch board / Light point / Fan point will be as per existing location or as per the instruction of Engineer-in-charge.
8. All the wiring will be done with feruling and cable / Wire termination by required size or lugs of required materials and It should be noted that license wire man shall only be allowed for the wiring work.

Electrical safety at work site

The contractor will identify one of the supervisors for taking care of implementation of Safety systems.

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

Usage of eye protection equipment shall be ensured when workmen are engaged for grinding, chipping, welding and gas-cutting. For other jobs as and when site safety co-coordinator insists eye protection has to be provided.

1. All safety appliances like Safety shoes, Safety gloves, Safety helmet, Safety belt, Safety goggles etc. shall be arranged before starting the job.

Signature of contractor



2. All excavated pits shall be barricaded & barricading to be maintained till the backfilling is done. Safe approach to be ensured into every excavation.
3. All the dangerous moving parts of the portable / fixed machinery being used shall be adequately guarded.
4. Ladders being used at site shall be adequately secured at bottom and top. Ladders shall not be used as work platforms.
5. Material shall not be thrown from the height. If required, the area shall be barricaded and one person shall be posted outside the barricading for preventing the tre-passers from entering the area.
6. Other than electricians no one is allowed to carry out electrical connections, repairs on electrical equipment or other jobs related thereto.
7. All electrical connections shall be made using 3 or 5 core cables, having a earth wire.
8. Inserting of bare wires for tapping the power from electrical sockets is completely prohibited.
9. A tools and tackles inspection register must be maintained and updated regularly.
10. Debris, scrap and other materials to be cleared from time to time from the workplace and at the time of closing of work every day.
11. All the unsafe conditions, unsafe acts identified by contractors, reported by site supervisors and / or safety personnel to be corrected on priority basis.
12. No children shall be allowed to enter the workplace.
13. All the lifting tools and tackles shall be stored properly when not in use.
14. Clamps shall be used on Return cables to ensure proper earthing for welding works.
15. All the pressure gauges used in gas cutting apparatus shall be in good working condition.
16. Proper eye washing facilities shall be made in areas where chemicals are handled.
17. Connectors and hose clamps are used for making welding hose connections.
18. All underground cables for supplying construction power shall be routed using conduit pipes.
19. Spill trays shall be used to contain the oil spills while transferring / storing them.
20. Tapping of power by cutting electric cables in between must be avoided. Proper junction boxes must be used.
21. Non-compliance to above shall invite a penalty recovery as per 3.22.8.

