



# राष्ट्रीय विज्ञान शिक्षा एवं अनुसंधान संस्थान, भुवनेश्वर

(परमाणु उर्जा विभाग, भारत सरकार का एक स्वयं शासित संस्थान)

**NATIONAL INSTITUTE OF SCIENCE EDUCATION AND RESEARCH, BHUBANESWAR**

(AN AUTONOMOUS INSTITUTE UNDER DEPT. OF ATOMIC ENERGY, GOVT. OF INDIA)

**Name of Work: -“Provision of chemical maintenance free earth pit for transformers and DG set neutrals in different LCS inside NISER campus Jatni”**

**NIT No. & Date: - NISER/IWD-ELECT /LCS EARTHING/2018-19 /034**

**Dtd: 21.02.2019**

**Estimated cost of tender: Rs 3,48,028.00**

**Earnest Money : Rs. 6,961.00**

**Completion time: - 30 (Thirty) days**

**Last date of submission of E- tender: 07.03.2019 up to 11.30 AM**

**Opening of (Technical & Financial) Bid : 07.03.2019 at 3.00 P.M**

This tender document contains 11 (Including front page) pages.



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**TENDER DOCUMENTS**

File No. NISER/IWD-ELECT /LCS EARTHING/2018-19 /034

Date: 21.02.2019

Name of work: -“Provision of chemical maintenance free earth pit for transformers and DG set neutrals in different LCS inside NISER campus Jatni”

**I N D E X**

Sl. No.	Particulars	Page No.	Remarks
1.	Notice Inviting Tender	1- 03	
2.	Standard E-Tender terms and condition	04	
3.	Detail Tender notice	05	
4.	General terms and conditions	06-08	
5.	Technical specification	09-10	
5.	Schedule of Quantity	11	

## NOTICE INVITING TENDER

**NIT No. NISER/IWD-ELECT /LCS EARTHING/2018-19 /034**

**Date: 21.02.2019**

Director, NISER invites E- tender in single bid (Comprising Technical Bid and Financial Bid) for the following work:-

Name of the work: “Provision of chemical maintenance free earth pit for transformers and DG set neutrals in different LCS inside NISER campus Jatni”.

<b>Estimated Cost</b>	<b>:</b>	<b>Rs 3,48,028.00</b>
<b>Earnest Money</b>	<b>:</b>	<b>Rs.6,961.00</b>
<b>Period of Completion</b>	<b>:</b>	<b>30 (THIRTY) days</b>
<b>Last date of submission of E- tender</b>	<b>:</b>	<b>07.03.2019 up to 11.30 AM</b>
<b>Opening of Technical Bids</b>	<b>:</b>	<b>07.03.2019 at 3.00 P.M</b>

Tender can be downloaded and bided from website address: [www.tenderwizard.com/NISER](http://www.tenderwizard.com/NISER).

Tender documents for viewing only is also available in NISER web-site address: [www.niser.ac.in](http://www.niser.ac.in).

**REGISTRAR  
NISER**

## **Standard e-Tender Terms & Conditions**

1. The details of tender notification can be downloaded from [www.tenderwizard.com/NISER](http://www.tenderwizard.com/NISER) under "Tender Free View" link.
2. Vendors should obtain the USER ID and PASSWORD from [www.tenderwizard.com/NISER](http://www.tenderwizard.com/NISER) by clicking on "REGISTER ME" link in the homepage.
3. The Vendor registration fee has to be paid to ITI Ltd for Rs. 1180/- including GST. Using the e-payment link provided at the time of registration, and the mode of payments are Credit Card, Debit Card and Internet Banking. Vendor Registration is Valid for 1year.
4. For further details on e-Tender participation, please contact ITI Help desk on
  - Telephone: 080-49352000/9686115318
  - Email: [harishkumar.kb@etenderwizard.com](mailto:harishkumar.kb@etenderwizard.com), [ambasa@etenderwizard.com](mailto:ambasa@etenderwizard.com).
5. Tenders should be submitted only through e-Tender portal and obtain the Tender Acknowledgement copy as a proof of successful submission.



**राष्ट्रीय विज्ञान शिक्षा एवं अनुसंधान संस्थान, भुवनेश्वर**  
(परमाणु उर्जा विभाग, भारत सरकार का एक स्वयं शासित संस्थान)  
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**Tender Notice**

Director of NISER hereby invites E- tender in a single bid (Comprising Technical Bid and Financial Bid) for the following work from experienced and capable agencies registered in CPWD/ MES/ Railways/ State PWDs/ MSME and/or those who have worked for DAE or its Organizations or Govt. /Semi Government organizations/ reputed private organizations and have successfully carried out a minimum of **one/two/three similar works** of 80%/60%/40% respectively of the estimated cost or above, as indicated in the prescribed format of the E-Tender portal in last seven years. The eligible contractors may submit their bid along with supporting documents of fulfilling the above conditions otherwise the bid bear the risk of not being considered.

Name of Work	Estimated Cost ₹	Earnest Money ₹	Duration of work
<b>Name of the work:</b> - Provision of chemical maintenance free earth pit for transformers and DG set neutrals in different LCS inside NISER campus Jatni . <b>NISER/IWD-ELECT /LCS EARTHING/2018-19 /034 Date: 21.02.2019</b>	Rs 3, 48,028.00	Rs. 6,961.00	30 (Thirty) days

The Bidders are requested to give detailed tender in E-Tender portal in the prescribed forms in single Bid (Comprising Technical Bid and Financial Bid)

**Tender process & award of contract.**

The technical bid will be evaluated to shortlist the eligible bidders. The financial bid of only the short listed bidders shall be considered for further processing. The bidders, whose technical offer is found acceptable and meeting the eligibility requirements as specified in this tender will be eligible for the financial bid evaluation.

The earnest money deposit as indicated against the work should be send **by post or by hand** to “SO(D)-ELECTRICAL,INSTITUTE WORKS DEPARTMENT, NISER, Jatni campus, PO-Bhimpur-Padanpur, Via-Jatni, District- Khurda, PIN- 752050” so that it reaches on or before the opening of the technical bid for e-tender system, in the form of **Account Payee Bank Draft** payable on any branch of Nationalized/Schedule Bank at Bhubaneswar/ Jatni in favour of **Director, NISER payable at Bhubaneswar/Jatni** in a sealed envelope. All tenders submitted without requisite amount of earnest money shall be rejected and their technical and financial bid shall not be opened. No interest is payable on EMD. Director of NISER, reserves the right to accept/reject any/all tenders without assigning any reason whatsoever. Part or incomplete tenders will be summarily rejected. No further correspondences whatsoever shall be entertained in this regard. Canvassing in any manner shall result in rejection of the tender.

Any dispute arising out of this shall subject to Bhubaneswar jurisdiction only.

**REGISTRAR  
NISER**

## General Terms and Conditions:

1. Director of NISER hereby invites e-Tender in a single bid system (Comprising Technical Bid and Financial Bid) for the following work from experienced and capable agencies registered in CPWD/ MES/ Railways/ State PWDs/ MSME and/or those who have worked for DAE or its Organizations or Govt. /Semi Government organizations/ reputed private organizations and have successfully carried out a minimum of one/two/three similar works of 80%/60%/40% respectively of the estimated cost or above, as indicated in the prescribed format of the e-Tender portal in the last seven years. The eligible contractors may submit their bid along with supporting documents of fulfilling the above conditions otherwise the bid bear the risk of not being considered.

In support of fulfilling all the essential conditions mentioned in the previous Para the contractor shall submit the details through e-Tender in the prescribed format the past details, mentioning the name of work, estimated cost, date of commencement as per agreement & actual date of completion as per agreement along with schedule of quantities executed and any penalty levied due to delay in executing the work from an officer not below the rank of Executive Engineer.

2. The estimated cost of the work is ₹ **Rs 3, 48,028.00/- (Rupees Three Lakh Forty Eight Thousand Twenty Eight only.)**
3. Period for completion of the work will be **30 (Thirty Days)** and the date of commencement shall be reckoned from the tenth day of issue of award letter.
4. The earnest money deposit as indicated against the work should be send by **post or by hand** to **“SO(D)-ELECTRICAL, INSTITUTE WORKS DEPARTMENT, NISER, Jatni Campus, PO-Bhimpur-Padanpur, Via-Jatni, District- Khurda, PIN- 752050”** so that it reaches on or before the opening of the technical bid for e-tender system in the form of Account Payee **Bank Draft** payable on any branch of Nationalized/Schedule Bank at Bhubaneswar/ Jatni in favour of **“Director, NISER payable at Bhubaneswar/Jatni”** in a sealed envelope. All tenders submitted without requisite amount of earnest money shall be rejected and their technical and financial bid shall not be opened. No interest is payable on EMD. The EMD will be returned to the bidders(s)/Agents whose offer is not accepted by NISER within one month from the date of the placing of the final order(s) on the selected bidder(s). In case of the bidder(s) whose offer is accepted the EMD will be returned on submission of Performance Bank Guarantee (if applicable). However, if the return of EMD is delayed for any reason, no interest /penalty shall be payable to the bidders.
5. The details of tender notification can be downloaded from [www.tenderwizard.com/NISER](http://www.tenderwizard.com/NISER) under **“Tender Free View”** link. Vendors should obtain the USER ID and PASSWORD from [www.tenderwizard.com/NISER](http://www.tenderwizard.com/NISER) by clicking on **“REGISTER ME”** link in the homepage. The Vendor registration fees has to be paid to ITI Ltd for Rs. 1180/-. Using the e-payment link provided at the time of registration, and the mode of payments are Credit Card, Debit Card and Internet Banking. Vendor Registration is Valid for 1year.Tenders should be submitted only through e-Tender portal and obtained the Tender Acknowledgement copy as a proof of successful submission.
6. The Bidders are requested to give detailed tender in E-Tender portal in the prescribed forms in single Bid (Comprising Technical Bid and Financial Bid).
7. **Last date of submission of E- tender** : **07.03.2019 to 11.30 AM.**  
**Opening of (Both Technical & Financial) Bid** : **07.03.2019 at 3.00 P.M**

**8. Tender process & award of contract.**

The technical bid will be evaluated to shortlist the eligible bidders. The financial bid of only the short listed bidders shall be considered for further processing. Bidders whose technical offer is found acceptable and meeting the eligibility requirements as specified in this tender will be eligible for the financial bid evaluation.

9. Director of NISER does not bind himself to accept the lowest or any tender and reserves the right to accept the tender either in whole or in part. Director of NISER, reserves the right to accept/reject any/all tenders without assigning any reason whatsoever. The decision of the Director shall be final in this regard.
10. Canvassing in any manner or form will lead to rejection of the Bid.
11. The tenderer shall not be permitted to bid for works in any unit of DAE where any of his/her relatives are employed. He shall also intimate the names of any such persons who are working with him in any capacity or subsequently employed by him and whose relatives are working in DAE or its units.
12. **Contact for Technical information:** (Only E-mail enquiries will be entertained)

**Mr. Amit Kumar Panigrahi**  
SA\_D (Electrical),  
Institute Works Department, NISER.  
E-Mail – [amit.panigrahi@niser.ac.in](mailto:amit.panigrahi@niser.ac.in)

**Mr. Dilip Jha**  
SO\_D (Electrical),  
Institute Works Department, NISER.  
E-Mail – [dilipjha@niser.ac.in](mailto:dilipjha@niser.ac.in)

**NOTE:**

A person shall be deemed to be a relative of another if, (a) they are members of a Hindu undivided family; or (b) they are husband and wife; or (c) the one is related to the other in the following manner : Father, Mother (including step mother), Son (including step son), Son's wife, Daughter (including step daughter), Father's father, Son's son, Son's wife, Son's daughter, Son's daughter's husband, Daughter's husband, Daughter's son, Daughter's son's wife, Daughter's daughter, Daughter's husband, Brother (including step brother), Brother's wife, Sister (including step sister), Sister's husband.

13. The Bid shall remain valid for a minimum period of 90 days from the date of opening of the tender for the purpose of acceptance and award of work. Validity beyond 90 days from the date of opening shall be by mutual consent.
14. The tenderer should see and obtain the drawings. In case of any queries, necessary clarifications may please be sought from the office of the Scientific Officer-D (Electrical). No claim whatsoever will be entertained in this regard for any alleged ignorance, thereof.
15. Before tendering, the tenderer shall inspect the site to fully acquaint himself about the condition in regard to accessibility to site, nature and extent of ground, working condition of site and locality including stacking of materials, conditions affecting accommodations and movement of labour, etc., which are required for satisfactory execution of the work. No ignorance of the same, whatsoever shall be entertained under any circumstances.
16. EMD is liable to be forfeited if the contractor fails to commence the work as per award letter.

17. Some of the provisions of the contract are given below.

a). **DEFECT LIABILITY PERIOD - Twelve months** from the date of completion as certified by the authorized engineer.

b). **MINIMUM VALUE OF WORK FOR THE INTERMEDIATE CERTIFICATE** Intermediate certificate for a lesser amount can be admitted for payment at the discretion of the Institute.

c). **SECURITY DEPOSIT - A sum @ 5%** of the gross amount of the bill shall be deducted from each running bill of the contractor, till the sum along with the sum already deposited as earnest money, will amount to security deposit of 5% of the tendered value of the work. In addition, the contractor shall be required to deposit an amount equal to 5% of the tendered value of the contract as **Performance Security** within the period prescribed for commencement of work in the letter of award issued to him.

d) **COMPENSATION** – In the event of any delay in completion of the work beyond the scheduled period, the contractor shall pay an amount equal to one per cent of the total cost of work or such smaller amount as decided by Director of NISER (whose decision shall be final) as compensation to the institute, for every week that the work remains un-commenced or unfinished. Compensation to be paid shall not exceed ten per cent of the estimated cost of the total work as per award letter.

18. Stores to be issued: - No material shall be issued by the Institute. The responsibility for arranging all materials from approved manufacturer as per award letter lies with the contractor.

19. The rate quoted by the tenderer shall be **inclusive of Taxes** as per the Govt. rule. There will be deduction of TAX from every RA bill and also from the final bill of the contractor at the rate prescribed by govt. of India from time to time.

20. The successful bidder will be required to submit the names, qualifications and experiences of the supervising staff to be deployed for execution of the work. In case of any changes occurring during the course of execution of the said work, the same shall also be intimated by the bidder to the institute.

21. The tenderer should also submit the detail list of tools and plants/ machineries/ equipment, etc. that he proposes to place at the site of work.

22. The Contractor shall have to make his own arrangements for storage of materials required for execution of the work and NISER in any manner shall be held responsible for the storage and safe custody of the said materials at work site.

23. Electricity will be supplied to the site of work at one point only if required and Contractor can do onward distribution with metering arrangement as per the requirement. Electricity charges; if any will be recovered from the Contractor's bill based on meter readings towards its consumption.

24. Before commencement of the work, the contractor has to submit the list of tools and plants brought to the site of work. No items other than the list submitted will be allowed to be taken out from the work site.

25. All the mandatory testing charges will be borne by the contractor.

26. Cost escalation in any manner whatsoever, will not be accepted for the said work, where in the stipulated period of completion of work is 30 (Thirty) days or less.



27. The work will be executed as per CPWD guidelines and DAE works procedure under the supervision of Engineer-In-charge of NISER.

### Technical Specifications

1. **Work should be carried out as per CPWD electrical specification revised from time to time.**
2. **Circuit wiring:** - Phase, Neutral & Earth wire shall be connected up to Switch Box.
3. In wiring, no joints in wiring will be permitted anywhere, except in switch box or point outlets, where jointing of wires will be allowed with use of suitable connector.
4. **2.5** sq mm for **points & circuit** wiring, **4** sq. mm for **power plug point** wiring, **6** sq mm & **above size** for **Sub-main** wiring, i.e. Panel to DB etc. as per site plan/project requirement as directed by Engineer-in-charge.
5. Drawing of PVC insulated copper conductor cable should not be excess from maximum capacity of conduit, as per clause [4.2.1 (ii)]
6. MCB DBs pre-wired type & brand name/make as specified in the tender only.
7. Only quality materials of reputed make as specified in the tender will be used in work.
8. The contractor shall engage suitably **skilled/licensed workmen** of various categories for execution of work & **supervised by supervisors / Engineer of appropriate qualification** & experience to ensure proper execution of work. They will carry out instructions of Engineer-in-charge & other senior officers of the Institute during progress of work.
9. **Inspection and Testing** Testing shall necessarily be carried out at factory/ manufacturer premises in presence of representative of the Department. The successful tenderer shall give a notice of minimum two weeks for carrying out such tests. The Engineer-in-charge/ or his authorized representative shall witness such inspection & testing at mutually agreed date. The cost of the representative's visit to the factory will be borne by the Department. The department also reserves the right to inspect the fabrication job at factory and the successful tenderer has to make arrangements for the same.
10. All electrical works shall be carried out in accordance with the provisions of Indian Electricity Act,2003 and Indian Electricity Rules, 1956 amended to date. They shall also conform to CPWD General Specifications for Electrical Works, Part-I: Internal 2005 and Part-II External, 1994, amended to date.
11. Within ten days from the date of receipt of the letter of acceptance, the successful tenderer shall Submit his programme for submission of drawings, supply of equipments, installation, testing, commissioning and handing over of the installation to the Engineer-in-Charge.
12. **The contractor shall submit the drawings to the Engineer-in-Charge for approval before start of work.**
13. **GUARANTEE:-**All equipments shall be guaranteed, against unsatisfactory performance and/or break down due to defective design, workmanship or material, for a period of 12 months from the date of taking over the installation by the department. The equipments or components, or any part thereof, so found defective during guarantee period shall be forthwith repaired or replaced free of cost, to the satisfaction of the Engineer-in-Charge. In case it is felt by the department that

undue delay is being caused by the contractor in attending the defect/fault removed, the same will be got done by the department at the risk cost of the contractor. The decision of the Engineer-in-Charge in this regard shall be final.

### **MEASUREMENT AND RA/ FINAL BILL**

1. The contractor shall submit his running and final bills with detail measurement for the purpose of payment & bills shall be processed by the various offices for payment, as per existing procedure. He has to sign the MB Book as an acceptance to the measurements carried out by the engineer in charge of NISER, based on which the RA/Final Bill shall be generated for payment.
2. The contractor shall extend all possible co-operations for checking the measurement. Decision of the engineer in charge (electrical) of NISER shall prevail. In case of any dispute, the final decision lies with the Director of NISER, which shall be binding on both the parties.

### **OTHERS**

If, the contractor has to remove/dismantle any old, damaged wiring & fixtures etc. for the purpose of execution of the said work, the same shall be deposited with NISER Stock Yard along with the list of materials under intimate to the concerned Engineer in- Charge. No extra payment will be made by the institute for this purpose.

**SCHEDULE OF QUANTITY**

Sl. No.	Description of items	Unit	Qty
1	<p><b>Supply installation testing and comissioning of Maintenance free chemical earthing with earthing valus less than 5 Ohm.</b> Electrode -The Electrode will be a solid steel rod (Copper Cladded Earth Electrode) of 17mm Dia and min 3 mtr length. The thickness of the copper coating will be 250 microns and uniform with tolerance level of 0.1 micron Earth electrode will carry UL Marking and pragati name engraved on each electrode. Earth electrodes will be visually inspected and checked for diamention and length before installation. Electrodes should not get physically crack or depleted in case of bending. (Including excavation and filling of material with the back field compound/Bentonite powder etc.) The electrode to be used to be tested and approved by CPRI Back fill Compound:- The Earth enhancement material (backfill material ) - Back filled compound must have cmposition of Carbon, silica,chloride, calcium, tin, Mg, Lead, PBB, PBDE etc.as per the ISO standard,IEC 62561-7 and ISO certified by Govt. of India and "LOHM" compound may be used if ISO certified. (Quantity : As required) . The chamber cover &amp; frame shall be hinged type &amp; it shall be got approved by department. The value of earth resistance and date of measurement shoud be written on the chamber cover with paint.</p>	SET	15
2	<p>Supplying and laying 25 mm X 5 mm copper strip at 0.50 metre below ground as strip earth electrode, including connection/terminating with nut, bolt, spring, washer etc. as required. (Jointing shall be done by overlapping and with 2 sets of brass nut bolt &amp; spring washer spaced at 50mm)</p>	Meter	150
3	<p>Providing masonry enclosure to existing earth pit.(Each set contains 50 Nos of bricks, cement 0.01 tonne, sand 0.03Cum and required labour)</p>	Set	25
4	<p>Painting with synthetic enamel paint of approved brand and manufacturer of required colour to give an even shade.</p>	Sq Meter	195
5	<p>Lettering with black Japan paint of approved brand and manufacturer.</p>	Per letter per Cm height	11890.5

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