

**ESTATE ELECTRICAL & MECHANICAL WORKS HEAD OFFICE
INDIAN INSTITUTE OF TECHNOLOGY
KHARAGPUR 721 302**

NOTICE INVITING TENDER

No. : IIT/E/E&M/T/04/2018-19

Dt. : 03.05.2018

1. Sealed tenders are invited on behalf of the Director, Indian Institute of Technology, Kharagpur from eligible electrical Contractors of CPWD/PWD/IIT/MES/Railways/PSUS/Central Govt. or State Govt. Departments for the following works :

Sl. No.	Name of Work	Estimated Amount (₹)	Earnest Money (₹)	Cost of Tender Document (₹)	Completion Time
1	Shifting of 1.5 MVA, 11/0.415 kV transformer from Substation No. 13A to Substation no 13 by replacing existing 1.0 MVA transformer to enhance the capacity of Substation no-13 and also to facilitate power supply to High Power Computational Laboratory dedicatedly through Substation No.13A	82,984.00	1660/- (To be submitted in a separate envelope)	5,00.00 (non-refundable)	60 days

The above estimate, however, is given merely as a rough guide.

TENDER DOCUMENTS can be downloaded from the Institute website www.iitkgp.ac.in. Requisite Tender fee (non-refundable) to be paid by demand draft in favour of "IIT Kharagpur" on any nationalized Bank of India payable at Kharagpur Branch as stated above at the time of submission of Bid. For any amendment /corrigendum please visit the Institute website www.iitkgp.ac.in.

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

- i) GST
- ii) PAN
- iii) Work Completion Certificates justifying eligibility criteria
- iv) Updated Electrical Contractor Licence
- v) Updated Trade Licence
- vi) Electrical High voltage/SCC. certificate

Eligibility criteria :

Contractors who fulfil the following requirement shall be eligible to apply :

Three works each costing not less than 40% of estimated cost or two works each costing not less than 60% of estimated cost or one work costing not less than 80% of estimated cost executed under Central Government /State Government/Central Autonomous Body/Central Public Sector undertaking.

Kindly note the following information as per the Table below:

Date of Submission of Bid	23 rd May 2018 upto 3:30 P.M.
Date of opening of Bid	23 rd May 2018 at 4:30 P.M.
Tender Paper Cost (Non-refundable) & Earnest Money Deposit	To be paid by demand draft in favour of "IIT Kharagpur" on any nationalized Bank of India payable at Kharagpur Branch in two separate envelopes. Earnest Money will be converted to Security Deposit of successful tenderer.
The submission of bid must have a forwarding application along with self attested all relevant documents as required.	

The scope of work under the Tender shall include supply of Plant and Machinery, Erection of Equipment, Testing and Commissioning, supply of working Drawing, Elimination of teething problems and handing over the plant.

The Tenderers are requested to inspect the sites and satisfy themselves about the working conditions and site requirements before submitting the Tender.

(S. Ghosh)

Sr.. Executive Engineer (Electrical)

Copy to :

- 1) Prof. in-Charge (Electrical Works)
- 2) Prof. in -Charge (IIC) :- with a request for publication of tender notice
In Institute Web site
- 3) Registrar, I.I.T Kharagpur.
- 4) Chief Engineer
- 5) Superintending Engineer (E & M)
- 6) Superintending Engineer (CC & M)
- 7) Sr. Executive Engineer (E&M)
- 8) Sr. Executive Engineer (Civil)
- 9) Dy. Registrar (F &A)
- 10) Dy. Registrar (S&P)
- 11) Notice Board, EPDS.
- 12) Notice Board, Estate (E &M) Head office, Old Building
- 13) Office file.

Tender Document

For

Name of the Work: **Shifting of 1.5 MVA, 11/0.415 kV transformer from Substation No. 13A to Substation no 13 by replacing existing 1.0 MVA transformer to enhance the capacity of Substation no-13 and also to facilitate power supply to High Power Computational Laboratory dedicatedly through Substation No.13A**

1. The site for the work is available/or the site for the work shall be made available in the parts as specified below.
2. The time allowed for carrying out the work will be 60 days from the day after the date of written orders to commence the work.
3. The contractor should quote the figures as well as in words the rate and amount tendered by them. The amount for each item should be worked out and the requisite totals given.
4. When a contractor signs a tender in an Indian Language the total amount tendered should also be written in the same language.
5. Earnest Money, amounting to Rs. 1660/-
(Rupees One Thousand Six Hundred Sixty only) in Demand Draft in favour of " IIT Kharagpur" on SBI, Kharagpur must accompany each tender and each tender is to be in a sealed cover superscribed with , **"Shifting of 1.5 MVA, 11/0.415 kV transformer from Substation No. 13A to Substation no 13 by replacing existing 1.0 MVA transformer to enhance the capacity of Substation no-13 and also to facilitate power supply to High Power Computational Laboratory dedicatedly through Substation No.13A."**
6. Earnest Money of the successful bidder is to be converted into security deposit, further sum amounting 10% or as applicable will be deducted from your running bill(s)/final bill.
7. The acceptance of a tender, will rest with the authority who does not bind himself to accept the lowest tender, and reserves to himself the authority to reject any or all the tenders received without the assignment of a reason. All tenders in which any of the prescribed conditions are not fulfilled or are incomplete in any respect are liable to be rejected.
8. Canvassing in connections with tenders is strictly prohibited and the tenders submitted by the contractors who resort to canvassing will be liable to rejection.
9. All rates shall be quoted on the proper form of the tender alone.
10. On acceptance of the tender, the name of the accredited representative(s) of the contractor who would be responsible for taking instructions from the Engineer-in-Charge shall be communicated to the Engineer-in-Charge.
11. Special care should be taken to write the rates in figures as well as in words, and the amount in figures only, in such a way that interpolation is not possible. The total amount should be written both in figures and in words. In case of figures, the word "Rs." should be written before the figure of rupees and words "P" after the decimal figures, "e.g., Rs.2.15P" and in case of words "Rupees" should precede and the word "Paise" should be written at the end. Unless the rate is in whole rupees and followed by the words "only" it should invariably be upto two decimal places. While quoting the

rate in schedule of quantities, the work “only” should be written closely following the amount and it should not be written in the next line.

12. The Institute does not bind himself to accept the lowest or any tender and reserve to himself the right of accepting the whole or any part of the tender and the tenderer shall be bound to perform the same at the rate quoted.
13. GST, labour cess insurance or any other tax on materials, machinery and T&P, labour or any other item/service in respect of this contract shall be payable by the contractor and Institute will not entertain any claim whatsoever in respect of the same.
14. The contractor shall not be permitted to tender for works in the Institute in which his near relative is posted as Divisional Accountant or as an Officer in any capacity between the grades of Superintending Engineer and Engineer (Both inclusive). He shall also intimate the names of persons who are working with him in any capacity or are subsequently employed by him and who are near relatives to any Officer in the Institute. Any breach of this condition by the contractor would render him liable to be removed from the approved list of contractors of this Institute.
15. The contractor shall give a list of Institute employees related to him.
16. No Engineer of Officer rank or other employees employed in Engineering or Administrative duties in an Engineering Department of the Govt. of India Institute is allowed to work as a contractor for a period of two years of the retirement from Govt. service Institute, without the previous permission of the Govt. of India Institute. This contractor is liable to be cancelled if either the contractor or any of this employees is found at any time to be such a person who had not obtained the permission of the Govt. of India Institute as aforesaid before submission of the tender or engagement in the contractor's service.
17. The tender for the work shall remain open for acceptance for period of 120 days from the date of opening of the tender. If any tenderer withdraws his tender before the said period or makes any modifications in terms & conditions which are not acceptable to the Engineer-in-charge then Institute shall without prejudice to day other right or remedy be a liberty to forfeit the said earnest money.
18. The contractors exempted from payment of earnest money/security deposit in individual cases should attach with the tender an attested copy of the Institute's letter exempting them from the payment of earnest money and security deposit and should produce the original whenever called upon to do so.
19. The tender for the work shall not be witnessed by a contractor or contractors who himself/themselves has/have tendered or who may and has/have tendered for the same work. Failure to observe this condition would render tenders of the contractors tendering as well as witnessing the tender liable to summary rejection.
20. The Contractor shall submit list of works which are in hand (Progress) in the following form :

Name of Work	Name and particulars of Division where work is being executed.	Amount of work	Position of works in progress	Remarks
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21. 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.

22. 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.

23. 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.

Office of the Sr. Executive Engineer (Electrical)

Name of the work

Shifting of 1.5 MVA Transformer from S/S- 13A to No- 13 S/Stn after removing the existing 1.0 MVA transformer to enhance the capacity of No 13 sub-station for providing additional power supply to S/S-12 L.T ring main system, Law College, J C Bose Lab Complex apart from the connected usual Takshila and Vikramshila loads.

Sl. No	Description	Unit	Qty.		
1.	<p>(a) Hiring of crane and open truck for shifting the 1.0MVA (Which is already in service) 11kV/415V,ONAN Transformer from Sub-station No.- S/S-13 to Sub-station No – 6(Water works section) to enhance the capacity of the of existing transformer from 750 kVA to 1.0 MVA for future replacement. The scope of the job should strictly follow the ANX-1 attached herewith.</p> <p>(b) Hiring of crane and open truck for shifting of 1.5MVA(already in service), 11kV/415V, Kirloskar Make Transformer from Sub-station no 13A to Sub-station No. 13 . The scope of the job should be as per ANX-2 attached herewith.</p> <p>NB: 1. One day job. The contractor should be well equipped with tools tackles & adequate manpower for shifting the above job in one Day (from 8am to 5pm) 2. The bidders are requested to visit the site before quoting the rates for the job.</p>	job	01		
2.	<p>Filtration of transformer oil of 1.5MVA Transformer at Sub-station No.- 13 after shifting and pouring of oil after duly tested at site.</p> <p>The contractor has to arrange to shift the</p>	Day	02		

	Institute oil filtering machine from 33 kV substation to no-13 Sub- station and return the machine after completion of filtration work.				
3.	Supply and making indoor type , 11kV HT cable end termination with RAYCHEM MAKE heat shrinkable joint kit complete with all accessories including lugs suitable for . a) From 3 core 95 sq mm to 120 sq. mm H.T cable	Each	01		
4.	Supply and installation of Aluminium Bus-Bars having 2400 amp capacity for phases and 1200 amp capacity for neutral bars, Size of Bus-Bar: 100 mm x 6 mm x 4 no x 3 no for phases and 100 mm x 6 mm x 2no x 1 no for neutral with considering length of Bus Bar, 3 mts each for R, Y,B and N. The Bus bars are to be connected with the existing Bus Risers of 1.0 MVA capacity and to be matched with the LT terminals of the shifted 1.5 MVA transformer at No 13 sub-station. All modification of bus risers AND the Bus Bars as needed are to be carried out by the contractor for successfully connected with the L.T terminals of the transformer. The job involves total covering of the bus-duct/bus riser with M.S sheet as required for confirming safety for the users.	Mts	03		
5.	Supply and fixing of M.S cable end box of suitable size (! Mt x 1 mt x1mt) which are required to be fixed on the L.T side of the transformer and extension of Bus Duct as may be required to facilitate the connection of the Bus duct to the LT terminals of the Transformer.	Each	02		

Total

ANX-1

The works includes dismantling of radiators, conservator, downloading the transformer oil in empty drums etc. removing of power cables (H.T and L.T) earthing attachment etc after taking proper shut down /disconnecting the H.T /L.T supply etc.

The job involves shifting of Transformer at new location, reassembling the dismantled parts, pouring of transformer oil etc for keeping it ready for put in service at **No-6** sub-station for enhancing the capacity of No-6 Sub-Station for providing power to newly constructed Annexe building of Mining Engineering Department.

The contractor will have to shift the oil filtration machine from 33 kV sub-station for downloading the oil and also pouring of oil after filtration.

ANX-2

The works includes dismantling of radiators, conservator, downloading the transformer oil in drums etc. removing of power cables (H.T and L.T) earthing attachment etc after taking proper shut down /disconnecting the H.T/L.T supply etc.

The job involves shifting of Transformer at new location, reassembling the dismantled parts, pouring of transformer oil etc for keeping it ready to put in service at **No-13** sub-station in the vacated place of the **removed 1.0** MVA transformer. The job involves concrete casting for supporting iron channel for erection of 1.5 MVA transformer after fixing of iron channel, suitable arrangement for LT terminal connection with the existing **Bus duct** of 1 MVA transformer at sub-station No. 13 with necessary modification and covering of Bus-Duct as required.

The contractor is liable to modify the 1.5 MVA transformer L.T terminals so that it can be connected and matched with the existing 1.0 MVA transformer Bus-Duct suitably with protective covering as required as per site condition confirming maximum safety and security of the personnel.

The transformer should be commissioned at new location after pouring of oil, filtering the oil ,earth connection complete for neutral and body earthing with suitable GI strip and testing of transformer at site after all connection complete before commissioning.

Note: The bidders are requested to visit the site and assess the work physically to confirm their suitability for undertaking the job before quoting the rates.

Note

1. (For item no 1). The job involves dismantling of the transformer and accessories, disconnection and removing of HV and LV cables and end terminations, earthing connections etc after disconnecting the H.V and LV power supply and totally isolating the transformers as required as per site condition.

2. After shifting the transformer and accessories at new places the re-assembling works are to be done, restoring of cable end terminations with existing cables, earthing connections etc are to be properly carried out at site.

3. After re-assembling work complete the transformers are required to be tested at new location. Oil testing works are also to be carried out before commissioning at new site. The transformers are allowed to charge only if all the testing results are found to be satisfactory.

The readjustment of the relay settings in the HT and LT Switchgear of the transformer is included.

GENERAL SPECIFICATION AND CONDITIONS

1. The work shall be carried out as per National Code or P.W.D. specifications for works at West Bengal or other wise as specified in the Schedule of Quantities for the works.
2. The rates on percentage quoted by the contractors shall be for all leads, lifts, depth etc. unless otherwise specified in the schedule of quantities attached to agreement.
3. The work will be carried out as per instructions given by the Engineer-in-Charge and as per layout plan and the contractor shall be bound to carry out the work in accordance with the revised instruction and /OR modified drawing.
4. The brick shall be second class and / or first class bricks or a specified in the schedule of quantities and shall be of local best available size. To use first class brick only for construction of feeder pillar foundation.
5. All the materials such as stone chips. Sand pipes and other materials to be used in the work shall have to be approved by the Engineer-in-Charge not below the rank of Assistant Engineer.
6. No pipe line shall be covered until the same has been approved by the Engineer-in-Charge.
7. All charges for the Municipal fees and other taxes that may be payable as per local Municipal rules be paid by the contractors and his rates for such items shall be inclusive of all such charges. Nothing extra will be paid on this account by the department.
8. The contractor shall construct suitable go-down at the site of work for storing the materials safe against damage by Sun, Rain, dampness, fire, theft, etc. at his own cost. He shall also employ necessary watch and ward establishment for tools and plant and other materials issued to him at his own cost. No extra payment shall be made on this account.
9. After laying of cable in underground the trench must be strictly mended and duly rammed with a rammer or rolled with a roller.
10. The fences damaged while digging the trench in individual quarters must be mended using barbed wire and bamboo or concrete pillars.
11. All G.I. items mentioned in the entire tender should be or hot dipped galvanization.
12. All light brackets are to be made first as specified in the tender and then hot dipped galvanizations are to perform. No cracks are acceptable on brackets.
13. Empty cable drums are to be deposited to the Section or Store as desired by Site-in-Charge.
14. Any item used while execution of the work, should be duly approved by the department.
15. Prior to commencement of the work Registration from labour enforcement office has to be taken. Also it may be noted that minimum wages as per minimum wages Act must be paid to the contract labours. Currently the minimum wage as per G.O.I norms is Rs.283/- which must be followed.
16. The Site Supervisors should possess supervisory competency certificate and the Electricians should have proper work permits.
17. Safety of materials issued by the Department to the Contractor is the contractors' responsibility.
18. Safety of engaged manpower of Contractor is the Contractor's responsibility. The successful tenderer shall at all times indemnify the Institute, consequent on this work contract. The successful Tenderer shall be liable, in accordance with Indian law & Regulations for any accident occurring due to any cause and the Institute shall not be responsible for any accident and damage incurred or claims arising there from during the period of erection, construction and putting into operation the equipment under the supervision of the successful bidder in so far as the latter is responsible. The successful Tenderer shall also provide all insurance including third party insurance as may be necessary to cover the risk. No extra payment would be made to the successful Tenderer due to above.