



Office of the Director
INDIRA GANDHI INSTITUTE OF MEDICAL SCIENCES,

SHEIKHPURA, PATNA - 800 014 (Bihar, India)

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Re-(E-Tender Notice No: IGIMS / EC/ EW/ 02 / 2023-24)

Memo No. 828 / EC/EW/2024

Date 09/02/24

TENDER NOTIFICATION

Rates of **Non-Schedule items** in two bid systems (Technical and Price Bid) are invited through e-tendering process from eligible and experienced firms registered under, CPWD, BCD, Energy Department, Railway, autonomous bodies, PSUs or in any government organization under which similar nature of works are carried out. Intending bidders must be registered with e-procurement cell on www.eproc2.bihar.gov.in. After registration bidders will get user ID, password and digital signature which will provide an opportunity and eligibility to take part in e-tendering process.

S I N O	Name of work	Estimated cost ₹	Tender Processing fee ₹	Cost of blank tender /BOQ ₹	Earnest Money Deposit ₹	Completion period of the work
1	Comprehensive annual maintenance contract of 33 & 11 KV equipments at 33KV Substation with one no. 3.15 MVA, 33/11KV and two no.s 1000 KVA, 11/0.433KVA Transformers, 33& 11 KV VCBs, ACBs, Main LT panels cum AMF panels, rising mains, & MCCBS, HT/LT cables all other electrical installations etc. all inclusive at IGIMS, Patna	-	As per generated by www.eproc2.bihar.gov.in)	Rs. 5,000.00	Rs.1,00,000.00	36 months
Date & Time for obtaining BOQ (Only on www.eproc2.bihar.gov.in)			12/02/2024 to 03/03/2024 up to 03:00 PM			
Last Date & Time for uploading of complete tender Document (on www.eproc2.bihar.gov.in)			04/03/2024 up to 03:00 PM			
Last Date & Time for submission of complete tender Document Hard copy at Director's Office IGIMS through Regd. /speed post/courier.			06/03/2024 up to 3:00 PM			
Date & Place of opening of Tender (Technical bid only on www.eproc2.bihar.gov.in)			Conference Room IGIMS, Patna 07/03/2024 at 3:00 PM			
Date & Place of Opening of Tender (Price bid only on www.eproc2.bihar.gov.in)			Date of opening of Price bid of Technically viable tender shall be intimated only through www.eproc2.bihar.gov.in and on Institute web site www.igims.org			

Details of the tender can be seen and downloaded from Institute website: www.igims.org and www.eproc2.bihar.gov.in. Undersigned reserve the right to accept/reject any or all tenders without assigning any reason. Prospective bidders are advised to regularly visit www.igims.org and www.eproc2.bihar.gov.in for Corrigendum/Amendments etc. if any will be notified on this portal only and no separate advertisement will be made.

Particulars in brief:

1. Authority to sanction the tender: Director, IGIMS, Sheikhpura, Patna-8000014.
2. **Any Contractor with valid** registered under, CPWD, BCD, Energy Department, Railway, autonomous bodies, PSUs or in any government organization under which similar nature of works are carried out.
3. Tender shall be carried out only through e-tender procedure at the website (www.eproc2.bihar.gov.in). For any information regarding e-tender procedure, bidder may contact at Help Desk **eProc2.0 Help Desk Address: mjunction services limited RJ Complex, 2nd Floor, Canara Bank Campus, Khajpura, Ashiana Road, P.S. - Shastri Nagar, Patna 800 014, Bihar** and may contact also on **Toll Free Number: 1800 572 6571, Email Id: eproc2support@bihar.gov.in**
4. Bidder desiring to participate in the tender shall have to get registered with e-procurement. Necessary registration forms are available at the website. Bidder will get user id and password by registration. Bidder shall have to obtain DSC (Digital Signature Certificates) also. Bidder shall be able to participate in tender using user id, password, DSC and internet.
5. Bidder shall have to obtain (download) tender papers and submit (upload) their bids at the website www.eproc2.bihar.gov.in
6. Prescribed forms filled up at specified places and necessary documents must (in hard copy) be submitted in office of the Director, IGIMS, Patna on or before the stipulated time by Regd./Speed Post/Courier. Information regarding tender opening or any corrigendum regarding tender shall be available at the website only. In case of non submission of tender documents in hard copy as per eligibility criteria and technical bid sheet the bidder will be non responsive.
7. The cost of tender document is non-refundable and **Earnest money to the tender may be submitted through bank guarantee / internet payment Gateway/ Internet Banking. All EMD should be pledged to Director IGIMS, Patna, as per provisions of EPROC2 of BELTRON. (Related site www.eproc2.bihar.gov.in) Any query regarding this may be clarified with To Free No. 18005726571 or E-mail ID eoroc2suood@bihar.gov.in. All Original document Acknowledgement Of amount deposit towards value of Quantity Bill and original copy of BG (Bank Guarantee) to be deposited as EMD or receipt of amount deposited in online mode (Whichever is applicable) if is Mandatory to submit to the Accounts Section, Indira Gandhi Institute of Medical Sciences, Patna-14 before the scheduled, date and time of opening of technical bid. Otherwise tender will be not valid.**
8. The Bid validity period of 120 days from the date of submission of tender/quotation.
 - (a) Tender/quotation processing fee (Non Refundable as per NIT- is mandatory to be paid through on line mode i.e. Internet payment gateway (credit/debit card, net banking, NEFT/RT GS)
 - (b) Bids along with necessary on line payment must be submitted through e-procurement postal www.eproc2.bihar.gov.in before the date & time specified in the N.I.T. The department does not take any responsibility for the delay/non submission of tender, quotation/ non reconciliation of on line payment caused due to non availability of internet connection, network traffic /holidays or any other reason.
9. Regarding any information of the proposed work, bidder should contact the Superintending Engineer, IGIMS, Patna on any working day, before submission of bid.
10. The undersigned has right to extend or cancel the Bids without declaring any reason.

INSTRUCTION TO TENDERER

1. Bidders has to submit hard copy of tender in sealed envelopes containing all related documents (hard copy) of Technical bid super scribed as "Technical Bid" and Price bid super scribed as "Price Bid" in two separate envelopes, both containing in third envelope super scribed as "Bid for **Re-(E-Tender Notice No: IGIMS /EC/EW/02/2022-23)**. This must reach to the office of the undersigned through Registered post/ Speed post/Courier Services only on or before the last submission day and related to this Tender.
2. IGIMS reserves the right to accept or reject any application without assigning any reason or incurring any liability whatsoever.
3. Bidders are advised to inspect and examine the site and its surroundings and satisfy themselves before submitting their tenders on his own cost, to acquaint themselves from the nature of the work and nature of the ground and sub-soil, the form and nature of the site, the means of access to the site, the volume of work involved, the accommodation they may require and in general shall themselves obtain all necessary information as to risks, contingencies and other circumstances which may influence or affect their work tender. The bidder shall be deemed to have full knowledge of the site, nature of work etc, whether he inspects it or not. It is to note that and no extra charges for complete work either in civil electrical or mechanical work, etc will be paid to the contractor. Any misunderstanding or otherwise shall not be allowed.
4. The work to be awarded by this tender shall be treated as indivisible works contract.
5. IGIMS reserves the right to inspect the works intimated to have been completed by the applicant and reject any prospective application without assigning any reason.
6. The tender for the works shall remain open for acceptance for a period of 120 days from the date of opening of tenders.
7. **Completion period**
The 12 (Twelve) months completion period indicated in the tender documents is for the entire work of planning, designing, supplying, installation, testing, commission and handing over of the entire job to the satisfaction of the Engineer - in - charge or his authorized representative.

8. **CAMC Period**

All the items covered in the BOQ, shall carry minimum twelve months Onsite Comprehensive Warranty, commencing from the date of issue of work order of entire job. The service support has to be provided at IGIMS, Patna-14. The repairing / rectification, if any of the items under CAMC must be done at site only within 4 hours for minor fault and 24 hours for major fault.

9. The bidder should submit along with the technical bid, the detailed plan for providing installation and warranty services at site. Prompt and efficient after sales service must be free within the warranty period.
10. The bidders must have name, signature, date & seal should appear on each page of the Tender documents which are required to be submitted with technical bid in the form of hard copy.
11. The bidder shall be responsible for the delivery of the spare/material/ equipment to site and shall include in his bid all the necessary arrangements for transport, loading and off-loading (including cranes, lifting tackles, wire rope, winches, slings, etc. All the necessary arrangement along with material for installation, testing and commissioning to complete the work will be contractor's responsibility. IGIMS will not accept any claims for additional costs in this regard.
12. If the contractor or his workmen or employees shall break, deface, injure, or destroy any part of a building, road kerb, fence, enclosure, water pipes, cables, drains, electric or telephone posts, wires, etc. The contractor shall make the same good at his own expenses. IGIMS may cause the same to be made good by other workmen and deduct the expenses of which IGIMS decision is final.

13. **Safety**

The successful bidder shall follow the Safety Code and Model Rules for the Protection of health and sanitary arrangement for Workers.

14. The quality of all the materials to be utilized by the successful bidder must be get approved by the Executive Engineer Electrical before utilizing it.
15. The successful bidder has to submit daily progress report of the work to the Executive Engineer Electrical while execution of the work.

16. **Eligibility Criteria:**

- a. Experience certificate of work done not less than 80% value of single work or two work of 50% value or three work of 40% value of estimated amount. Notarize copy of experience certificate/s of similar nature and magnitude of work carried out by the Contractor in Last 5 (Five) Years in any government department only. The last five years will be counted from the month of publish of this Tender.
 - b. Bidder should be having all the necessary documents like eligible experienced contractors / firms registered under CPWD, BCD, Energy Department, PESU, Railway or in any government organization under which similar nature of work has been carried, GST, PAN, Registration, experience etc. Agency must enclose the Self attested photocopies with notarized of these documents.
 - c. Notarized copy of Valid Electrical License in the name of the bidder or its associate, issued from the competent government licensing authority.
17. This Notice Inviting Tender (NIT) shall form a part of the contract document. The successful bidder/contractor, on acceptance of his tender by the Accepting Authority, shall, sign the contract agreement within 15 days from the stipulated date of start of the work.
 18. The contractor shall submit the program for execution of work, get it approved from the Electrical Executive Engineer and strictly adhere the same for the timely completion of the project work before start of the work.
 19. The rate for all items of work shall include the cost of all labour, materials and all other inputs involved in the execution of the complete work and nothing extra on any account will be paid to the agency other than his quoted rates.
 20. While installing or commissioning the contractor or his authorized representative should always be available at the site of work to take instructions from department officers and ensure proper execution of work.
 21. The contractor shall maintain in good condition all work executed till the completion of entire work allotted to the contractor. No payment will be made to the contractor for damages caused by rains, floods or any other natural calamity, whatsoever during the execution of the work. The contractor shall be fully responsible for any damage to the Owners property and to the work for which the payment has been advanced to him under the contract during the execution of the works.
 22. The malba /garbage, removed from the site shall be disposed off by the contractor at any suitable place as directed by the Engineer-In-Charge.
 23. Material must be properly packed against any damage and insured up to the destination. The material should be directly dispatched to the installation site at IGIMS, Patna -14.
 24. All the expenses involved in delivering, unloading etc. the equipment at our site, shall be borne by the Bidder. All aspects of safe delivery shall be the exclusive responsibility of the Bidder. IGIMS will have the right to reject the component/equipment supplied, if it does not comply with the specifications at any point of installation, inspection and testing. EMD is liable to be forfeited and bid is liable to be rejected, if the bidder withdraws or amends impairs or derogates from the tender in any respect within the validity period of the tender.
 25. If any equipment/material or part thereof is lost or rendered defective during transit, the supplier shall immediately arrange for the replacement of damaged equipment or part thereof, as the case may be, at no extra cost.
 26. Rates should be quoted towards Supply at site, Unloading, Erection, Commissioning, Testing and Maintenance of Supplies / Materials given under BOQ, accordingly by giving the basic price, GST, Service Tax, etc. wherever applicable.
 27. Along with slandered deduction, 1% labour cess will be deducted of the completed work as per prevailing Bihar state government rules.

28. IGIMS shall have the sole right to assess the performance of the tendered equipment(s) /components, primary / intermediate and or final, and reject the same without assigning any reason / explanation to the bidder if the performance is found to be unsatisfactory. The decision of IGIMS will be final and binding on the contractor.
29. Price basis should be FOR IGIMS Patna only. The quoted price will be considered firm and no price escalation will be permitted.

30. SECURITY DEPOSIT

- a. The amount of Security Money shall be 10% (Ten Percent) of the work order Value- and deduction/deposit shall be made in following manner.
- b. On acceptance of tender, it will be obligatory to deposit Initial Security money @ 5% of the amount of the approved tender. Five Percent of the accepted/agreed value, which has to be deposited by the contractor through D. D. payable to Director IGIMS Patna and remain with IGIMS till expiry of warranty period. Balance 5% (Five Percent) Security Money shall be deducted from each running account bill of work done under this work order.
31. Security deposit shall be refunded after expiry of warranty period 12 months after the date of issue of work order and satisfactory performance provided there are no defects in work and removed all surplus material, rubbish, scrap from site. The Security deposit shall be totally non-interest Demand Draft, if furnished, shall also not entail any liability towards bank interest, money or bank charges etc. on IGIMS.

32. Payment

The payment will be released on quarterly basis for CAMC after submitting the bill with the copies of logbook registers and service reports. Complaints will be register through verbally, telephonically, social media, written etc. All complaints will be maintained in daily log book by the agency for the breakdown maintenance and service reports for the scope of work mentioned in the Annexur-1 shall be satisfactory carried out which should be duly signed by Engineer in charge.. Security deposit will be released after 12 months from the date of wok order. All the payment shall be made on actual measurement basis.

Compensation for Delayed Services

33. The contractor shall clear the site thoroughly of all scaffolding materials, rubbish and scrap etc. left out of his work and dress the site around the building/site to the satisfaction of the Engineer before the work is considered as complete.
34. The quoted rate shall be complete in all respects including the cost of all materials, labour, tools & plants, machinery etc. IGIMS shall not be supplying any material, labour, plant etc.
35. The contractor has to ensure co-ordination with Institute authorities to maintain the smooth functioning / operation of existing Institute timing without disruption during the execution of work. This may require working rescheduling the normal working hours, working in restricted period etc. Nothing extra shall be payable on this account.
36. In the case of any tender where unit rate of any item/ items appear unrealistic, such tender will be considered as unbalanced and in case the bidder is unable to provide satisfactory explanation such a tender is liable to be disqualified and rejected.
37. On account of security consideration, some restrictions may be imposed by the security staff on the working and movement of men and materials etc. The contractor shall be bound to follow all such restrictions/ instructions and he shall organize his work accordingly. No claim on this account, whatsoever, shall be payable.
38. The contractor shall be responsible for completing the work and for satisfying all terms and conditions of the Contract without any extra payment over his quoted rates unless otherwise specified.
39. The contractor shall quote his rates for various items of work accordingly and no claim whatsoever shall be entertained for any incidental or extra work involved in the execution of the work as per nomenclature of the item and the specifications indicated in the tender documents.

40. Penalty Clause:

Minor rectification 4 hours and major rectification in 24 hours will be allowed. If the awarded contractor exceeds this time limit then a penalty of Rs.1000.00 (Rupees One Thousand only) in case of minor fault and Rs. 2000 (Rupees Two Thousand only) in case of major fault per hour will be deducted from Bills. To avoid these situation contractor are advised to deploy sufficient number of manpower, Plants, Tools, spares or any consumables necessarily in the Institute. If the work is not done by the contractor within the prescribed period the institute will get the work done by the other agency at the risk and cost of the contractor.

41. Technical Bid shall contain:

- a) Non-Refundable cost of required B.O.Q. amounting to the respective Column as per NIT .
- a) Refundable Earnest Money Deposit (EMD) amounting to the respective Column as per NIT .
- (a) Forwarding letter clearly indicating the documents attached therein submitted in the first cover
- (b) (i) Notarize copy of experienced contractors / firms registered under, CPWD, BCD, Energy Department, PESU, Railway or in any government organization under which similar nature of work has been carried.
(ii) Notarize copy of Registered Partnership deed if the tenderer is a partnership firm and power of attorney.
- (c) Notarize copy Permanent Account Number.
- (d) Notarized copy of Annual Turnover certificate issued from the registered Chartered Accountant for last three financial Years.
- (e) Notarize copy of valid GST Certificate with updated challan.
- (f) Notarize copy of Valid Electrical Contractor License/ supervisor license of the suitable class in the name of the bidder or its associate, issued from the competent government licensing authority, for electrical work. In case of

- bidder's associate holds the license, the contractor has to submit an affidavit that all the electrical work will be carried out under supervision of electrical license holder.
- (g) Notarize copy of experience certificate/s of similar nature and magnitude of work carried out by the Contractor in Last 5(Five) Years in any government department only. The last five years will be counted from the month of publish of this Tender.
 - (h) Notarize copy of technical personnel to deploy at site for smooth functioning of maintenance work.
 - (i) Notarize copy of List of Tools, Plants, Machineries, Spares as per Annexure attached 1 & 2 immediately available for use on the respective work.
 - (j) Notarize copy of Character certificate issued from Govt. of Bihar.
 - (k) Notarized copy of P.F and E.S.I registration Certificate with updated challan.
 - (l) The Bidder should submit original Notarized certificate on Rs.1000.00 non-judicial stamp that it has not been blacklisted, debarred, declared non-performer or expelled by Union Govt/State Govt / PSU's during the last 5 years.
 - (m) The Bidder should submit original Notarized certificate on Rs.1000.00 non-judicial stamp that "In case any ambiguity is noticed in the documents submitted at any stage, we shall be entirely responsible and liable for any action as deemed fit under the law" shall be submitted by the Firm/Agency with Technical bid. The absence of Certificate, the Bid is liable to be rejected.

Note:

- 1) Agency must have factory/workshop with in Patna district where spare transformer, VCB and ACB are stored and a factory/workshop visit will be done before opening the technical bid.
- 2) Quoted rate by the agency must include all complete works including deputing of sufficient manpower having experience at working in 11KV/33KV or above substation switchyard and experience of handling HT/LT panels, AMF Panels, Capacitor panels ,control system, supply and installation of spare parts, freight taxes, contractor profit etc. all inclusive. If extra manpower/s is/are required as per the instruction of Executive Engineer (Electrical) then the agency will have to make available depending upon the work loads. **Agency has to comply with the provision of contract Labour (Regulation and Abolition) Act 1970 and contract labour (Regulation and Abolition) central rules 1971 and minimum wages act and rules thereof central and state Governments** The interested agency is advised to visit the site at IGIMS, Patna before quoting their rate, so that to understood the scope of work at site. Accommodations for manpower will be the responsibility of contractor and Institute will not provide these facilities.
- 3) Details of electrical installations at 33KV substation and Scope of work is enclosed at Annexure -1. Plant, tools and spares parts necessarily to be deployed at site by the agency is enclosed at Annexure-2.
- 4) **Similar nature of work means "AMC/ CAMC/ Operation & Maintenance/Repair including Supply, Installation, Testing , Commissioning (SITC) with maintenance of the concerned work.**

Special Terms and Conditions

- a) FR wiring shall be used everywhere inside/outside all panels/equipment/building.
- b) Copper material (strip, plate, etc.) shall have conductivity greater than 95% in all applications.
- c) Each Earth conductor (for earthing) shall not left bare it will be through ISI mark PVC pipes to avoid corrosion & mechanical injuries.
- d) Failure on the part of the client to inspect or to reject after inspection any work, which later proves to be defective, shall not relieve the Contractor from warranties, commitments and obligations, which he undertakes under this contract. The Contractor is solely responsible for the accuracy, quality and completeness of his work and supply.
- e) The Contractor shall include and provide for securely protecting and packing the equipment in accordance with the best established practices so as to protect the contents from damage during transit, storage, exposure to heat, moisture or rain.
Notwithstanding the above, the Contractor shall be entirely responsible for loss, damage or deterioration to the materials occasioned by faulty, defective or insecure packing.
- f) If required obtaining approvals from Electrical Inspector, Local Electricity Supply Authority and all other statutory authorities for the complete scope of work is contractor's responsibility. It is not the intent to specify completely here in all aspects of design constructional and constructional features of equipment and details of the work to be carried out nevertheless, the equipment and work shall conform in all respects to high standards of the engineering, design and workmanship and shall be capable of performing and continuous commercial operation in a manner acceptable to the owner who are interpret the meaning of the specifications and drawing and shall have right to reject or accept any work or material which in his assessment is not complete to meetings requirement of these specifications and or applicable codes and standards mentioned elsewhere in these specifications.

- g) All sundry fittings, accessories, hardware items, foundation bolts, termination lugs for electrical connections as required, and all other sundry items is included in the quoted price. The materials/spares parts, tools and equipment required during the work are not in the BOQ that will have to be provided by the agency
- h) The Contractor shall arrange all the materials and labour required for inspection of equipment or for any testing to be carried out at his works or at site/Factory. Notice for such inspection/presence for testing shall be given to the Electrical Executive Engineer by the Contractor at least fifteen (15) days in advance.
- i) Notwithstanding approval of tests or equipment by the Electrical Executive Engineer the contractor shall be required to perform site tests and prove the correctness of ratings and performance of equipment/machinery and materials supplied and installed by the contractor as per the contract specifications and conditions. Engineer-in-Charge shall reserve the right to reject any equipment/machinery/material should it, on tests after erection, be found not to comply with contract specifications. Engineer-in-Charge shall have full power to order the material or work to be tested by an independent agency at the electrical Contractor's expense in order to prove soundness & adequacy.
- j) All quantities indicated in BOQ are tentative which may vary as per site conditions. Contractor has to verify quantities before procuring the material.
- k) All materials and equipment shall be brand new. On arrival of the materials at site they shall be inspected and tested by the Electrical Executive Engineer and his representative shall at all reasonable time have free access to the site of assembly. They shall have full powers to examine the materials and workmanship of the equipment at the contractor works or at any other place from where the material or equipment is obtained. The contractor shall give every facility to the engineer-in-charge and his representatives and necessary help for inspection, examination & testing of the materials. Original test certificates of the manufacturer's shall be submitted by the Contractor for all major equipment before they are accepted by the Engineer-in-Charge. Acceptance of any material or equipment shall in no way relieve the Contractor of his responsibility for meeting the requirements of the contract.
- l) Electrical work done under this contract shall be executed by licensed men under the supervision of licensed electrical supervisor as per the Indian Electricity act.
- m) Contractor shall obtain the approval of all electrical installation done under this contract from the appropriate competent authority before the installation and commissioning if required as per rules.
- n) All tools and tackles required for handling of equipment and materials at site of works as well as for their assembly, erection, commissioning and also necessary test instruments shall be the responsibility of the contractor.
- o) The Contractor shall provide for the tendered equipment comprehensive warranty for parts as well as labour for a period of 12 months from the date of successful installation & commissioning of the equipment at Purchaser's site at no extra charges against any manufacturing defect/faulty workmanship. In case any defect arises during warranty period, the Contractor should replace/rectify the same at its own cost at site/works.
- p) Bidder will quote and upload their lowest item rate for non-schedule items in the format of BOQ attached rate in the separate envelope of Price bid.
- q) Bidders are advised to inspect all the equipments to be cover under Comprehensive maintenance and if it is required to repair or replacing of any parts, Amount including it is to be quoted in the price bid for the First year with comprehensive maintenance. Rate for the comprehensive maintenance for the 2nd and 3rd year are also to be quoted in the price bid.

ANNEXURES-1
Details of Installation

Sub-station Equipment

- 1) 33 K.V. H.T Panel (VCB)
- 2) 11 K.V. H.T Panel (VCB)
- 3) 33/11 KV, 3.15 MVA Transformers - 1 No.
- 4) 11 KV/433 V, 1000 KVA Transformers - 2 No.s
- 5) Bus ducts. and 1.1 KV aluminum conductor armored power cables from outgoing of LT Panels.
- 6) Main L.T Panels with ACBs, Bus couplers, MCCBS, Interlocking system, bus bars, metering units etc. all complete.
- 7) AMF Panels.
- 8) 33KV Grade Cable (HT Panel to Transformer) & 11 KV Grade Cable (HT Panel to Transformer).
- 9) Any nos. of breakdown complaints must be attended immediately after locking complaints via telephone, e-mail or via any medium and get rectified as earliest.
- 10) Minimum qualification of Supervisor, senior electrician and technician must have III from electrician.
- 11) Annual comprehensive maintenance does not include the operational work, however Schedule of work as given below i.e work to be done on every day, weekly, monthly, three months, six months are all related to maintenance works which are to be done by agency by their deployed supervisor, Senior electrician, Technician.
- 12) **If any such conditions arises in which the equipment (only for transformers, VCBs, ACBs, and HT Cables) are beyond repairable and by replacing any parts it cannot be rectified then in such conditions, Institute will replace the damage equipment (only for transformers, VCBs, ACBs and HT Cables) on its own cost. However till the new equipment get installed, agency will make an alternative arrangement immediately. The periodically maintenance of these equipments**

i.e Filtration of transformer Oil, Testing of BDV, Regular servicing of VCBs, ACBs , Checking conditions of underground cables etc. as and when required as described below are all in the scope of the contractor.

WORK TO BE DONE ON EVERY DAY BASIS.

- 1) To check the electrical and mechanical parts of all the electrical installations e.g. Transformers, Main LT panels, sub panels, AMF Panels Rising Mains, HT and LT Cables, etc. and rectify if found defective.
- 2) Checking the yard at periodic intervals and attend to any unusual observations, defects, sparks, loose contacts, red hot spots and loose bolts and nuts etc., and informing the concerned authority. The records of operational persons shall also be consulted for this purpose.
- 3) To monitor & record the incoming supply parameters, make necessary tap to in changing to maintain the voltage in limits, maintain the power factor at not less than 0.9 lagging by switching the capacitor banks, to keep the maximum demand within prescribed limits etc.
- 4) To check earth pits pertaining to all equipment's, systems and buildings etc. Watering them as and when required and testing their earth resistance etc.
- 5) Recording/Maintain a register for Parameters of all equipment installed at Substation daily with signature.
- 6) Maintain a register for Recording complaints and attending the same with date , time & signature
- 7) Any other work required for the equipment for proper functioning.
- 8) Supply of any spare parts as and when required for making it proper functional.

WORK TO BE DONE ON WEEKLY BASIS

- 1) Attend the equipment complaints which are not sorted out during daily maintenance.
- 2) To cleaning/tightening of loose contacts of transformers, HT and LT panels, AMF panels DBs etc. if so required.
- 3) Change/cleaning of power/control cables etc. as required.
- 4) Record all the major events in the history Register for Transformer, AMF panel, BUS BAR and Circuit breakers etc. for their maintenance, faults and other characteristics shown during their operation.
- 5) Any other work required for the equipment for proper functioning such checking of temperature/moisture time to time.
- 6) To check electrical circuits and rectify faults as and when necessary.
- 7) Supply of any spare parts as and when required for making it proper functional.

WORK TO BE DONE ON QUARTERLY BASIS :

- 1) To check Buchholz relay, Pressure release device, OLTC device, controls, leakage of oils etc. of Transformers and other electrical installation like VCBs as per their OEM schedule and taking necessary action.
- 2) To check the electrical load on each feeders and change over the load on other transformer or feeder periodically.
- 3) Lubricating / Greasing all moving parts of OLTC/VCB/ACB etc. mechanism.
- 4) Checking and recording or IR values of all cables with Megger of suitable range if the concerned feeder cable is idle for more than one month.
- 5) To check the solenoid valve, safety controls Mechanical, Electrical / Electronics and inter – locking of the various equipment like VCBs, ACBs etc.
- 6) Carryout the BDV of Transformer oils for five times and average it, if BDV is less than 45 KV, then carryout the filtration of oil also moisture content should be less than 10 PPM if not found do necessary
- 7) Supply of any spare parts as and when required for making it proper functional.

WORK TO BE DONE ON HALF YEARLY BASIS.

- 1) Maintenance of Transformer, VCB, ACB, SCADA Panels, DG sets and other electrical installation as per their OEM schedule.
- 2) To check and change if required Transformer Oil, Breather (silica gel and oil) and other accessories.
- 8) Carryout the BDV of Transformer oils for five times and average it, if BDV is less than 45 KV, then carryout the filtration of oil also moisture content should be less than 10 PPM if not found do necessary.
- 9) Check the I.R. value of each Current/Potential Transformer and keep record.
- 10) To check earthing resistance, insulation resistance and Breakdown voltage of all equipment including HT and LT cables, Transformer Oil etc. as applicable and Submit the test report/observation as per instruction or CPWD/CPRI norms.
- 11) Supply of any spare parts and spares as required for making it proper functional.

MAJOR MAINTENANCE.

- 1) To test the oil samples of transformers and to give suggestions for dehydration of oil if required.
- 2) Replacing of Buchholz relay, OTI, WTI, breather, HT or LT Bushing etc. if found malfunctioning.
- 3) Servicing of ACB, VCB, all relay, calibration of meters and providing report for the same.
- 4) Replacement of Lightning Arrestor pole.
- 5) Any other electrical works as assigned by the engineer in charge essentially required for keeping the equipment's in good healthy working conditions though not indicated above.
- 6) All the maintenance activities shall be carried out by following all the safety measures using required PPE equipment. The contractor will be only responsible for any mishap due to unsafe act / practice.
- 7) Transformer, AMF panel, BUS BAR and Circuit breakers etc. for their maintenance, faults and other characteristics shown during their operation.
- 8) All the equipment/installation shall always be kept in good and trouble free operating conditions.
- 9) All the required record for break-downs/repairs and maintenance etc. shall be maintained in the form of history books and logbooks etc. as per directions. All the maintenance works shall be carried out in accordance with the manufacturer's specifications and instructions of the engineer in charge.
- 10) Supply of any spare parts as and when required for making it proper functional.

TOOLS & PLANTS

All the general & special tools, tackles i/c chain pulley blocks etc., required for proper maintenance and repairs/break down etc, shall be arranged by the contractor at his own cost and issued to the staff deployed by him for this work.

CONSUMABLES

The rates shall be all inclusive of establishment as well as spares and consumables as per schedule of work. The contractor is required to assess the probable quantity of all types of spares and consumables likely to be required for replacement for keeping all the installations in good working conditions and include the cost of these spares & consumables.

Nothing extra on any account shall be payable above the agreed rate.

Scope of works also includes liaison with SBPDCL regarding 11KV Feeder Power connection to IGIMS Patna so as to ensure uniform power supply.

The work shall be generally carried out as per IS/CPWD/CPRI specifications for Electrical works and as per the norms set by the manufacturers of respective equipments, specifications and specific instructions as may be issued by the IGIMS Patna Engineer in charge.

Brief description of maintenance activities generally carried out as mentioned. All the electrical equipment's/installations shall be always kept in working conditions.

The consumables and spares shall be of best standard quality purchased from the original manufactures or authorized dealers only and shall be shown to the Engineer in-charge of IGIMS Patna before use.

The dismantled/replaced parts whenever replaced shall be property of contractor and have to dispose off as early as possible.

All spares and consumables such insulation tape, washing detergent, cotton for cleaning etc. shall be arranged by the contractor for which nothing extra shall be payable.

Log book and complaint books, all stationery like registers, sheets, markers, pens and pencils etc. will be supplied by the contractor and no extra payment for these shall be made. Log book Performa must be approved by IGIMS Patna Engineer- in-charge or his authorized representative.

To arrange for a well-equipped first-aid box and maintain it in a healthy condition to take care of first aid for any eventualities of their workman at site.

ANNEXURES-2

Plant,Tools,Spares necessarily to be deployed at site by the agency:

1) Hydraulic and Manual crimping tools	- 1 Set each
2) Megger-500 volts and 2000 volts	- 1 No each
3) Digital multi meter	- 1 No
4) Digital Tong tester	- 1 No
5) Earth Resistance Tester	- 1 No
6) Wrench set/plumbing set of wrenches/plier	- 1 set
7) Insulated rubber gloves (11000V)	- 02 Nos.
8) 500 V insulated Pliers	- 03 Nos.
9) Test lamp holders	- 03 Nos.
10) Drilling machine (hammer type) with drill sets	- 01 Set
11) Aluminium Ladder	- 02 No. s
12) Torch & batteries	- 03 No.
13) Blower for cleaning of panels	- 01 No.
14) Cable fault locator (LT)	- 1 No
15) Chain pulley block with Tripod	- 1 set
16) Wire rope	- 50 Mt
17) Jute rope	- 100 M
18) High Voltage Testing unit	- 1 No.
19) Welding Machine	- 01 Set
20) 11kV HT Cable jointing KIT (each size as installed)	- 2 set
21) Cable Cutter	- 1 set
22) Distance relay	- 1 set

Note: Agency is advised to visit the site at IGIMS, Patna before quoting their rate, so that to understood the scope of work at site and also to understand the deployment necessary tools, Plants, Spare parts not mentioned above.

ANNEXURES-3

Price Bid

Rates of **Non-Schedule items** in two bid systems (Technical and Price Bid) are invited through e-tendering process from eligible and experienced firms registered under, CPWD, BCD, Energy Department, Railway, autonomous bodies, PSUs or in any government organization under which similar nature of works are carried out. Intending bidders must be registered with e-procurement cell on www.eproc2.bihar.gov.in. After registration bidders will get user ID, password and digital signature which will provide an opportunity and eligibility to take part in e-tendering process.

Sl No:	Item Descriptions	Unit	Qty	Rate	GST Applicable	Amount
1)	First year Comprehensive annual maintenance contract of 33 & 11 KV equipments at 33KV Substation with one no. 3.15 MVA ,33/11KV and two no.s 1000 KVA, 11/0.433KVA Transformers, 33& 11 KV VCBs, ACBs, Main LT panels cum AMF panels, rising mains, & MCCBS, HT/LT cables all other electrical installations etc. all inclusive at IGIMS , Patna	1	lot			
2)	Second Year Comprehensive annual maintenance contract of 33 & 11 KV equipments at 33KV Substation with one no. 3.15 MVA ,33/11KV and two no.s 1000 KVA, 11/0.433KVA Transformers, 33& 11 KV VCBs, ACBs, Main LT panels cum AMF panels, rising mains, & MCCBS, HT/LT cables all other electrical installations etc. all inclusive at IGIMS , Patna	1	lot			
3)	Third Year Comprehensive annual maintenance contract of 33 & 11 KV equipments at 33KV Substation with one no. 3.15 MVA ,33/11KV and two no.s 1000 KVA, 11/0.433KVA Transformers, 33& 11 KV VCBs, ACBs, Main LT panels cum AMF panels, rising mains, & MCCBS, HT/LT cables all other electrical installations etc. all inclusive at IGIMS , Patna	1	lot			

Note:

Quoted rate by the agency must include all complete works including deputing of sufficient manpower having experience at working in 11KV/33KV or above substation switchyard and experience of handling transformers, HT/LT Panels, AMF Panels, Capacitor panels ,control system, supply and installation of spare parts, freight taxes, contractor profit etc.. all inclusive. The interested agency is advised to visit the site at IGIMS, Patna before quoting their rate, so that to understood the scope of work at site. Accommodations of Supervisor will be the responsibility of contractor and Institute will not provide these facilities.

Details of installations along with Plants , Tools , Spares necessarily to be deployed at site by the agency can be seen at Annexure -1 & Annexue-2.

Re-(E-Tender Notice No: IGIMS / EC/ EW/ 02/ 2022-23)


3.2.24

Director,
I.G.I.M.S. – Patna.