



INSTITUTE OF PHYSICS

*(AN AUTONOMOUS RESEARCH INSTITUTION OF DEPARTMENT OF ATOMIC ENERGY
GOVERNMENT OF INDIA)*

P.O. SAINIK SCHOOL, BHUBANESWAR-751005

TENDER DOCUMENT

(11 pages)

FOR

**“Repair & Maintenance of 750KVA, 33/0.433KV, off load tap
changer, CGL make, Distribution Transformer”**



Institute of Physics

(An autonomous Research Institute of Department of Atomic Energy, Govt. of India)

P:O: Sainik School, Bhubaneswar, Orissa-751005

TENDER CALL NOTICE **FOR ELECTRICAL WORK**

Sealed tenders in two bid system (Technical & Financial bid separately) are invited from the Electrical Contractors with valid electrical contractor license issued by Chief Electrical Inspector, Government of Orissa for the “Repair & Maintenance of 750KVA, 33/0.432KV, off load tap changer, CGL make, Distribution Transformer”. For details log on to www.iopb.res.in.

The estimated cost of the total job is Rs. 2,09,600.00 only.

The sale of tender paper will be from 24.03.2010 to 05.04.2010 up to 12 noon.

The tender papers will be received up to 3PM on 05.04.2010 and Technical Bid will be opened on the same day at 4.30PM.

The authority reserves the right to reject any or all tenders without assigning any reason thereof.

REGISTRAR

TECHNICAL BID

TENDER CALL NOTICE

Sealed tenders are invited by the “Director”, Institute of Physics, Bhubaneswar-751005, Orissa, comprising of technical and financial bid separately, from registered and reputed contractors, with valid Electrical License issued by Electrical Inspector of Government of Orissa for the “Repair & Maintenance of 750KVA, 33/0.433KV, off load tap changer, CGL make, Distribution Transformer”.

Name of the work	Estimated Cost	Cost of the tender paper	EMD required for the work	Time for completion
“Repair & Maintenance of 750KVA, 33/0.433KV, off load tap changer, CGL make, Distribution Transformer”.	Rs. 2,09,600.00 (Rupees Two Lakh Nine Thousand Six Hundred only)	Rs.200.00	Rs.5250.00 (Rupees Five thousand two hundred fifty only)	45 days from the date of issue of work order

The tender documents may be purchased from the office (Accounts Section) on payment of Rs.200.00 (Rupees two hundred only) (non refundable) by cash during the office hours from 10AM to 3 PM on working days only.

Bidders may download the Tender Documents and submit their bids as per the procedure mentioned in the tender document accompanied by a DD of Rs.200.00 (Non refundable) favoring “Institute of Physics” payable at “Bhubaneswar” towards the cost of tender paper along with the DD for EMD and other documents.

The estimated cost of the work is Rs.2,09,600.00 (Rupees two lakh nine thousand six hundred only).

The sale of tender paper will be from 24.03.2010 to 05.04.2010 up to 12 noon.

The tender papers will be received up to 3PM on 05.04.2010 and Technical Bid will be opened on the same day at 4.30PM (in case that day becomes a non-working day tenders (Technical Bid) shall be opened on next working day at the same time). The bidders or their authorized representative may be present at the time of opening the tender (technical bid). The Price bid will be opened on a suitable date after evaluation of the technical bid and the same date will be intimated to the technically successful bidders, who can deputee their representatives to witness the opening of price bid.

The tender paper should accompany the documents as mentioned in item no.1 of Special Instruction to the tenderers at the time of submission of the tender. In absence of any of the documents listed there tender papers will not be entertained.

Address for submission of tender: DIRECTOR, INSTITUTE OF PHYSICS, BHUBANESWAR – 751005, ORISSA.

Tenders should be submitted in sealed envelopes in two parts separately, i.e. “Technical bid” and “Price bid”. Both the parts should be further sealed in an envelope super-scribing Tender no. & name of work i.e. “Repair & Maintenance of 750KVA, 33/0.433KV, off load tap changer, CGL make, Distribution Transformer”, due date for opening, bidder’s name and address. The tender duly filled in & signed on each page, accepting the terms and conditions, may be sent to above mentioned address either by post or hand delivered in tender box kept in the office of the Director, It should not be handed over to any employee of the Institute. No tender shall be accepted later than the time schedule specified above. Institute will not be responsible for delay in transit if sent by post.

- Note: 1) The tenderer is requested to go through the tender documents in detail and visit the work site to make himself conversant regarding the work before filling up the tender paper.
- 3) The bidder should have the experience of having successful completion of similar type work during last three years.
- 2) Director, Institute of Physics reserves the right to reject any or all tenders without assigning any reason thereof.

REGISTRAR

PART - II
SPECIAL INSTRUCTIONS TO TENDERERS

PART-II: SPECIAL INSTRUCTIONS TO TENDERERS:

1. **Introduction:** Sealed tenders are invited on two part basis (i.e. 1. Technical Bid & 2. Price Bid), by the “Director”, Institute of Physics, Bhubaneswar, Orissa for the work of “Repair & Maintenance of 750KVA, 33/ 0.433KV, off load tap changer, CGL make, Distribution Transformer”. The tender paper consists of the following:

TECHNICAL BID

Part-I	-	Tender Notice (Signed with seal on all pages by the bidder)
Part-II	-	Special Instructions to tenderers (Signed with seal on all pages by the bidder)
ANNE XURE-I	-	(Form for the credential of the bidder)
Draft for EMD	-	Draft towards cost of tender paper or the cash payment receipt if purchased from IOP.
Documents	-	Copy of PAN card, VAT clearance certificate, Copy of the Valid Electrical Contractor License
Credentials	-	All documents related to credentials i.e. work orders with schedule of quantities for similar type of work, completion certificates, Registration certificates etc.
Tools/ Infrastructure	-	List of equipments, accessories and infrastructure facilities possessed by the bidder

PRICE BID - Schedule of quantities and rates

2. **Acceptance of Tenders:**

The “Director, Institute of Physics, Bhubaneswar reserves the right to reject any or all tenders without assigning any reasons therefore. The lowest or any tender will not necessarily be accepted. Any tender not supported by the information requested in tender documents or not complying the provisions in the tender is liable to be rejected.

3. **Compliance with specification and tender clarifications:**

Each bid shall deemed to be in full compliance with every clause of the specifications asked, unless exceptions are clearly defined and set forth in a separate sheet.

The tenderer shall note that if any clarifications regarding specifications, conditions of contract, schedule of quantities and scope of work required, he should contact Institute of Physics, Engineer-in-Charge. No claim on account of any ambiguity in any respect will be entertained after issue of work order.

4. **Sub Contractors:**

The contractor shall not subcontract any/ whole part of the work without written consent of the competent authority of Institute of Physics.

5. **PRICES:**

The tenderers shall bid for the works in Indian Rupees for the Items listed in PRICE BID – Schedule of quantities and Rates.

Each tenderer shall submit unit prices and total price (as per schedule of quantities and rates)

The quantities mentioned in this schedule (Price – Bid – Schedule of quantities and Rates) shall be considered approximate only and the unit price entered in the schedule shall apply to the actual quantities measured in the completed work in accordance with the specifications. The prices quoted by the tenderer shall include the full cost of material, labour, equipment, transportation, overheads, insurance, taxes, profit and other costs associated with the completion of the work involved under the items and shall account for the full scope of the work.

Income Tax and Work Contract Tax at the prescribed rate shall be deducted at source from your bill and will be deposited with the concerned authority. Necessary TDS certificate will be issued in your favor. The tenderer's prices shall include all insurance, taxes and duties, all traveling, transportation and accommodation costs of all his staff including supervisory personnel.

6. **Miscellaneous Works:**

In addition to the items of work specifically set out in the form of tender schedule to be performed by the contractor as per the agreement, the contractor shall at the request of Engineer, whose decision in this regard shall be final, perform such works and supply such materials, facilities and services which are contingent to the work covered by the contract or are required for the completion of the works.

7. **Co-ordination of Works:**

The contractor shall plan his works suitably so as to avoid interference with the operations of the existing systems and the work will be carried out with minimum shut down of PDBs to be connected.

8 **Information to be included with the tender:** The tender shall be submitted as mentioned below:

8.1 **PRICE-BID:** All supporting data as required in PRICE-BID i.e. Schedule of Quantities and Rates has to be filled in the space provided in the same and to be submitted in separate sealed envelope as Price Bid. No other document is to be kept inside this envelope and the envelope is to be superscribed as ***“Price Bid for the Repair & Maintenance of 750KVA, 33/0.433KV, off load tap changer, CGL make, Distribution Transformer”***. In this bid the bidder is required to quote his rates/ prices for the works mentioned in the scope of work & technical specifications. The rates/ price should be inclusive of all material cost, labor, services, charges for the plant/ machinery/ tools & tackles required for work, freight, insurance, octroi, Govt. duties, taxes, levies up to IOP site basis. No charges towards quantity variation, escalation, site difficulties, other hidden cost even though they may not have been explicitly mentioned in the scope and schedule of works shall be payable extra or separately. It is mandatory on bidder to quote all items rate as asked for in the BOQ/ Price schedule. Failure to adhere to this condition will lead to rejection of tender. The bidders should quote unconditional rates, neatly written without any overwriting/ white fluid/ erasing and duly signed & stamped at all pages.

8.2 **TECHNICAL-BID:** In this bid, the bidder should submit the documents as mentioned above in item no.1. No deviations in respect of tender conditions are acceptable. **The bidder is required to attach entire tender conditions including the annexure (excluding Price Bid) & Drawings duly signed & stamped on each page as a token of acceptance to the tender conditions with this bid.** This envelope is to be superscribed as ***“Technical Bid for the Repair & Maintenance of 750KVA, 33/0.433KV, off load tap changer, CGL make, Distribution Transformer”***. The following specific conditions/ documents are essential for pre-qualification:

- 8.2.1 The full tender document duly signed by the bidder on each page with seal has to be submitted as a token of acceptance of the terms and conditions mentioned therein.
- 8.2.2 Receipt of the cash deposit for the cost of tender paper/ DD towards the same
- 8.2.3 The tenders shall contain sufficient information to permit a detailed comparison and evaluation of the tenders.
- 8.2.4 Copies of work orders of the similar works executed earlier shall be enclosed.
- 8.2.5 Schedule of similar works executed earlier shall be submitted (Annexure-V).
- 8.2.6 Details of any deviations from the specifications.

- 8.2.7 Copy of TIN under VAT & PAN under IT act.
- 8.2.8 Copy of the Valid Electrical Contractor License.
- 8.2.9 Draft for EMD

Both the parts (Technical Bid & Price Bid) should be further sealed in an envelope superscribing Tender no. & name of work (Repair & Maintenance of 750KVA, 33/0.433KV, off load tap changer, CGL make, Distribution Transformer”), due date for opening, bidder’s name and address. The tender duly filled in & signed on each page, accepting the terms and conditions may be sent to DIRECTOR, INSTITUTE OF PHYSICS, BHUBANESWAR – 751005, ORISSA, either by post or hand delivered in tender box kept in the office of the Director, It should not be handed over to any employee of the Institute. No tender shall be accepted later than the time schedule specified above. Institute will not be responsible for delay in transit if sent by post.

09 **Terms and Payment:** 90% of the total work order value will be paid after supply, installation, testing and successful commissioning of all equipments. Balance 10% will be retained as security deposit, which will be refunded after successful completion of defect liability period (Guarantee period).

10 **Penalty for the delay in completion:** If the contractor fails to execute and complete the work within the time specified i.e. 3 months from the date of work order or within the period of extension granted, except is so far as the delay is on the IOP account, the contractor shall accept reduction in the total amount payable to him by the IOP at the rate of **0.5% (Half percent) per week** of the contract value for the actual pay occasioned and until the work shall have been completed under the contract. Subject to maximum deduction of 5% of the total value of the work.

11 **Proof of Ability:** The contractor shall submit the details of similar works executed by him in the form given in the Annexure-V as a proof of his ability to carry out the specified work.

12 **Increase or Decrease in Scope of Work:** The contractor shall carry out extra work at their quoted prices in their tender document for respective items of work so long as the entire total cost of the work executed is within the limits of $\pm 25\%$ of the contract value. **The quantities mentioned in schedule of quantities are indicative only and actual requirement may vary in field.**

13 **Guarantee:** All supplied materials including hardware’s and work executed by the contractor shall be guaranteed for one year from the date of commissioning.

14. **VALIDITY:** The tenders submitted should remain valid for acceptance for a period of 180 days from the date set for opening of the tender. The tenderer shall not be entitled during the said period of validity to revoke or cancel his tender or vary the tender given or any item thereof. In case of tenderer revoking or canceling his tender, varying any terms in regard thereof, the earnest money paid by the tenderer along with the tender shall be forfeited by the Institute of Physics.

15 **Security Deposit:** 10% of contract value will be deducted as security deposit and will be released after one year from the date of completion of work (Defect liability period). No interest shall be paid on EMD/ Security deposit or the amount to the contractor under contract. However the amount towards security deposit can be released against submission of Bank Guarantee for the equivalent amount valid for the defect liability period by the contractor issued by a Nationalized/ Schedule Bank.

16 **EMD:** An earnest money of Rs.5250.00 (Rupees Five thousand two hundred fifty only) has to be deposited along with the technical bid. The EMD shall be only in the form of Bank Draft in favor of Institute of Physics, payable at Bhubaneswar. No Cheques/ cash shall be accepted. EMD

of technically disqualified bidders will be returned within 30 days from the date of evaluation of the technical bids. EMD of successful bidder will be retained by IOP during pendency of the contract & shall be adjusted towards security deposit. No interest shall be given on such EMD

18. **Escalation:** No escalation over and above items' rates quoted by the bidder shall be paid during the execution of contract.

19. **Rights reserved by IOP:** Institute of Physics reserves the right to reject any or all the tenders in full or in part without assigning any reasons whatsoever, and the decision of the Institute in this regard will be binding on all the bidders. Tenders not complying any of the provisions stated in this tender document are liable to be rejected. **Director, IOP reserves the right to accept or reject any tender, either in full or part, without assigning any reasons thereof and does not bind himself to accept the lowest tender.**

20. **Entry and exit of materials from IOP campus:** Materials belonging to the contractor whether consumable or non consumable should be brought inside the IOP campus with proper entry at the main gate and any material to be taken out with proper gate pass issued by the Institute.

21. **Termination of the contract:** The Director, IOP reserves the right to terminate the contract on account of poor workmanship, failure to mobilize site, non-compliance of set norms/specifications for the works, delay in progress of work, violation of any contract provisions by the contractor. In such cases the contractor is liable to pay liquidated damages amounting to 10% of the total work value.

22. **Communication Address of Bidder:** Bidder should mention their detailed contact address, telephone & Fax number, E-mail address, name of authorized contact person for this tender, mobile phone number etc. in their letter head pad and same is to be attached along with the technical bid.

23. **Dispute:** Any dispute arising out of this contract will be subjected to jurisdiction of Bhubaneswar.

24. **Statutory condition:** Tender once submitted will remain with the Institute and will never be returned to the bidders. The bids will be IOP property.

Signature of the tenderer with seal

ANNEXURE-I

WORKS COMPLETED AND IN PROGRESS DURING THE LAST 3 YEARS (INCLUDING ALL WORKS AWARDED)

{ADD ADDITIONAL SHEETS, IF NECESSARY}

Sl. No.	Name of Work	Date of start	<u>Date of Completion</u>		Reason for delay & compensation levied if any	Tendered Cost	Net Amount received	Name Designation & Complete address of the Authority for whom the Work was done
			<i>Stipulated</i>	<i>Actual</i>				

Signature of the tenderer with seal

PRICE BID (3 pages)

(THIS IS THE ONLY DOCUMENT TO BE SUBMITTED IN PRICE BID ENVELOPE OF BID)

Name of the work: Repair of 750KVA, 33/0.433KV, CGL make Transformer with indoor type HT bushing, & associated works at IOP, Bhubaneswar.

Sl. No.	Description Qty		Rate			Unit	Amount
			Supply	Install	Total		
1	Repair, oil filtration, painting, cleaning of winding & core, etc of the Transformer of 750KVA, 33/0.433KV, indoor type HT bushing, CGL make, Serial no.V7524, Year of manufacture - 1990						
1.1	<p>Supply & Replacement of complete gasket set including HT & LT oil seals provided in the Transformer of 750KVA, 33/0.433KV, indoor type HT bushing, CGL make, with new gasket set made out of RC-70, Neoprene Cork/ Rubber material exclusively suitable for oil immersed, high capacity distribution transformer. The scope of this job includes the following:</p> <ol style="list-style-type: none"> 1. Insulation resistance of the HT and LT winding with ground/body/ core & between the phases of the transformer is to be noted before starting any type of work on the transformer with the help of a 5 KV megger (to be arranged by the contractor). 2. Removal of the transformer oil and storing the same in suitable drums (to be supplied by the contractor on returnable basis). 3. Dismantling of the transformer and to disconnect the HT & LT cables, where ever required for removal of the old gasket and old oil seals. 4. To supply & provide the suitable new gasket set & oil seals as per requirement. 5. Re-Assembling/Fixing back the complete transformer ready to use, after replacement of the gasket set/ oil seals. 6. Transformer is to be filled back with transformer oil. 7. Transformer is to be tested for oil leakage from all joints. 8. Insulation resistance of the HT and LT winding with ground/body/ core of the transformer is to be noted after completion of all the above points, with the help of a 5KV/ 1KV megger (to be arranged by the contractor). 9. Supply & Replacement of hardware's wherever required during the 	01				job	

	<p>progress of above mentioned activities.</p> <p>10. All type of tools & tackles, manpower, use of overhead chain pulley/ crane and other accessories required for accomplishment of the above mentioned job is under the scope of this job and no extra cost will be paid for the same.</p>						
1.2	<p>Lifting the core & winding assembly from main tank, cleaning with hot oil, cleaning the main tank, removing the sludge formed inside tank again box-up & tanking including engineering & supervision. This job is to be carried out with proper planning and co-ordination with the job as mentioned in item no.1.1.</p> <p>All type of tools & tackles, manpower, use of overhead chain pulley/ crane and other accessories required for accomplishment of this job is under the scope of this job and no extra cost will be paid for the same.</p>	01					job
1.3	<p>Dismantling & Reinstallation of the temporary shed over the Transformer:</p> <p>The scope of this job includes the following points:</p> <ol style="list-style-type: none"> 1. The temporary corrugated tin shed provided over the transformer is to be dismantled for easy access to the transformer for execution of the jobs required for repair of transformer. During dismantling all care is to be taken to safeguard all the parts of structure, which will be reinstalled back after the repair work. 2. The complete room of the transformer is to be covered with tarpaulin (returnable basis) during progress of the repair work to prohibit the moisture ingress in the transformer oil, core & winding. If required the necessary supports for spreading the tarpaulin is to be provided. At least 4 numbers of Halogen-1000W lights with wires (returnable basis) for connection from the nearest LT panel room are to be provided inside the transformer room for lighting and keeping the surrounding warm. 3. After completion of the repair work of the transformer, the temporary shed over the transformer is to be reinstalled all as per the earlier structure before dismantling. 	01					job
1.4	<p>Filtration of transformer oil of above referred transformer at site with high vacuum machine including testing of breakdown value and acidity of oil and topping of oil after filtration, all as per relevant IS specifications and as per instructions of EIC</p>	01					job
1.5	<p>Supply of new transformer oil (EHT grade) as per IS: 335- 1972 in non returnable drums.</p>	1300					litre
1.6	<p>Supply & installation of new Bucchholz relay as a replacement of the existing Bucchholz relay (if required)</p>	01					set

1.7	Supply & installation of new HV bushing complete as a replacement of existing bushing (if required).	01				set		
1.8	Supply & installation of new LV bushing complete as a replacement of existing bushing (if required).	01				set		
1.9	Supply & installation of Silica Gel Breather set as a replacement of existing Breather (if required).	01				set		
1.10	<p>Painting of the transformer:</p> <p>The scope of this job includes the following points:</p> <ol style="list-style-type: none"> 1. The complete body of the transformer is to be cleaned free from oil and dirt with the help of mopping cloth and cleaning agents if required. 2. All roughness and oxidized points are to be cleaned with the help of suitable emery cloths with a precaution and without causing any damage to the body of the transformer. 3. Two coats of red oxide/ primer is to be applied through fine nozzle, compressed air, spray painting machine. 4. Two coats of suitable synthetic enamel paint is to be applied through fine nozzle, compressed air, spray painting machine 	01				job		
1.11	<p>Supply & providing the HT insulation booting/ HT tape of 33KV grade over the HV terminals (if required). The HT booting should be preferably of Raychem make.</p> <p>Supply & Complete sealing of the HV terminal/ cable end box joints by applying suitable sealing agent on all joints (if required).</p>	01				job		
1.12	Supply installation of GI Nuts and Bolts with washers, to replace the worn out nuts & bolts of the transformer.	20				kg		
1.13	Supply & installation of new conservator tank viewing glass as replacement of the existing viewing glass.	01				No.		
	Total							