

NATIONAL INSTITUTE OF TECHNOLOGY PATNA



(An Institution of National Importance under MHRD, Govt. of India)

ASHOK RAJPATH, PATNA-800 005 (BIHAR)

Ph. 0612-2371715,2372715,2371929 Fax-061-2660480

Website- www.nitp.ac.in e-mail-registrar@nitp.ac.in

NOTICE INVITING TENDER

Tender No. NITP/19-20/12

dated 22.10.2019

Sealed tenders are invited by the undersigned upto **13.11.2019 till 12.00 Noon** from Supply and installation of 500 KVA Transformer & Installation of 315 KVA Transformer (already existed in NIT Patna) at Brahmaputra Hostel, NIT Patna. The PI(EMU), NIT Patna will give instructions regarding jobs to be carried out as and when requirement arises at the site. The Contractor shall have to carry out the jobs in consultation with PI(EMU) and have to be completed in all respect to the entire satisfaction of institute, such as "Installation of the transformer as per instructions of concerned authority and maintenance schedules indicated in this tender document or recommended by manufacturers of the Transformer as the case may be & attending the faults in the Transformer wherever these go out of order or work under warranty terms & condition". The detailed specification of the works to be provided alongwith terms and conditions may be downloaded from the website of the Institute. Tender received will be opened on the same day **i.e. 13.11.2019 at 03.30 P.M.** in the presence of the authorized representative of Tenderers, if they so desire, at NIT Patna.

Terms & Conditions

1. The tender documents are containing six (6) pages.
2. The rates quoted will be inclusive of all taxes, and these taxes should be shown separately.
3. TDS as applicable on date will be deducted from the bill.
4. NIT Patna reserves the absolute right to accept or reject any or all the tenders on whole or in part without assigning any reason thereof.
5. Articles/Services should be delivered to NIT Patna without any extra charge.
6. Payment: The amount payable for the Routine maintenance in respect of each completed quarterly after production of bill quarterly basis duly certified by concerned authority.
7. NIT Patna reserves the right to reject any articles/services found defective, damaged and or not of the desired quality and specification. Decision of NIT Patna will be final.
8. Any loss or damage caused to the article during the contract period is to be made good by the service provider free of cost within reasonable time.
9. Postal or courier delay will not be considered and the Tender received late will be rejected.
10. No escalation in respect of materials, labour, custom duties, freight etc. will be allowed in any shape.
11. The tenderer must have experience of satisfactory completion of works of Routine Maintenance of at least 5 years in any reputed organization.
12. The bids shall be submitted in two parts, viz., i) Technical bid and iii) Financial bid. Technical bid should contain papers regarding registration of the firm/agency, Minimum turnover of the firm should be Rs 25,00,000/- in last two consecutive financial years, GST Registration, PAN No, 5 years work experience of successfully completion of similar nature of work in any reputed organization. Financial bid should contain maintenance price (annually) against each items/articles including all taxes as duly filled up Annexure-I of the enquiry letter. The above two bids must be signed sealed by the bidder in separate cover duly super-scribed Technical bid and Financial bid respectively and all two sealed covers are to be put in a bigger cover which should also be signed sealed and duly super-scribed. The bidding format is specified in the quotation (Annexure – I). A bidder who submits more than one bid shall be disqualified.

Registrar



NATIONAL INSTITUTE OF TECHNOLOGY PATNA

(An Institution of National Importance under MHRD, Govt. of India)

ASHOK RAJPATH, PATNA-800005 (BIHAR)

BID DOCUMENT

Tender No. NITP/19-20/12

Name of the work: - Supply and installation of 500 KVA Transformer & Installation of 315 KVA Transformer

Instructions to the bidders

- 1.1 Sealed bids are invited on behalf of the Registrar, National Institute of Technology (NIT), Patna – 800005, Bihar, from Sub-station, transformer & other accessories Maintenance Service Provider with proven credential for Routine Maintenance Contract of Sub-station, transformer & other accessories at NIT Patna as detailed in the enquiry letter
- 1.2 The bidders should quote their offer/rates in clear terms without ambiguity.
- 1.3 The rates should be quoted both in figures and words and legibly written without any over-writings. In case of any correction, the same must be attested by the bidder with full signature. However, no over-writing is permissible. Manufacturer's price-list, wherever applicable, should be submitted with the bid.
- 1.4 In case of any discrepancy between the rates in figures and that in words, the rate in words will be accepted as correct.
- 1.5 The last date for receipt of the bid is marked in the enquiry. In case the above date is declared a holiday for NIT Patna, then the bids will be received up to the given time on the next working day. Bids received after the deadline of receipt of bid as indicated in notice shall not be taken in to consideration.
- 1.6 The bids may be sent by registered post/speed post/courier service/by hand so as to reach the Registrar, NIT Patna before/on the last date of receipt.
- 1.7 The bids shall be submitted in two parts, viz., i) Technical bid and ii) Financial bid.

Technical bid should contain papers regarding registration of the firm/agency; minimum turnover of the firm should be Rs. 25,00,000/- in last two consecutive financial years. GST Registration, PAN No, Work Experience of 5 years and completion certificate of similar type of work like Routine maintenance.

Financial bid should contain duly filled up Annexure I of the enquiry. The above two bids must be signed sealed by the bidder in separate cover duly super-scribed Technical bid and Financial bid respectively and all two sealed covers are to be put in a bigger cover which should also be signed sealed and duly super-scribed. The bidding format is specified in the quotation (Annexure – I). A bidder who submits more than one bid shall be disqualified.

- 1.9 The cover containing the bid must be signed sealed and super-scribed "Supply and installation of 500 KVA Transformer & Installation of 315 KVA Transformer at NIT Patna vide Tender No. NITP/19-20/12".
- 1.10 The bids shall be opened at NIT Patna on the date and time given in the enquiry letter. The bidders may send their authorized representative to attend the bid opening, if they so desire. In

the event of the above bid opening date being declared holiday for the NIT Patna, the bids will be opened at the given time and place on the next working day.

1.11 The bidder has to sign in full at all pages of the bidding document.

1. Eligibility Criteria

The firm should have to submit the following documents in the technical bid in folder respectively:-

1. The applicant has successfully completed following works during last five years with Central/State Government Organization/ Central Autonomous Body/ Public Sector Undertaking/corporate Offices/Hospitals/Educational institute.
2. Experience of having successfully completed similar nature of works during last 05 years ending last day of month previous to the one in which quotations are invited should be either of the following:-
 - (a) One *similar completed work costing not less than the amount equal to 80% of the estimated cost.
OR
 - (b) Two *similar completed works costing not less than the amount equal to 60% of the estimated cost.
OR
 - (c) Three *similar completed works costing not less than the amount equal to 40% of the estimated cost.

* "Similar work" shall mean SITC Of 500 KVA Transformer units during last five years ending on last date of the month previous to the one in which applications are invited.

2. The Tenderer should be an Original Equipment Manufacturer (OEM) or authorized dealer/representative, service partner for providing service & maintenance for the Original Equipment or have successfully completed the similar nature of work at least for 05 (five) years with the Original Equipment. Should be authorized dealer of OEM and submit letter from the OEM that they will supply spare part to vendors upon selection for the subject work during the currency of contract and will not withdraw/stop supply of spare under any circumstances. Tenderer should be an Original Equipment Manufacturer (OEM) or authorized dealer/representative and necessary certificate shall be enclosed with technical bid documents.
3. Completion certificate from Client along with copy of Contract Agreement/ award letter/ Work Orders must be submitted by the bidder.

Annexure – I**Tender No. NITP/19-20/12****Financial Bid**

S.No	Item Description	Qty.	Unit	Rate	Amount	Remarks
1	Supply of 500 KVA ,11000/433V, 3 Phase outdoor Type Copper Wound, Oil Cooled Distribution Transformer along with all standard fitting & Fast Filling Oil as per 2026 Connection HV/LV-Delta Star Vector Group-DY11, Frequency-50Hz, Temperature Rise oil-45-50 Degree Celsius, Cooling-ONAN Tap Switch off Load Impedence-4.25%(+/-) standard company make like-Crompton Greaves , Kirloshker, Schneider	1	No.			
2	Dismantling of 500 KVA Distribution Transformer from existing pole mounted structure & storage same in existing campus as per direction of Engineer In charge	2	No.			
3	Shifting of 315 KVA Distribution transformer from NIT Campus(Electrical Substation) to Brahmaputra Campus	1	No.			
4	Filtration of Transformer oil in existing 315 KVA Distribution Transformer if required as per BDV of Transformer oil and as per direction of PI(EMU)	560	Litres			
5	Installation of 315 KVA Distribution Transformer above the PCC Mounted Structure including all types of accessories	1	No.			
6	Installation, Testing & Commissioning of 500 KVA Distribution transformer on Existing Structure	1	No.			
7	Earthing with copper earth plate 600 mm x 600 mm x 3 mm thick including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe of 2.7 meter long etc. with xharcola/coke and salt as required.	2	No.			
8	Providing and fixing 25 mm x 5 mm copper strip in 40 mm dia G.I. Pipe from earth electrode including connection with brassnut, bolt, spring, washer excavation and refilling etc. as required.	30	Meters			
9	Top-up of transformer Oil if required	100	Litres			
		Total Amount In Rupees				
		GST				
		Total Amount In Rupees				

Signature of Tenderer

Technical Specification for SITC of 500 KVA Transformer:-

Requirements regarding supply, installation, testing, commissioning and handing over of transformers required for the PCC Structure. Conventionally oil cooled transformers were being used for Brahmputra Hostel at NIT Patna.

The oil filled transformers shall comply with the following Indian Standards as amended up to date:-

- (i) IS 2026 - Part I to V - power transformers.
- (ii) IS 335 - Transformer oil.
- (iii) IS 10028 (Part II & III) - Installation and Maintenance of Transformers.
- (iv) IS 2099 - Bushings.
- (v) IS 2705 - Current Transformers.
- (vi) IS 6600 - Guide for loading of oil immersed transformers
- (vii) Insulation oil shall conform to IS 335. Transformer oil to be supplied with initial fill of filtered oil.
- (viii) The transformer shall be outdoor type as specified. Unless otherwise specified the transformer in addition shall have thermal and dynamic ability to withstand external short-circuit as per clause 9 of IS 2026 (Part I) : 1977.
- (ix) Tap changing device shall be provided on H.V side, circuit type, externally hand operated with necessary indications for tap position and locking arrangement at any of the tapping positions. It shall be designed for bi-directional operation and shall be of self-positioning type. Tap changing device shall normally be off load type.
- (x) The transformer shall be suitable for a voltage ratio of 11 KV/433 V.
- (xi) The winding connections shall conform to vector group DY11
- (xii) The transformer shall be oil immersed natural air-cooled type (ONAN)
- (xiii) The transformer shall be a single tank type with termination on bushings or cable end box as specified both on HV and LV side. The LV side shall be suitable to receive bus bar trunking or LV cable inter-connection suitable for full load current of the transformer.
- (xiv) Explosion vent or pressure relief device shall be provided of sufficient size for rapid release of any pressure that may be generated within the tank and which might result in damage to the equipment. The device shall operate at a static pressure less than the hydraulic test pressure for transformer tank. Means shall be provided to prevent the ingress of moisture and of such a design to prevent gas accumulation.
- (xv) The following plates shall be fixed to Transformer in a visible position.
 - (a) A rating plate of weather proof material bearing the data specified in the appropriate clauses of IS 2026:1977.
 - (b) A diagram plate showing the internal connection and also the voltage vector relationship of the several windings in accordance with IS 2026:1977 and a plan view of the transformer giving the correct physical relationship of the terminals
- (xvi) In addition to tests at manufacturer's premises, all relevant pre-commissioning checks and tests conforming to IS code of practice No. 10028 (Part II & III) shall be done before energised.
- (xvi) The following tests are to be particularly done before cable jointing or connecting up the Bus bar trunking:
 - (a) Insulation test between HV to earth and HV to LV with 5000 volts Megger.

- (b) Insulation test between LV to earth with 500 volts Megger.
- (c) Di-electric strength Test on oil. All test results are to be recorded and reports should be submitted to the department.
- (xvii) The transformer shall be installed in accordance with IS 10028-Code of practice for Installation and maintenance of transformer. Necessary support channels shall be grouted in the flooring.
- (xviii) The transformer shall be moved to its location and shall be correctly positioned. Transformer wheels shall be either locked or provided with wheel stoppers. Wiring of devices shall be carried out as per drawings;
- (xix) Earthing of neutral and body of the transformer shall be done in accordance with section (7) of these Specification.
- (xx) All devices shall be checked for satisfactory operation.
- (xxi) All tests specified in these specifications shall be carried out by the contractor in the presence of inspecting officer/ consignee free of cost.

Registrar

#.....End of Document.....#