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**Name of Work: Providing additional 11kV HT metering cubicle and HT Cable for existing MSEDCL HT Connection at NCCS, University Campus at GaneshKhind Pune.**

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*Certified that this bid document contains Four parts i.e. Part A, Part B, Part C and Part- D pages marked as page 01 to 57.*

***The NIT approved for Rs. 10,00,013/- (Rupees Ten- Lakh Thirteen Only)***

**TENDER NOTICE**

**CENTRAL PUBLIC WORKS DEPARTMENT**

**NOTICE INVITING E-TENDER**

The **Executive Engineer (E), CPWD, Pune** on behalf of the President of India invites online percentage rate bids in Single bid system from eligible CPWD contractors of Buildings & Roads category of appropriate class for the following work: -

N.I.T. No.: **31/NIT/EE(E)/PCED/2026-27**

Name of Work: **Providing additional 11kV HT metering cubicle and HT Cable for existing MSEDCL HT Connection at NCCS, University Campus at GaneshKhind Pune.**

Estimated Cost: **Rs. 10,00,013/-**

Earnest Money: **Rs. 50,001/-**

Time Allowed: **03 (Three) Months**

Last date & time  
of submission of tender: **Up to 11:00 AM on 15/07/2026**

Date & Timing of  
Opening of bid: **at 11:30 AM on 15/07/2026**

To,  
Draft NIT.

**Assistant Engineer (E) (P),  
CPWD, Pune-37.**

**Executive Engineer (E),  
CPWD, Pune-37.**

**CHECK LIST FOR BIDDERS FOR SUBMISSION OF BIDS**

1. The bidder should read all the instructions, items & conditions, contract clauses, nomenclature of items, specifications etc., contained in the bids document very carefully, before quoting the rates.
2. The bidder should also read the General Conditions of Contract for CPWD works 2023 maintenance work, published by DG, CPWD, Nirman Bhawan, New Delhi which will be a part of the Agreement with up-to-date amendments up to one day previous to the last date of receipt of tenders.
3. The bidder shall quote his rates keeping in mind the specifications, terms & conditions, additional and special conditions, taxes, royalties, labour cess, stamp duty etc. and nothing extra shall be payable unless otherwise specified.
4. The bidder shall have to make his own arrangement for housing facilities for staff and labour at site or to transport the labour to and for between work site and labour camp at his own cost.
5. The bidder should read the specification and special condition and additional conditions etc.
6. The bidder shall make environment friendly arrangement for disposal of dismantle/ waste materials from work site.

## INFORMATION AND INSTRUCTIONS FOR BIDDERS FOR e-TENDERING

The Executive Engineer (E), CPWD, Pune (Email ID: pcedeee@gmail.com) invites on behalf of the President of India, online percentage rate tender in Single bid system from eligible CPWD contractors of Buildings & Roads category of appropriate class for the following work: -

| Sr. No. | NIT No.                   | Name of work & Location                                                                                                                      | Estimated cost  | Earnest Money | Period of Completion | Last Date & Time of online submission of bid, original EMD, copy of receipt for deposition of original EMD and other documents | Date & Time of opening of bid |
|---------|---------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|-----------------|---------------|----------------------|--------------------------------------------------------------------------------------------------------------------------------|-------------------------------|
| 1.      | 31/NIT/EE(E)/PCED/2026-27 | Providing additional 11kV HT metering cubicle and HT Cable for existing MSEDCL HT Connection at NCCS, University Campus at GaneshKhind Pune. | Rs. 10,00,013/- | Rs. 50,001/-  | 03 (Three) Months    | Up to 11:00 AM<br>15/07/2026                                                                                                   | At 11:30 AM<br>15/07/2026     |

The enlistment of the contractors should be valid on the last date of submission of tenders. In case the last date of submission of tender is extended, the enlistment of contractor should be valid on the original date of submission of tender.

1. The intending bidder must read the terms and conditions of CPWD-6 carefully. He should only submit his bid if he considers himself eligible and he is in possession of all the documents required.
2. The Information and Instructions for bidders posted on website shall form part of bid document.
3. The bid document consisting of plans, specifications, the schedule of quantities of various types of items to be executed and the set of terms and conditions of the contract to be complied with and other necessary documents can be seen and

downloaded from website **www.etender.cpwd.gov.in** or **www.cpwd.gov.in** free of cost.

4. But the bid can only be submitted after deposition of original EMD either in the office of Executive Engineer inviting bids or division office of any Executive Engineer, CPWD within the period of bid submission and uploading the mandatory scanned documents such as Insurance Surety Bonds, Account Payee Demand draft or Bankers Cheque or Fixed Deposit Receipt or/and Bank Guarantee (for balance amount as prescribed from any of the Commercial Bank towards EMD in favour of **“EXECUTIVE ENGINEER(E), PUNE CENTRAL ELECTRICAL DIVISION, CPWD PUNE”**, receipt for deposition of original EMD to division office of any Executive Engineer (including NIT issuing EE/AE), CPWD and other documents as specified.
5. Those contractors who are not registered or have not updated their profile on the website mentioned above, are required to get registered beforehand. The necessary training materials including the videos with step-to-step process are available on download section of <https://etender.cpwd.gov.in>
6. The intending bidder must have valid class-III digital signature certificate with encryption key (combo type) to perform any operation/transactions on the e-tendering portal/website and the bidder should download and install the eMSigner on their system as per instruction available on download section of <https://etender.cpwd.gov.in>
7. On opening date, the contractor can login and see the bid opening process. After opening of bids he will receive the competitor bid sheets.
8. Contractor can upload documents in the form of **JPG** format and **PDF** format.
9. Contractor must ensure to quote rate of each item. The column meant for quoting rate in figures appears in yellow colour and the moment rate is entered, it turns sky blue.

In addition to this, while selecting any of the cells a warning appears that if any cell is left blank the same shall be treated as "0". Therefore, if any cell is left blank and no rate is quoted by the bidder, rate of such item shall be treated as "0" (ZERO).

However, If a tenderer quotes nil rates against each item in item rate tender or does not quote any percentage above/below on the total amount of the tender or any section / sub head in percentage rate tender, the tender shall be treated as invalid and will not be considered as lowest tenderer.

10. Intending Bidders are advised to inspect and examine the site and its surroundings and satisfy themselves before submitting their bids as to the nature of the ground and subsoil (so far as is practicable), the form and nature of the site, the means of access to the site, 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 bid. A bidder shall be deemed to have full knowledge of the site whether he inspects it or not and no extra cost consequent on any misunderstanding or otherwise shall be allowed. The bidders shall be responsible

for arranging and maintaining at his own cost all materials, tools & plants, water, electricity access, facilities for workers and all other services required for executing the work unless otherwise specifically provided for in the contract documents. Submission of a bid by a bidder implies that he has read this notice and all other contract documents and has made himself aware of the scope and specifications of the work to be done and of conditions and rates at which stores, tools and plant, etc. will be issued to him by the Government and local conditions and other factors having a bearing on the execution of the work.

- 11.** GST applicable as per Government norms up to date and future circulars. Contractor should quote the rate including GST as per Govt. norms, nothing to be reimbursed against GST directly.
- 12.** Contractor should quote considering Stamp Duty as per Maharashtra Govt. norms, nothing to be reimbursed against Stamp Duty.
- 13.** The department reserves the right to reject any prospective application without assigning any reason thereof and to restrict the list of qualified bidders to any number deemed suitable by it, if too many bids are received satisfying the minimum laid down criteria.
- 14.** Bidder shall have Electrical contractor license OR associate CPWD enlisted contractor having valid electrical license of appropriate class at the time of execution of electrical work.

**List of documents to be scanned and uploaded by bidder within the period of bid submission:**

1. Insurance Surety Bonds/ Account Payee Demand Draft/ Fixed Deposit Receipt/ Banker's Cheque and Bank Guarantee (for balance amount as prescribed) from any of the Commercial Banks against EMD in favour of "EXECUTIVE ENGINEER(E), PUNE CENTRAL ELECTRICAL DIVISION, CPWD PUNE"
2. **Copy of Receipt for deposition of original EMD** issued from any Division office of CPWD where bidder deposited EMD. Format of deposition receipt should be as per NIT. **(Annexure-I)**
3. Copy of valid enlistment in Composite Category in CPWD for CPWD Registered Contractors (Rules for Enlistment of Contractors in CPWD, 2026, ISSUED BY THE AUTHORITY OF DIRECTOR GENERAL, CPWD).
4. GST Registration Certificate, if already obtain by the bidder.

**OR**

If the bidder has not obtained GST registration as applicable, then he shall scan & upload following undertaking along with the bid document –

*"If work is awarded to me, I/We shall obtain GST registration certificate as applicable, within one month from date of receipt of award of letter or before release of any payment by CPWD, whichever is earlier, failing which I/We shall be responsible for any delay in payments which will be due towards me/us on account of the work executed and /or for any action taken by CPWD or GST department in this regard."* **(Annexure-II)**

5. Uploading of valid electrical license of eligible class.

**OR**

Uploading of an undertaking that:

*"I/we hereby certify that I/we will either obtain valid electrical license at the time of execution of electrical work or associate CPWD enlisted Contractor having valid electrical license of eligible class".* **(Annexure-III)**

6. Undertaking For Association of MSEDCL Registered Contractor (Annex-IV) Along with copy of registration of MSEDCL of contractor.
7. Any other document as specified in Eligibility Criteria and/or in CPWD-6

**Executive Engineer (E)**  
**CPWD, Pune**

# **PART – A**

**NOTICE INVITING e-TENDER (CPWD-6), TENDER FORM (CPWD-7), SCHEDULES - A TO F FOR WORK AND STANDARD GCC FOR CPWD-2023 FOR MAINTENANCE WORK WITH AMENDED/ MODIFIED UP TO LAST DATE OF TENDER SUBMISSION**

## CPWD-6 FOR E- TENDERING

1. The Executive Engineer (E), CPWD, Pune (Email ID: pcedeee@gmail.com) invites on behalf of the President of India, online percentage rate tender in single bid system from eligible CPWD contractors of Buildings & Roads category of appropriate for the work of **“Providing additional 11kV HT metering cubicle and HT Cable for existing MSEDCL HT Connection at NCCS, University Campus at GaneshKhind Pune.”**

The enlistment of the contractors should be valid on the last date of submission of bids.

In case the last date of submission of bid is extended, the enlistment of contractor should be valid on the original date of submission of bids.

- 1.1 The work is estimated to cost **Rs. 10,00,013/-** only. This estimate, however, is given merely as a rough guide.
- 1.1.1 The authority competent to approve NIT for the combined cost and belonging to the major discipline will consolidate NITs for calling the bids. He will also nominate Division which will deal with all matters relating to the invitation of bids. For composite bid, besides indicating the combined estimated cost put to bid, should clearly indicate the estimated cost of each component separately. The eligibility of bidders will correspond to the combined estimated cost of different components put to bid.
- 1.2 Intending bidders is eligible to submit the bid provided he has definite proof from the appropriate authority, which shall be to the satisfaction of the competent authority, of having satisfactorily completed similar works of magnitude specified below: -
2. Agreement shall be drawn with the successful bidders on prescribed Form No. **CPWD 7** (or other Standard Form as mentioned) which is available as a Govt. of India Publication and also available on website **www.cpwd.gov.in**. Bidders shall quote his rates as per various terms and conditions of the said form which will form part of the agreement.
3. The time allowed for carrying out the work will be **03 Months** from the date of start as defined in schedule 'F' or from the first date of handing over of the site, whichever is later, in accordance with the phasing, if any, indicated in the bid documents.
4. The site for the work shall be made available in parts as per requirement of work and on demand of the contractor.

5. The bid document consisting of plans, specifications, the schedule of quantities of various types of items to be executed and the set of terms and conditions of the contract to be complied with and other necessary documents except Standard General Conditions of Contract Form can be seen on website <https://etender.cpwd.gov.in> or [www.cpwd.gov.in](http://www.cpwd.gov.in) free of cost.
6. After submission of the bid the contractor can re-submit revised bid any number of times but before last time and date of submission of bid as notified.
7. While submitting the revised bid, contractor can revise the rate of one or more item(s) any number of times (he need not re-enter rate of all the items) but before last time and date of submission of bid as notified.
- ~~8. When bids are invited in three stage system and if it is desired to submit revised financial bid then it shall be mandatory to submit revised financial bid. If not submitted then the bid submitted earlier shall become invalid.~~
9. Earnest Money in the form of Insurance Surety Bonds, Account Payee Demand Draft, Fixed Deposit Receipt, Banker's Cheque or Bank Guarantee including (for balance amount as prescribed) from any of the Commercial Banks (drawn in favour of **(EXECUTIVE ENGINEER(E), PUNE CENTRAL ELECTRICAL DIVISION, CPWD PUNE)**) shall be scanned and uploaded on the e-Tendering website within the period of bid submission. The original EMD should be deposited either in the office of Executive Engineer inviting bids or division office of any Executive Engineer, CPWD within the period of bid submission. The EMD receiving Executive Engineer (including NIT issuing EE/AE) shall issue a receipt of deposition of earnest money deposit to the bidder in a prescribed format (enclosed) uploaded by tender inviting EE in the NIT.

A part of earnest money is acceptable in the form of bank guarantee also. In such case, minimum 50% of earnest money or Rs. 20 lac, whichever is less, shall have to be deposited in shape prescribed above, and balance may be deposited in shape of Bank Guarantee of any Commercial bank having validity for a period of 90 days for single bid works and 180 days for two bid system or more from the last date of receipt of bids which is to be scanned and uploaded by the intending bidders.

The earnest money given by all the tenderers except the lowest tenderer shall be refunded immediately after the expiry of stipulated bid validity period or immediately after acceptance of the successful bidder, whichever is earlier. However, in case of two/ three bid system, earnest money deposit of bidders unsuccessful during technical bid evaluation etc. should be returned within 30 days of declaration of result of technical bid evaluation.

Copy of Enlistment Order and certificate of work experience and other documents as specified in the notice inviting e- tender shall be scanned and uploaded on the e-Tendering website within the period of bid submission. However, certified copy of all the scanned and uploaded documents as specified in e- tender notice shall have to be submitted by the lowest bidder within a week physically in the office of tender opening authority. Online bid documents submitted by intending bidders shall be opened only

of those bidders, whose original EMD deposited with any division of CPWD and other documents scanned and uploaded are found in order.

**The bid submitted shall be opened at 11:30 AM on 15/07/2026**

10. The bid submitted shall become invalid and e-Tender processing fee (if applicable) shall not be refunded if:
  - (i) The bidder is found ineligible.
  - (ii) The bidder does not upload scanned copies of all the documents stipulated in the bid document.
  - (iii) If a tenderer quotes nil rates against each item in item rate tender or does not quote any percentage above/below on the total amount of the tender or any section / sub head in percentage rate tender, the tender shall be treated as invalid and will not be considered as lowest tenderer.
11. The contractor whose bid is accepted will be required to furnish performance guarantee at specified percentage of the tendered amount as mentioned in schedule E and within the period specified in Schedule F. This guarantee shall be in the form of Insurance Surety Bonds, Account Payee Demand Draft, Fixed Deposit Receipt or Bank Guarantee from any of the Commercial Banks in accordance with the prescribed form. In case the contractor fails to deposit the said performance guarantee within the period as indicated in Schedule 'F', including the extended period if any, the Earnest Money deposited by the contractor shall be forfeited automatically without any notice to the contractor. The earnest money deposited along with bid shall be returned after receiving the aforesaid performance guarantee. The contractor whose bid is accepted will also be required to furnish either copy of applicable licenses/ registrations or proof of applying for obtaining labour licenses, registration with EPFO, ESIC and BOCW Welfare Board including Provident Fund Code No. If applicable and also ensure the compliance of aforesaid provisions by the subcontractors, if any engaged by the contractor for the said work within the period specified in Schedule F.
12. **The description of the work is as follows:**

**“Providing additional 11kV HT metering cubicle and HT Cable for existing MSEDCL HT Connection at NCCS, University Campus at GaneshKhind Pune.”**

Intending Bidders are advised to inspect and examine the site and its surroundings and satisfy themselves before submitting their bids as to the nature of the ground and sub-soil (so far as is practicable), the form and nature of the site, the means of access to the site, 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 bid. A bidder shall be deemed to have full knowledge of the site whether he inspects it or not and no extra charge consequent on any misunderstanding or otherwise shall be allowed. The bidders shall be responsible for arranging and maintaining at his own cost all materials, tools & plants, water, electricity access, facilities for workers and all other services required for executing the work unless otherwise specifically provided for in the contract documents. Submission of a bid by a bidder implies that he has read this notice and all other contract documents and has made himself aware of the scope and

specifications of the work to be done and of conditions and rates at which stores, tools and plant, etc. will be issued to him by the Government and local conditions and other factors having a bearing on the execution of the work.

13. The competent authority on behalf of the President of India does not bind itself to accept the lowest or any other bid and reserves to itself the authority to reject any or all the bids received without the assignment of any reason. All bids in which any of the prescribed condition is not fulfilled or any condition including that of conditional rebate is put forth by the bidders shall be summarily rejected.
14. Canvassing whether directly or indirectly, in connection with bidders is strictly prohibited and the bids submitted by the contractors who resort to canvassing will be liable for rejection.
15. The competent authority on behalf of President of India reserves to himself the right of accepting the whole or any part of the bid and the bidders shall be bound to perform the same at the rate quoted.
16. The contractor shall not be permitted to bid for works in the CPWD Circle (Division in case of contractors of Horticulture/Nursery category) responsible for award and execution of contracts, in which his near relative is posted a Divisional Accountant or as an officer in any capacity between the grades of Superintending Engineer and Junior Engineer (both inclusive). He shall also intimate the names of persons who are working with him in any capacity or are subsequently employed by him and who are near relatives to any gazetted officer in the Central Public Works Department or in the Ministry of Housing and Urban Affairs. Any breach of this condition by the contractor would render him liable to be removed from the approved list of contractors of this Department.
17. No Engineer of Gazetted Rank or other Gazetted Officer employed in Engineering or Administrative duties in an Engineering Department of the Government of India is allowed to work as a contractor for a period of one year after his retirement from Government service, without the prior permission of the Government of India in writing. This contract is liable to be cancelled if either the contractor or any of his employees is found any time to be such a person who had not obtained the permission of the Government of India as aforesaid before submission of the bid or engagement in the contractor's service.
18. The bids for the work shall remain open for acceptance for **30 (Thirty)** days from the date of opening of bid in case bids are invited in single bid system.

Further

- (i) If any tenderer withdraws his tender or makes any modification in the terms & conditions of the tender which is not acceptable to the department within 7 days after last date of submission of bids, then the Government shall without prejudice to any other right or remedy, be at liberty to forfeit 50% of the earnest money absolutely irrespective of letter of acceptance for the work is issued or not.
  - (ii) If any tenderer withdraws his tender or makes any modification in the terms & conditions of the tender which is not acceptable to the department after expiry of 7 days after last date of submission of bids, then the Government shall without prejudice to any other right or remedy, be at liberty to forfeit 100% of the earnest money absolutely irrespective of letter of acceptance for the work is issued or not.
  - (iii) In case of forfeiture of earnest money as prescribed in para (i) and (ii) above, the bidders shall not be allowed to participate in the rebidding process of the same work.
19. This notice inviting Bid shall form a part of the contract document. The successful bidder/contractor, on acceptance of his bid by the Accepting Authority shall within 15 days from the stipulated date of start of the work, sign the contract consisting of:-
- (a) The Notice Inviting Bid, all the documents including additional conditions, specifications and drawings, if any, forming part of the bid as uploaded at the time of invitation of bid and the rates quoted online at the time of submission of bid and acceptance thereof together with any correspondence leading thereto.
20. Standard C.P.W.D. Form 7/8 or other Standard C.P.W.D. Form as applicable. The intending bidders are required to update their profile in CPWD e- tender portal and to upload their bids well in advance of last date of submission of tender. Any issue related to updating profile/uploading tender can be resolved through the concerned **(Executive Engineer (E), CPWD, Pune)** Executive Engineer/ Assistant Engineer (Phone no **020-24263692**, E-mail ID : **pcdeeee@gmail.com**) or ERP helpline no. 18001803286 or e-mail Id cpwd.support@techmahindra.com. The e- tendering bidders are also advised not to wait to raise any issues till the last date of submission of bid in their own interest.
21. In case any discrepancy is noticed between the documents as uploaded at the time of submission of the bid online and hard copies as submitted physically in the office of Executive Engineer, then the bid submitted shall become invalid and the Government shall, without prejudice to any other right or remedy, be at liberty to forfeit 50% of the said earnest money as aforesaid. Further the tenderer shall not be allowed to participate in the re-tendering process of the work.
22. **Jurisdiction of Courts**
- The Court of the place from where the letter of award of work has been issued shall have the jurisdiction to decide any dispute arising out of or in respect of the contract.
23. CPWD does not have funds of its own and it carries out the works of client departments from their funds (deposit, budgetary, authorization). The CPWD is making payments to the contractors after getting budget/ authorization/ deposit from

various Ministries/Client Departments. The payment to the contractor can be done only on availability of funds for that work from client department and in case of delay in getting funds from Ministry / Client Department, CPWD will not be responsible for delay in payment and no any extra compensation on this account shall be granted apart from specified elsewhere in this document. The contractor has to quote his tender accordingly considering this aspect

**Executive Engineer (E)**  
**CPWD, Pune**

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**CPWD-7**

**GOVERNMENT OF INDIA CENTRAL PUBLIC WORKS DEPARTMENT**  
**Percentage Rate Tender & Contract for Works**

Tender for the work of “ **Providing additional 11kV HT metering cubicle and HT Cable for existing MSEDCL HT Connection at NCCS, University Campus at GaneshKhind Pune.**”

- (i) To be uploaded by **11:00 AM on 15/07/2026** at [www.etender.cpwd.gov.in](http://www.etender.cpwd.gov.in).
- (ii) Bid to be opened in presence of tenderers who may be present at **11:30 AM on 15/07/2026** in the office of Executive Engineer (E), CPWD,Pune.

**T E N D E R**

I/We have read and examined the notice inviting tender, schedule, A, B, C, D, E & F Specifications applicable, Drawings & Designs, General Rules and Directions, Conditions of Contract, clauses of contract, Special conditions, Schedule of Rate & other documents and Rules referred to in the conditions of contract and all other contents in the tender document for the work.

I/We hereby tender for the execution of the work specified for the President of India within the time specified in Schedule 'F' viz., schedule of quantities and in accordance in all respect with the specifications, designs, drawing and instructions in writing referred to in Rule-1 of General Rules and Directions and in Clause 11 of the Conditions of contract and with such materials as are provided for, by, and in respect of accordance with, such conditions so far as applicable.

We agree to keep the tender open for Thirty (30) days from the date of opening of eligibility/ technical bid in case tenders are invited on single bid/ system and not to make any modification in its terms and conditions.

A sum of **Rs. 50,001/-** is hereby forwarded in cash/ receipt treasury challan/ deposit at call receipt of a commercial bank/ fixed deposit receipt of commercial bank/ demand draft of a commercial bank/ bank guarantee issued by a commercial bank as earnest money.

A copy of earnest money in receipt treasury challan/ deposit at call receipt of a commercial bank/ fixed deposit receipt of commercial bank/ demand draft of a commercial bank/ bank guarantee issued by a commercial bank is scanned and uploaded (strike out as the case may be). If I/ We, fail to furnish the prescribed performance guarantee within prescribed period, I/ We agree that the said President of India or his successors, in office shall without prejudice to any other right or remedy, be at liberty to forfeit the said earnest money

absolutely. Further, if I/ We fail to commence work as specified, I/ We agree that President of India or the successors in office shall without prejudice to any other right or remedy available in law, be at liberty to forfeit the said performance guarantee absolutely. The said Performance Guarantee shall be a guarantee to execute all the works referred to in the tender documents upon the terms and conditions contained or referred to those in excess of that limit at the rates to be determined in accordance with the provision contained in Clause 12.2 and 12.3 of the tender form.

Further, I/ We agree that in case of forfeiture of Performance Guarantee as aforesaid, I/We shall be debarred for participation in the re-tendering process of the work.

I/We undertake and confirm that eligible similar work(s) has/have not been got executed through another contractor on back-to-back basis. Further that, if such a violation comes to the notice of Department, then I/We shall be debarred for tendering in CPWD in future forever. Also, if such a violation comes to the notice of Department before date of start of work, the Engineer-in-Charge shall be free to forfeit the entire amount of Earnest Money Deposit/Performance Guarantee.

I/ We hereby declare that I/We shall treat the tender documents drawings and other records connected with the work as secret/confidential documents and shall not communicate information/derived there from to any person other than a person to whom I/We am/are authorized to communicate the same or use the information in any manner prejudicial to the safety of the State.

Dated

Signature of Contractor

Witness:

Postal Address

Address:

Occupation:

## ACCEPTANCE

The above tender (as modified by you as provided in the letters mentioned hereunder) is accepted by me for and on behalf of the President of India for a sum of Rs. ....

(Rupees..... )

The letters referred to below shall form part of this contract agreement: -

(a)

(b)

(b)

For & on behalf of the President of India.

Signatures.....

Dated:

Designation.....

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## **SCHEDULE 'A' to 'F'**

### **SCHEDULE 'A'**

Schedule of quantities : **As per BOQ attached**

### **SCHEDULE 'D'**

Extra schedule for specific requirements/ documents for the work, if any

1. Additional Conditions
2. Additional Specifications
3. Special Conditions

### **SCHEDULE 'E'**

#### **Reference to General Conditions of Contract:**

General Conditions of Contract 2023 for Maintenance Works in CPWD as amended / modified up to the previous date of submission of Bid.

**Name of Work:** **"Providing additional 11kV HT metering cubicle and HT Cable for existing MSEDCL HT Connection at NCCS, University Campus at GaneshKhind Pune."**

**Estimated Cost of work:** **Rs. 10,00,013/-**

**Earnest Money:** **Rs. 50,001/-**

(to be returned after receiving performance guarantee)

**Performance Guarantee:** a) 5% of Estimated cost put to tender (ECPT) or contract amount whichever is higher

Where the tendered amount is less than eighty percent (80%) of the Estimated Cost Put to Tender (ECPT), the Performance Guarantee, in addition to the requirement under (a) above, shall be increased by an amount equal to the difference between 80% of the ECPT and the tendered amount (As per Modification in Para 5,2 for CPWD Works Manual 2024 vide OM No. DG/Manual-2024/20 dated 27.02.2026)

**Security Deposit:** **2.5% of the accepted tendered value of work**

**SCHEDULE 'F':****General Rules & Directions: -**

|                 |                                                                                                                                                                                                                                                                                     |   |                                                                                                                                                 |
|-----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|-------------------------------------------------------------------------------------------------------------------------------------------------|
|                 | <b>Officer Inviting Tender</b>                                                                                                                                                                                                                                                      | : | <b>Executive Engineer (E) CPWD, Pune</b>                                                                                                        |
|                 | Maximum percentage for quantity of items of work to be executed beyond which rates are to be determined in accordance with Clauses 12.2 & 12.3                                                                                                                                      | : | Refer Clause-12                                                                                                                                 |
|                 | <b>Definitions: -</b>                                                                                                                                                                                                                                                               |   |                                                                                                                                                 |
| 2 (vi)          | Engineer-In-Charge                                                                                                                                                                                                                                                                  | : | <b>Executive Engineer (E) CPWD, Pune or successor thereof</b>                                                                                   |
| 2 (viii)        | Accepting Authority                                                                                                                                                                                                                                                                 | : | <b>Executive Engineer (E) or his or successor thereof Pune</b>                                                                                  |
| 2 (x)           | Percentage on cost of materials and labour to cover all overheads and profits                                                                                                                                                                                                       | : | 15%                                                                                                                                             |
| 2 (x)a)         | Standard Schedule of Rates (Electrical)                                                                                                                                                                                                                                             | : | DSR(E&M) 2025 for electrical works with up-to-date correction slips.                                                                            |
| 2 (xi)          | Department                                                                                                                                                                                                                                                                          | : | Central Public Works Department                                                                                                                 |
| 9(ii)           | Standard CPWD Contract (civil & electrical)                                                                                                                                                                                                                                         |   | General Conditions of Contract 2023 for <b>Maintenance</b> works, CPWD Form-7 as amended/ modified up to the previous date of submission of Bid |
| <b>Clause-1</b> |                                                                                                                                                                                                                                                                                     |   |                                                                                                                                                 |
| (i)             | Time allowed for submission of performance guarantee, Programme Chart (Time and progress) and applicable Labour licenses, registration with EPFO, ESIC and BOCW Welfare Board including provident fund Code No. or proof of applying thereof from the date of letter of acceptance. |   | <b>07 days</b>                                                                                                                                  |
| (ii)            | Maximum allowable extension with late fee @ <b>0.1 % per day</b> of performance guarantee amount                                                                                                                                                                                    |   | <b>03 days</b>                                                                                                                                  |

|                 |                                                                                            |                                                        |
|-----------------|--------------------------------------------------------------------------------------------|--------------------------------------------------------|
|                 | beyond the period as provided in (i) above                                                 |                                                        |
| <b>Clause-2</b> | Authority for fixing compensation under clause-2.                                          | Superintending Engineer, Pune or his successor thereof |
| <b>Clause-5</b> | Number of days from the date of issue of letter of acceptance for reckoning date of start. | 10 days                                                |

### **TABLE OF MILE STONES**

| <b>S. No.</b> | <b>Description of Milestone (Physical &amp; Financial)</b>                         | <b>Time allowed in days (from date of start)</b> | <b>Amount to be withheld in case of non-achievement of milestone</b> |
|---------------|------------------------------------------------------------------------------------|--------------------------------------------------|----------------------------------------------------------------------|
| 1             | Submission of Technical Data Sheets/ GA Drawing for approval of Engineer-in charge | 15 Days                                          | 1%                                                                   |
| 2             | Supply of Material at site                                                         | 45 Days                                          | 2%                                                                   |
| 3             | Installation, Testing and Commission & handing over                                | 90 Days                                          | 2%                                                                   |

|                                    |   |                          |
|------------------------------------|---|--------------------------|
| Time allowed for execution of work | : | <b>03 (Three) Months</b> |
|------------------------------------|---|--------------------------|

|       | <b>Authority to decide</b>                                                                                                                                                   |                                                               |
|-------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------|
| (i)   | Authority to convey the decision of shifting of Mile stone and extension of time (Engineer-in-charge of Major Components in case of Composite Contracts, as the case may be. | <b>Executive Engineer (E) CPWD, Pune</b>                      |
| (ii)  | Authority to decide rescheduling of Milestone and extension of time                                                                                                          | <b>Superintending Engineer, Pune or his successor thereof</b> |
| (iii) | Shifting of date of start in case of delay in handing over of site                                                                                                           | <b>Superintending Engineer, Pune or his successor thereof</b> |

**Proforma of Schedule:****Clause-5****Schedule of handing over of site:**

| <b>Part</b>   | <b>Portion of Site</b>                              | <b>Description</b> | <b>Time Period for handing over reckoned from date of issue of letter of intent</b> |
|---------------|-----------------------------------------------------|--------------------|-------------------------------------------------------------------------------------|
| <b>Part A</b> | <b>Portion without any hindrance</b>                | 100% of Full site  | 10 Days                                                                             |
| <b>Part B</b> | <b>Portions with encumbrances</b>                   | Nil                |                                                                                     |
| <b>Part C</b> | <b>Portions dependent on work of other agencies</b> | NIL                | Not Applicable                                                                      |

|                 |                                                                                                                                                                             |                                                                                              |
|-----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|
| <b>Clause-6</b> | Computerized Measurement Book (CMB) / Electronic Measurement Book (EMB) Mode of Measurement :                                                                               | EMB through CPWD ERP Portal<br><b>Contractor has to get himself registered in ERP portal</b> |
| <b>Clause-7</b> | Gross work to be done together with net payment / adjustment of advances for material collected, if any, since the last such payment for being eligible to interim payment. | <b>As per the discretion of engineer in charge</b>                                           |

**Note:-** Engineer in charge at his discretion may release monthly payment even at a lesser amount subject to availability of budget grants from client. But the contractor cannot claim it as a matter of right and no interest payment as per Clause-7 is permitted unless the work executed is beyond value of Gross work done stipulated under clause 7 in schedule F and bill is pending in Division Office.

|                  |                                                                              |                                                                    |
|------------------|------------------------------------------------------------------------------|--------------------------------------------------------------------|
| <b>Clause-7A</b> | Whether Clause-7A shall be applicable.                                       | <b>Yes</b>                                                         |
| <b>Clause-7B</b> | Payment to Third Party                                                       | <b>Yes</b>                                                         |
| <b>Clause 8</b>  | Competent Authorities to inspect and issue part/final completion certificate | <b>Executive Engineer (E), CPWD, Pune or his successor thereof</b> |
| <b>CLAUSE 8A</b> |                                                                              |                                                                    |

|                       |                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|-----------------------|---------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                       | Authority to decide compensation on account if contractor fails to submit completion plans. | <b>Executive Engineer (E), CPWD, Pune or his successor thereof</b>                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Clause-10A</b>     | <b>List of testing equipment to be provided by the contractor at site lab</b>               | Megger, Earth Tester, Multimeter, Tongue tester and any other equipment as per requirement of work and instructions of Engineer-in-charge.                                                                                                                                                                                                                                                                                                                                    |
| <b>Clause-10B(ii)</b> | Whether clause 10-B(ii) shall be applicable.                                                | <b>No</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Clause-10C</b>     | Component of labour expressed as percent of value of work                                   | <b>Not Applicable</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Clause :10CC</b>   |                                                                                             | <b>Not Applicable</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Clause-11</b>      | Specifications to be followed for Execution of work                                         | CPWD General Specifications for Electrical Works Part-I (Internal) 2023, Part-II (External) 2023, Part- IV Substation 2013, Part V as amended the previous date of submission of Bid, correction slip relevant IE Rules, BIS / IEC (for E&M items)<br>C.P.W.D. Specifications 2019 Vol. I & II with correction slips upto the previous date of submission of Bid and as per manufacturer's specification i/c special conditions & particular specifications (for Civil items) |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                |                         |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|
| <b>Clause-12</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | <b>Type of work</b>                                                                                                                            | <b>Maintenance Work</b> |
| <p>The Completion Cost of work including Gross work done, extra items, deviations and admissible escalation shall, in no case, exceed 1.50 times the contract amount. Contractor has to devise a system to keep a watch on quantum of work taken up vis- à-vis balance items required to complete defined scope of work and will give the alerts in writing to Engineer-In-Charge before taking up extra items, deviations so that completion cost including extra items, deviations and admissible escalation does not exceed 1.50 times the contract value. Work executed beyond above limit will neither be recorded nor be paid.</p> |                                                                                                                                                |                         |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <b>Maximum percentage for quantity of items of work to be executed beyond which rates are to be determined in accordance with Clauses 12.2</b> | <b>See Below</b>        |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                |                         |

|                  |                                                      |                                                                               |
|------------------|------------------------------------------------------|-------------------------------------------------------------------------------|
| <b>12.2</b>      | Deviation Limit beyond which clause 12.2 shall apply | <b>No Limit</b>                                                               |
| <b>Clause-16</b> | Competent Authority for deciding reduced rates       | <b>Superintending Engineer, Pune or his successor thereof</b>                 |
| <b>Clause-17</b> | Defect Liability Period                              | <b>12 Months after Completion recorded by the competent authority of CPWD</b> |

|                  |                                                                                                                                                                                                                                          |                                                                                               |
|------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|
| <b>Clause-18</b> | List of mandatory machinery, tools & plants to be deployed by the contractor at site:                                                                                                                                                    | As per requirement of work and instructions of Engineer-in-charge.                            |
| <b>Clause-19</b> | Competent Authority to decide penalty for each default                                                                                                                                                                                   |                                                                                               |
| Clause 19C       | Authority to decide penalty for each default (for the safety provisions as per C.P.W.D. Safety Code)                                                                                                                                     | <b>Executive Engineer (E), Pune, CPWD or his successor thereof &amp; Rs. 2000 per default</b> |
| Clause 19D       | Authority to decide penalty for each default (No. of labour report)                                                                                                                                                                      | <b>Executive Engineer (E), Pune, CPWD or his successor thereof &amp; Rs. 5000 per default</b> |
| Clause 19G       | Authority to decide penalty for each (default or breach of any of the provisions of the Central Public Works Department, Contractor's Labour Regulations and Model Rules for the protection of health and sanitary arrangements default) | <b>Executive Engineer (E), Pune, CPWD or his successor thereof &amp; Rs. 5000 per default</b> |
| Clause 19K       | Authority to decide penalty for each default (Employment of skilled/semi-skilled workers)                                                                                                                                                | <b>Executive Engineer (E), Pune, CPWD or his successor thereof &amp; Rs. 1000 per default</b> |

|                  |                                 |                                                                   |
|------------------|---------------------------------|-------------------------------------------------------------------|
| <b>Clause-25</b> |                                 |                                                                   |
| (i)              | Conciliator                     | <b>Special Director General (Mumbai) or his successor thereof</b> |
| (ii)             | Arbitrator Appointing Authority | <b>SE (Pune) or his successor thereof</b>                         |
| (iii)            | Place of Arbitration            | <b>Pune or as Mutually Agreed</b>                                 |

|           |                                                                 |                |
|-----------|-----------------------------------------------------------------|----------------|
| Clause-32 | "Requirement of Technical Representative (s) and Recovery Rate" | Not Applicable |
|-----------|-----------------------------------------------------------------|----------------|

| Requirement of Technical Staff |        | Minimum experience (Years) | Designation of Technical Staff                     | Rate at which recovery shall be made from the contractor in the event of not fulfilling provision of Cl. 32 |
|--------------------------------|--------|----------------------------|----------------------------------------------------|-------------------------------------------------------------------------------------------------------------|
| Qualification                  | Number |                            |                                                    | Figures                                                                                                     |
| Graduate or Diploma Engineer   | 1      | 2 or 5 Years respectively  | Project/ Planning/ Quality/ Site/ Billing Engineer | Rs. 15,000/-<br>Per month per person                                                                        |

~~Assistant Engineers retired from Government Services that are holding Diploma will be treated at par with Graduate Engineers.~~

~~Diploma holder with minimum 10 years relevant experience with a reputed construction co. can be treated at par with Graduate Engineers for the purpose of such deployment subject to the condition that such diploma holders should not exceed 50% of requirement of degree engineers.~~

**(On non-judicial stamp paper of minimum Rs. 100)**

**(Guarantee offered by Bank to CPWD in connection with the execution of contracts)**

**Form of Bank Guarantee for Earnest Money Deposit / Performance Guarantee/  
Security Deposit/Mobilization Advance**

1. Whereas the Executive Engineer ..... (name of division) ..... CPWD on behalf of the President of India (hereinafter called "The Government") has invited ..... bids ..... under..... (NIT number) ..... dated ..... for..... (name of work) ..... The Government has further agreed to accept irrevocable Bank Guarantee for Rs. (Rupees ..... only) valid upto ..... (date)\* ..... as Earnest Money Deposit from ..... (name and address of contractor) ..... (hereinafter called "the contractor") for compliance of his obligations in accordance with the terms and conditions of the said NIT.

**OR\*\***

Whereas the Executive Engineer ..... (name of division)....., CPWD on behalf of the President of India (hereinafter called "The Government") has entered into an agreement bearing number..... with ..... (name and address of the contractor) ..... (hereinafter called "the Contractor") for execution of work ..... (name of work) ..... The Government has further agreed to accept an irrevocable Bank Guarantee for Rs. .... (Rupees..... only) valid upto..... (date) ..... as Performance Guarantee/Security Deposit/Mobilization Advance from the said Contractor for compliance of his obligations in accordance with the terms and conditions of the agreement.

2. We, ..... (indicate the name of the bank)..... (hereinafter referred to as "the Bank"), hereby undertake to pay to the Government an amount not exceeding Rs. .... (Rupees..... only) on demand by the Government within 10 days of the demand.
3. We, ..... (indicate the name of the Bank)....., do hereby undertake to pay the amount due and payable under this guarantee without any demur, merely on a demand from the Government stating that the amount claimed is required to meet the recoveries due or likely to be due from the said Contractor. Any such demand made on the Bank shall be conclusive as regards the amount due and payable by the Bank under this Guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding Rs. .... (Rupees only)

4. We, ..... (indicate the name of the Bank)..... , further undertake to pay the Government any money so demanded notwithstanding any dispute or disputes raised by the contractor in any suit or proceeding pending before any Court or Tribunal, our liability under this Bank Guarantee being absolute and unequivocal. The payment so made by us under this Bank Guarantee shall be a valid discharge of our liability for payment there under and the Contractor shall have no claim against us for making such payment.

5. We, ..... (indicate the name of the Bank)..... , further agree that the Government at its option shall be entitled to enforce this Guarantee against the Bank as a principal debtor at the first instance without proceeding against the Contractor and notwithstanding any security or other guarantee the Government may have in relation to the Contractor's liabilities.

6. This guarantee will not be discharged due to the change in the constitution of the Bank or the Contractor.

7. We, ..... (indicate the name of the Bank)..... , undertake not to revoke this guarantee except with the consent of the Government in writing.

8. This Bank Guarantee shall be valid up to..... unless extended on demand by the Government. Notwithstanding anything mentioned above, our liability against this guarantee is restricted to Rs. .... (Rupees.....only) and unless a claim in writing is lodged with us within the date of expiry or extended date of expiry of this guarantee, all our liabilities under this guarantee shall stand discharged.

Date .....

Witnesses:

1. Signature .....  
Name and address

Authorized signatory  
Name  
Designation

2. Signature .....  
Name and address

Staff Code No.  
Bank Seal

\*Date to be worked out on the basis of validity period of 90 days where only financial bids are invited and 180 days for two/three bid system from the date of submission of tender.

\*\*In paragraph 1, strike out the portion not applicable. Bank Guarantee will be made either for earnest money or for performance guarantee/security deposit/mobilization advance, as the case may be.

# **PART - B**

## **(E&M WORKS)**

**SECTION-I**  
**BRIEF PARTICULARS OF THE WORK**

1. Salient details of the work for which bids are invited are as under:

| Sl. No. | Name of work                                                                                                                                 | Estimated Cost  | Period of completion |
|---------|----------------------------------------------------------------------------------------------------------------------------------------------|-----------------|----------------------|
| 1.      | Providing additional 11kV HT metering cubicle and HT Cable for existing MSEDCL HT Connection at NCCS, University Campus at GaneshKhind Pune. | Rs. 10,00,013/- | 03 (Three) Months    |

2. The work is situated at **NCCS, University Campus at GaneshKhind Pune.**
3. General features and major components of the work are as under:  
 i) Providing additional 11kV HT metering cubicle and HT Cable for existing MSEDCL HT Connection at NCCS, University Campus at GaneshKhind Pune.
4. Work shall be executed according to General Conditions of Contract for Central P.W.D. Works available separately at printer's outlets. The bidder may obtain the address of the outlets from the, **Executive Engineer (E), CPWD, Pune**. The General Conditions of Contract for Central Public Works Department are also available on web site [www.cpwd.gov.in](http://www.cpwd.gov.in).
-

## **SECTION-II**

### **1.0 General :**

#### **INFORMATION & INSTRUCTIONS FOR BIDDERS**

- 1.1 All information called for in the enclosed forms should be furnished against the relevant columns in the forms. If for any reason, information is furnished on a separate sheet, this fact should be mentioned against the relevant column. Even if no information is to be provided in a column, a "nil" or "no such case" entry should be made in that column. If any particulars/query is not applicable in case of the bidder, it should be stated as "not applicable". The bidders are cautioned that not giving complete information called for in the application forms or not giving it in clear terms or making any change in the prescribed forms or deliberately suppressing the information may result in the bid being summarily disqualified. Bids made by telegram or e-mailed or telex and those received late will not be entertained.
- 1.2 References, information and certificates from the respective clients certifying suitability, technical knowledge or capability of the bidder should be signed by an officer not below the rank of Executive Engineer or equivalent.
- 1.3 The bidder may furnish any additional information which he thinks is necessary to establish his capabilities to successfully complete the envisaged work. He is, however, advised not to furnish superfluous information. No information shall be entertained after submission of eligibility criteria document unless it is called for by the Employer.

### **2.0 Definitions:**

- 2.1 In this document the following words and expressions have the meaning hereby assigned to them.
- 2.2 Employer: Means the President of India, acting through the Executive Engineer(E), CPWD, PUNE.
- 2.3 Bidder: Means the individual, proprietary firm, firm in partnership, limited company private or public or corporation.

**2.4** "Year" means "Financial Year" unless stated otherwise.

**3.0 Method of application:**

**3.1** If the bidder is an individual, the application shall be signed by him above his full type written name and current address.

**3.2** If the bidder is a proprietary firm, the application shall be signed by the proprietor above his full typewritten name and the full name of his firm with its current address.

**3.3** If the bidder is a firm in partnership, the application shall be signed by all the partners of the firm above their full typewritten names and current addresses, or, alternatively, by a partner holding power of attorney for the firm. In the latter case a certified copy of the power of attorney should accompany the application. In both cases a certified copy of the partnership deed and current address of all the partners of the firm should accompany the application.

**3.4** If the bidder is a limited company or a corporation, the application shall be signed by a duly authorized person holding power of attorney for signing the application accompanied by a copy of the power of attorney. The bidder should also furnish a copy of the Memorandum of Articles of Association duly attested by a Public Notary.

**4.0 Final decision-making authority.**

The employer reserves the right to accept or reject any bid and to annul the process and reject all bids at any time, without assigning any reason or incurring any liability to the bidders.

**5.0 Particulars provisional**

The particulars of the work given in Section I are provisional. They are liable to change and must be considered only as advance information to assist the bidder.

**6.0 Site visit**

The bidder is advised to visit the site of work, at his own cost, and examine it and its surroundings to himself collect all information that he considers necessary for proper assessment of the prospective assignment.

(Annexure-I)

**Receipt of Deposition of Original EMD**

**Receipt No.:**

**Date:**

- |                                    |                                                                                                                                                     |
|------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. Name of Work                    | <b>Providing additional 11kV HT metering cubicle and HT Cable for existing MSEDCL HT Connection at NCCS, University Campus at GaneshKhind Pune.</b> |
| 2. NIT No.                         | <b>31/NIT/EE(E)/PCED/2026-27</b>                                                                                                                    |
| 3. Estimated Cost                  | <b>Rs. 10,00,013/-</b>                                                                                                                              |
| 4. Amount of Earnest Money Deposit | <b>Rs. 50,001/-</b>                                                                                                                                 |
| 5. Last date of submission of bid  | <b>15/07/2026</b>                                                                                                                                   |

.....  
.....

- |                                    |       |
|------------------------------------|-------|
| 1. Name of Contractor              | ..... |
| 2. Form of EMD                     | ..... |
| 3. Amount of Earnest Money Deposit | ..... |
| 4. Date of submission of EMD       | ..... |

Signature, Name and Designation  
of EMD receiving officer (EE / AE(P) / AAO)

Along with Office stamp

---

**Note :-**

1. The Executive Engineer of all divisions including NIT issuing division / sub-division of CPWD should receive the original EMD for tender of other division.
2. The NIT approving authority / EE at the time of issue of NIT shall also fill and upload the above prescribed format of receipt of deposition of original EMD along with NIT. The Executive Engineer receiving EMD in original form shall examine the EMD deposited by the bidder and shall issue a receipt of deposition of earnest money to the agency in a given format uploaded by tender inviting EE. The receipt may be issued by the AE(P)/AE/AAO.
3. The Executive Engineer receiving original EMD shall also intimate tender inviting Executive Engineer above deposition of EMD by the agency by email/fax/telephonically.
4. The original EMD receiving Executive Engineer shall release the EMD after verification from the e-tendering portal website ([www.etender.cpwd.gov.in](http://www.etender.cpwd.gov.in) > tender free view > advance search > awarded tenders) that the particular contractor is not L-1 tenderer and work is awarded.
5. The tender inviting Executive Engineer will call for original EMD of the L-1 tenderer from EMD receiving Executive Engineer immediately.

**(Annexure-II)**

**UNDERTAKING REGARDING GST REGISTRATION**

**To,**  
The Executive Engineer(E),  
Central P.W.D., Pune.

**Subject: Providing additional 11kV HT metering cubicle and HT Cable for existing MSEDCL HT Connection at NCCS, University Campus at GaneshKhind Pune.**

**Sir,**  
Having examined the details given in press notice and bid document for the above work, I/We hereby submit the following.

If the bidder has not obtained GST registration **as applicable**, then he shall scan & upload following undertaking along with the bid document **“If work is awarded to me, I/We shall obtain GST registration certificate as applicable, within one month from date of receipt of award of letter or before release of any payment by CPWD, whichever is earlier, failing which I/We shall be responsible for any delay in payments which will be due towards me/us on account of the work executed and /or for any action taken by CPWD or GST department in this regard.**

Date of submission

Seal of bidder.

Signature(s)

(Annexure-III)

**UNDERTAKING REGARDING ELECTRICAL LICENCE**

**To,**  
The Executive Engineer(E),  
Central P.W.D., Pune.

**Subject: Providing additional 11kV HT metering cubicle and HT Cable for existing  
MSEDCL HT Connection at NCCS, University Campus at GaneshKhind Pune.**

**Sir,**  
Having examined the details given in press notice and bid document for the above  
work, I/We hereby submit the following.

*“I/we hereby certify that I/we will either obtain valid electrical license at the time of  
execution of electrical work or associate CPWD enlisted Contractor having valid electrical  
license of eligible class.”*

Date of submission

Seal of bidder.

Signature(s)

**On non- judicial stamp paper of minimum Rs. 100/-**

**Annexure IV**

**UNDERTAKING FOR ASSOCIATION FROM MSEDCL REGISTERED CONTRACTOR**

1. I/WE ..... a MSEDCL registered agency / contractor having Registration number..... Issued vide letter ..... Here by agreed to associate with M/s ..... CPWD registered contractor for the following work.

**“Providing additional 11kV HT metering cubicle and HT Cable for existing MSEDCL HT Connection at NCCS, University Campus at GaneshKhind Pune.”**

2. I /We further offer full support in execution of aforesaid work as per the scope of work mentioned in NIT.

For M/s.....  
.....

**(Authorised signatory of MSEDCL registered agency / contractor)**

**Counter Signature,**

**Major contractor**

**ELIGIBILITY CRITERIA FOR MAIN AGENCY WITH RESPECT TO ASSOCIATED ELECTRICAL AGENCY TO BE ENGAGED BY MAIN CONTRACTOR FOR EXECUTING THE WORKS**

1. After award of work, within 07 days the main contractor if doesn't fulfil the eligibility on its own, will have to submit Name (s) of the proposed associate contractor who fulfil set eligibility criteria for the relevant sub-head/ Component of electrical part ending last day of previous month of submission. The documents will have to be submitted in detail as required, which will be checked as per NIT for approval of the associate contractors. It will be essential that proposed electrical associate agency qualify the eligibility criteria for sub - head given in NIT.
2. The department reserves the right to allow the main firm to submit additional Documents /additional names of the associates in case of the deficiencies in documents or in case of no associate getting qualified in respect of certain subheads. The same will have to be complied with the main contractor within the time allowed. The decision of the department shall be firm & binding on the intending bidders.
3. The main firm should submit the willingness from eligible specialized contractors to get associated with them for execution of the works in wholesome manner.
4. In support of the eligibility conditions of the proposed associated electrical contractor, copy of their registration documents, Electrical Contractor's License, GST documents, eligibility documents by competent authority shall have to be submitted. Such associate electrical contractor will certify that they are not debarred as on the day of application for sale of tender.
5. In event of the concerned E&M agency not performing satisfactorily or failure of associate/sub-contractor to complete the E&M work, the main contractor on the written direction of the department, shall remove the Associate/sub-contractor deployed on the work and shall submit name of new associate who fulfils the conditions mentioned in NIT to execute the leftover work without any loss of time or variation in cost to the department in this regard. Such associates shall also enter into Agreement with the main tenderer and shall meet the entire guarantee for the equipments already supplied for which payment has been released by the department in part. If any equipment supplied for the work, during the currency of the earlier Associate/sub-contractor and paid partly by the department, becomes redundant /not in a position to be installed and commissioned and put to beneficial use due to change in agency for execution of E&M work, the main contractor shall be liable for replacement of the equipment(S) at no cost to Department.
6. For components of E&M works, the eligibility criteria for Electrical/ specialized agencies to be associated by the main contractor after award of work will be as detailed below:
  - i. The Composite /main firm should either himself meet the eligibility conditions for the respective E&M packages or otherwise he will have to associate an agency meeting the eligibility requirements given below. They will have to submit willingness certificate for each of the component of the Electrical work for Associate agencies by clearly indicating the applicable component of the work.
  - ii. The firm should have successfully completed similar works during the last 7 years ending up to previous day of last date of submission of tender with completion

- iii. certificate issued by an officer not below the rank of Executive Engineer or Equivalent duly attested.
- iv. The value of executed works shall be brought to current costing level by enhancing the actual value of work at simple rate of 7% per annum, calculated from the date of completion to the last date of submission of bid.

**NOTE:** Total cost is taken as below which is rough cost for the purpose of eligibility criteria only, and should not be used or interpreted for any other purpose.

7. SITC means: Supplying, Installation, Testing & Commissioning.
8. The Composite category contractor is also be eligible to carry out himself / herself without associating any specialized agency provided:
  - (a) He fulfils the prescribed eligibility criteria for the work.
9. The composite contractor and the associated specialized agency shall give required affidavit on Rs 100/- or 500/- legal stamp paper to confirm their association.

| Sl. No. | Name of Component                                                            | App. Cost of work in lakh | Eligibility criteria                                                                                                                                                                                                                                                                                                            | Similar Work                                                                              |
|---------|------------------------------------------------------------------------------|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|
| 01      | Supplying, installation, testing and commissioning of Substation equipment's | Rs. 10.00 Lakh            | <p>One similar completed works costing of value not less than 80% of cost of Component</p> <p><b>OR</b></p> <p>Two similar completed works costing each of value not less than 60% of cost of Component</p> <p><b>OR</b></p> <p>Three similar completed works costing each of value not less than 40% of cost of Component.</p> | Supplying /fabrication, installation, testing and commissioning of Substation equipment's |

**WILLINGNESS CERTIFICATE FROM CONCERNED COMPETENT ELECTRICAL CONTRACTOR**

**Name of work: Providing additional 11kV HT metering cubicle and HT Cable for existing MSSEDCL HT Connection at NCCS, University Campus at GaneshKhind Pune.**

I/ We hereby give my consent to associate with M/s .....for executing the minor component of work of ..... (Mention category)

1. I/We will execute the work as per specifications and conditions of the agreement and as per direction of the Engineer –in-charge for the corresponding minor work till the completion of the work.
2. I/We will be responsible for necessary action to handover the installation and for rectification of defects and repair during the defeat liability / warranty period.
3. Also I/We will employ full time technically qualified Engineer/ Supervisor for the minor component of the work as specified in clause 32 for the work. I/We will attend inspection of officers of the department as and when required.

Dated:

**Signature of Main Contractor**

**Address:**

**Telephone:**

**Email:**

**Signature of Associate Electrical Contractor  
and Registration detail Address:**

**Address:**

**Telephone:**

**Email:**

## **MEMORANDUM OF UNDERSTANDING [M.O.U] BETWEEN**

1] M/S [Name of the firm with full address] [Henceforth called the main contractor]  
And

2] M/S [Name of the firm with full address]  
[Henceforth, called Associated Electrical Contractor or Electrical Contractor]

For the execution of Work:

**Name of work: Providing additional 11kV HT metering cubicle and HT Cable for existing MSEDCL HT Connection at NCCS, University Campus at GaneshKhind Pune.**

We state that M.O.U between us will be treated as an agreement and has legality as per Indian Contract Act [amended up to date] and the department [CPWD] can enforce all the terms and conditions of the agreement for execution of the above work. Both of us shall be responsible for the execution of work as per the agreement to the extent this MOU allows. In case of any dispute, either of us will go for mediation/arbitration by the SE or above, CPWD. Any of us may appeal against the decision/arbitration to the SE or above, CPWD, His decision shall be final and binding on both of us.

### **We have agreed as under:**

1. The electrical contractor will execute all electrical works in the wholesome manner as per terms and conditions of the agreement. The electrical contractor shall be paid as per standard procedure followed by the department and the agreement between parties. Any type of internal transaction between the electrical contractor and the main contractor shall be as per their convenience and mutual understanding without involving the department.
2. The electrical contractor shall be liable for disciplinary action if he failed to discharge the action[s] and other legal action as per agreement.
3. All the machinery and equipment, tools and tackles required for execution of the electrical works, as per agreement, shall be the responsibility of the electrical contractor.
4. The site staff required for the electrical work shall be arranged by the electrical contractor as per terms and conditions of the agreement.
5. Site order book maintained for the said work shall be signed by the main contractor as well as by the Engineer of the Associated Contractor and by Associated Contractor himself.
6. All the correspondence regarding execution of the electrical work shall be done by the Department with the Associated Contractor with a copy to the main contractor. In case of non- compliance of the provisions of agreement, the main contractor, as well as the associated contractor shall be responsible. The action under clauses 2 and 3 shall be initiated and taken against the main contractor

Signature of Main Contractor

Address:

Telephone:

FAX:

Email:

Signature of Associate Electrical Contractor  
and Registration detail Address:

Address

Telephone:

FAX:

Email:

Countersigned

EXECUTIVE ENGINEER (E), PUNE

### **ADDITIONAL, SPECIFICATION AND CONDITIONS**

1. The work shall be carried out strictly in accordance with the CPWD specifications for electrical works Part-I Internal 2023, Part II External 2023, part-IV (substation) 2013 relevant IS and IE rules as amended up to date and in accordance with Indian Electricity Rules, 1956, Indian Electricity Act, 1910 as amended up to date, MSEDCL guidelines and as per instructions of the Engineer-in-charge including as below and nothing will be paid extra.
2. **All liasoning works with MSEDCL** as required for the below scope of the work i/c but not limited to shut down, point of supplying metering, charging permission for metering cubicle panel, RMU, testing estimate for RMU, transformer, CT/PT of metering cubicle panel i/c receiving test report from testing section from MSEDCL (Local state electricity department) shall be borne by the successful tenderer. **Nothing extra shall be paid on account of this.**  
**Only statutory charges/fees paid to the local bodies will be paid by the department or reimbursed by the department on actual basis on production of valid receipt for same or directly to the local bodies.**  
  
**The work involves laying of cable in PMC areas such as road/footpath etc. the agency has to liason with concerned department of PMC for obtaining necessary permission/approval for execution of work in these areas. Nothing extra shall be paid on account of this. However road cutting and restoration charges or any other statutory charges/fees shall be paid by the department/client or if same is paid by contractor it shall be reimbursed to the contractor on actual basis on production of valid receipt for same.**
3. The contractor is advised to visit the site before quoting the rates for determining the site condition. Additional to this the contractor has to liason with the other contractor executing cabling work, so that no hindrance is being created on account of this. No claim shall be entertained at later stage for this work.
4. All materials to be used on this work by the contractor shall be got approved from the Engineer-in-charge/his representative before installation at site.
5. The work shall be carried out according to approved drawings/details which shall be subsequently issued to the successful tenderer for execution of work and as per instructions of the Engineer-in-charge who will have right to be change the layout as per requirement at site and the contractor shall not have any claim due to change in layout.
6. All damages done to the building during execution of electrical work shall be the responsibility of the contractor and the same will be made good immediately at his own cost to the satisfaction of the Engineer-in-charge. Any expenditure incurred by the department in this condition shall be recovered from the contractor and decision of the Engineer-in-charge about recovery shall be final.
7. The bad workmanship will not be accepted and defects shall be rectified at contractor's cost of the satisfaction of the Engineer-in-charge. The programmes of works are to be co-ordinate in accordance with the building work and no claim for idle labour will be entertained.
8. All the debris of the electrical works should be removed and the site should be cleared by the contractor immediately after the accruing of debris. Similarly, any rejected material should be immediately cleared off from the site by the contractor.
9. Cement for this bonafide work is to be arranged and used by the contractor himself and nothing extra will be paid on this account.

10. The contractor or his representative is bound to sign the site order book as and when required by the Engineer-in-charge and to comply with the remarks therein.
11. The contractor shall make his own arrangement at his own cost for electrical/general tools and plants required for the work.
12. The rates quoted shall be inclusive of all taxes.
13. The entire installation shall be at the risk and responsibility of the contractor until these are tested and handed over to the department. However, if there is any delay in construction from the department side, the installation may be taken over in parts, but the decision on the same shall rest with Engineer-in-Charge which shall be binding on the contractor.
14. The connection, inter connections, earthing and loop-earthing shall be done by the contractor, wherever required and nothing extra shall be paid on this account.
15. In case of equivalent, prior approval of Engineer-in-charge has to be taken before bringing the material to site.
16. The contractor has to liaison with the civil contractor for all the electrical works associated with the civil works nothing extra will be paid in case of any extra work occurred due to this.
17. In case of any accident during execution of work/ operation leading to injuries / damages to human being / equipment's, loss of life the contractor shall be fully responsible for setting all claims and indemnify the department against any claim arising out of such accident.
18. Nothing extra shall be paid for:-
  - a) Inter connections with thimbles / wires / taps / strips / connector etc.
19. Any dismantled materials received from the site should be returned back to the department / JE.
20. Material to be used in the work shall be ISI marked. The makes of materials have been indicated in the list of acceptable makes. The material to be used in the work shall be got approved from the Engineer-in-charge/his representative before its use at site. The Engineer-in-Charge shall reserve the right to instruct the contractor to remove the material which, in his opinion, is not acceptable.
21. After completion of the installation, testing shall be carried out as provided in CPWD specifications. The contractor will have to furnish completion plans and completion certificate as per specifications.
22. The earthing shall be carried out in the presence of the Engineer-in-Charge or his authorized representative.
23. Terms of Payment: -

The following percentage of contract rates shall be payable against the stages of work as shown.

Stage of Work All Items

  1. After delivery at site in good condition on pro rata basis - 70%
  2. On completion of pro-rata installation - 20%
  3. On successful testing and commissioning of the system- 10%

## **Technical Specification of Ring Main Unit**

### **ENCLOSURE :**

#### **1. Outer Enclosure :**

The RMU enclosure (Outer) shall be made up of CRCA of 2 mm thickness or galvanised of 1.6 mm thickness. The rating of enclosure shall be suitable for operation on three phase, three wire, 22 kV or 11 KV, 50 cycles, A.C. System with short-time current rating of 21 kA for 3 seconds for 22 kV supply with Panels. The complete RMU enclosure shall be of degree of protection **IP 54** (Main Door close) and **IP 41** (Main Door open). The enclosure shall provide full insulation, making the Switchgear insensitive to the environment like temporary flooding, high humidity etc. The active parts of the Switchgear shall be maintenance-free and the unit shall be minimum -maintenance. The complete RMU unit shall be powder coating of Dark Grey Code 632 as per BS 381C. Each switchboard shall be identified by an appropriately sized label which clearly indicates the functional units and their electrical characteristics. The RMU metal parts shall be made of high thickness high tensile steel which must be grit/short blasted, thermally sprayed with Zinc alloy (not for galvanised), phosphate and subsequently painted with Polyurethane based powder paint, the overall (including outer and inner paint layer), the thickness of paint layer shall be not less than 150 microns.

#### **2. Inner enclosure (Main tank)**

The tank shall be robotically welded stainless steel sheet of minimum 2mm thickness. The tank shall be sealed and no handling of gas is required throughout the 25 years of service life. However, the SF6 gas pressure inside the tank shall be constantly monitored by a temperature compensating gas pressure indicator offering a simple go, no-go indication. The gas pressure indicator shall be provided with green pressure and red pressure zones. There shall be one Non – return valve to fill up the gas. The manufacturer shall give guarantee for maximum leakage rate of SF6 gas will be lower than 0.1 % / year. An absorption material such as activated alumina in the tank shall be provided to absorb the moisture from the SF6 gas to regenerate the SF6 gas following arc interruption. The degree of protection of the inner enclosure shall be IP 67. The temperature rise test shall be carried out on complete RMU unit and test reports shall be submitted with the offer. The compact RMU Unit shall be provided with a pedestal made up of M.S. Angle to mount the unit on plain surface. The height of the bottom of cable box shall be 310 mm to provide the turning radius for the HT cable termination.

#### **3. BUSBARS :**

The three nos. of continuous Busbars made up of EC grade tinned copper of rating current 630A shall be provided. The Short time rating current shall be 21 kA for 3 seconds for 22 kV. The Busbar connections shall Anti- oxide greased.

#### **4. Load Break Switches ( Isolators)**

The Load Break Isolators for Incoming and Outgoing supply must be provided and the load break isolators are fully insulated by SF6 gas. The operating mechanism shall be spring assisted mechanism with operating handle for ON /OFF. Earth positions with arrangement for padlocking in each position. Also independent manual operations with mechanically operated indicator. The earth switch shall be naturally interlocked to prevent the main and earth switch being switched „ON“ at the same time. The selection of the main and earth switch is made by a lever on the facia, which is allowed to move only if the main or earth switch is in the off position. The load break isolators should have the facility for future remote operation. Each load break switch shall be of the triple pole, simultaneously operated, non-automatic type with quick break contacts and with integral earthing arrangement. The rated current of Isolator shall be 630 Amps continuous at maximum ambient temperatures. No Derating shall be allowed. For the isolator at an Ambient temperature of 50 °C, which means that Isolator rating should be 630 A

maximum ambient temperature of 50 °C. The relevant type test report to prove the temperature rise below 55 °C shall be submitted by the bidder with the offer.

## **5. EARTHING OF ISOLATORS AND DISTRIBUTION TRANSFORMER BREAKERS (EARTH SWITCH).**

- a) The unit shall consist of a 630 Amp Tee Off spring assisted three position rotating arc type SF6 circuit breaker unit, with integral fault making/dead breaking earth switch, the function shall be naturally interlocked to prevent the main and earth switch from being switched 'ON' at the same time and the CB not allowed to close in 'Earth On' position. The selection of the main/earth switch lever on the fascia, which is allowed to move only if the main or earth switches in the off position. The lever may be padlocked in either the main or earth position.
- b) The cables shall be earthed by an integral earthing switch with short-circuit making capacity, in compliance with IEC 129 standard. The earthing switch shall be operable through the main circuit mechanism and manual closing shall be driven by a fast-acting mechanism, independent of operator action.

## **6. CIRCUIT BREAKER ( SF6 or Vacuum media for arc quenching).**

- a) The 3 pole circuit breaker for the protection of Distribution transformers shall be enclosed in the main tank. The rated breaking and making current at rated voltage shall be as follows:

For 22 kV System : Rated breaking capacity shall be 21 kA for 3 second.

Rated making current shall be 40 kA for 3 second

- b) The manual operation of the circuit breaker shall not have an effect on the spring charging mechanism.
- c) The circuit breaker shall be fitted with a mechanical flag, which shall operate in the event of fault occurrences. The breaker indications **ON** and **OFF** positions shall be indicated by suitable flag. For **ON** position indication by Red flag and **OFF** position indication by Green flag shall be provided.
- d) The circuit breaker shall be operated by the same unidirectional handle or switch. The rated operating sequence shall be **O-3min-CO-3 min- CO**.

- e) The protection on the circuit breaker:

The circuit breaker unit fitted with 3 Nos. protection CT's ( tape wound) of ratio 100-50A/1 A, 5P10 class, having low burden and trip coil and auxiliary switch assembly allowing the use of a **self-powered non directional IDMT (Inverse Definite Minimum Time) Over Current and Earth Fault Relays (Microprocessor based)**. One Three Element Relay having two O/C elements and one E/F element shall be provided for this purpose. All these relays shall be of 3 seconds IDMT characteristics, the O/C elements current setting variable from 10% to 200% of CT secondary ratings, and the E/F elements having current setting variable from 10% to 40%. The protection curves and all other settings shall be adjustable from touch panel.

## **7. BUSHINGS**

All the bushings shall be of same height, parallel, on equal distances from the ground and protected by a cable cover. It is preferable to have bushings accessible from the rear side of the RMU.

## **8. CABLE BOXES**

All cable boxes shall be air insulated suitable for dry type cable terminations. The cable boxes at each of the two ring switches suitable HV cables of size 3C x 300 sq.mm and circuit breaker cable suitable up to 3C x 300 sq.mm. Necessary Right angle Boot should be supplied to the cable terminations. Compound filled cable boxes are not acceptable. The cable box shall be arc resistant as per IEC 62271-200 amended upto date. The internal arc fault test on cable box shall be carried out for 11 kV system for 20 kA for 1 second and for 22 kV system for 16 kA for 1 second. The clearance between phase to phase and phase to earth shall be as per IEC 61243 – 5 amended upto date. The cable termination and gland arrangements shall be appropriate for the type and style of cables used at the time.

## **9. VOLTAGE INDICATOR LAMPS AND PHASE COMPARATORS**

- a) The RMU shall be equipped with a voltage indication. There should be a facility to check the synchronization of phases with the use of external device. It shall be possible for the each of the function of the RMU to be equipped with a permanent voltage indication as per IEC 61958 to indicate whether or not there is voltage on the cables.
- b) The capacitive dividers will supply low voltage power to sockets at the front of the unit, an external lamp must be used to indicate live cables.
- c) Three outlets can be used to check the synchronization of phases with the use of an external device.

## **10. EXTENSIBLE**

- a) Each combination of RMU shall have the provision for extension by load break isolators / breakers in future, with suitable trenching chamber, accessories and necessary Busbars. Extensible isolators and circuit breakers shall be individually housed in separate SF6 gas enclosures. Multiple devices inside single gas tank / enclosure will not be acceptable. In case of extensible circuit breakers, the Breaker should be capable of necessary short circuit operations as per IEC standard i.e. 20 KA for 3 second for 11kV system and 16 kA for 3 second for 22 kV system. The Breaker should have a rated current carrying capacity of 200 A.

## **11. WIRING & TERMINALS:**

- a) The wiring should be of high standard and should be able to withstand the tropical weather conditions. All the wiring and terminals (including take off terminals wiring for future automation, DC, Control wiring), Spare terminals shall be provided by the contractor. The wiring cable must be standard single-core multi stranded, non-sheathed, Core marking(ferrules), stripped with non-notching tools and fitted with end sleeves, marked in accordance with the circuit diagram with printed adhesive marking strips.
- b) All wiring shall be provided with single core multi-strand copper conductor wires with P.V.C insulation and shall be flame retardant low smoke type.
- c) The wiring shall be carried out using multi-strand copper conductor super flexible PVC insulated wires of 1.1 KV Grade for AC Power, DC Control and CT circuits. Suitable coloured wires shall be used for phase identification and interlocking type ferrules shall be provided at both ends of the wires for wire identification. Terminal should be suitably protected to eliminate sulphating. Connections and terminal should be able to withstand vibrations. The terminal blocks should be stud type for controls and disconnecting link type terminals for CT leads with suitable spring washer and lock nuts.
- d) Flexible wires shall be used for wiring of devices on moving parts such as swinging Panels (Switch Gear) or panel doors. Panel wiring shall be securely supported, neatly arranged readily accessible and connected to equipment terminals, terminal blocks and wiring gutters. The cables shall be uniformly bunched and tied by means of PVC belts and carried in a PVC carrying trough.

- e) The position of PVC carrying trough and wires should not give any hindrance for fixing or removing relay casing, switches etc., Wire termination shall be made with solder less crimping type of tinned copper lugs. Core identification plastic ferrules marked to correspond with panel wiring diagram shall be fitted with both ends of each wire. Ferrules shall fit tightly on the wire when disconnected. The wire number shown on the wiring shall be in accordance with the IS.375.
- f) All wires directly connected to trip circuits of breaker or devices shall be distinguished by addition of a red colour unlettered ferrule.
- g) Inter-connections to adjacent Panels (Switch Gear) shall be brought out to a separate set of Terminal blocks located near the slots or holes to be provided at the top portion of the panel. Arrangements shall be made for easy connections to adjacent Panels (Switch Gear) at site and wires for this purpose shall be provided and bunched inside the panel. The bus wire shall run at the top of the panel. Terminal block with isolating links should be provided for bus wire. At least 10% of total terminals shall be provided as spare for further connections. Wiring shall be done for all the contacts available in the relay and other equipment and brought out to the terminal blocks for spare contacts. Colour code for wiring is preferable in the following colours.

Voltage supply Red, Yellow, Blue for phases, Black for Neutral CT circuits similar to the above 250V AC circuits Black for both phases and neutral Earthing Green

- h) The wiring shall be in accordance to the wiring diagram for proper functioning of the connected equipment. Terminal blocks shall not be less than 650V grade and shall be piece-moulded type with insulation barriers.
- i) The terminal shall hold the wires in the tight position by bolts and nuts with lock washers. The terminal blocks shall be arranged in vertical formation at an inclined angle with sufficient space between terminal blocks for easy wiring.
- j) The terminals are to be marked with the terminal number in accordance with the circuit diagram and terminal diagram. The terminals should not have any function designation and are of the tension spring and plug-in type.

## **12. EARTHING**

- a) The RMU outdoor metal clad, Switch Gear, Load break isolators, Distribution Transformer, R.S.Joists, M.S. Channels / M.S. Angles etc, shall be equipped with an earth bus securely fixed along the base of the RMU.

## **13. TAKE OFF TERMINAL UNITS FOR FUTURE AUTOMATION:**

- a) The RMU should be provided with necessary take off terminal units for future automations. Remote operation of the RMU's line switches must be possible using motors fitted to the operating mechanism.
- b) It shall be possible to fit the motors either directly in manufacturing plant or on site as and when required. Installation on site shall be possible with the RMU fully energized and manufacturer should provide detailed instructions for installation to the control mechanism.
- c) The fitting of the motors to the mechanism must not in any way impede or interfere with the manual operation of the switches or circuit breaker.
- d) The tenderer may wish to advice of options and cost for remote supervisory control units of the RMU and MV network supervisory control system.
- e) Complete Ring Main Unit shall be capable of withstanding 630A current without any damage being caused, in accordance with the recommendations IEC 694 and IEC 298.

## **14. FAULT PASSAGE INDICATORS / Earth Fault Indicators (FPI/EFI):**

- a) These shall facilitate quick detection of faulty section of line. The fault indication may be on the basis of monitoring fault current flow through the device. The unit should be self-contained requiring no auxiliary power supply. The FPI shall be integral part of RMU.

## **15. Operating lever**

An anti-reflex mechanism on the operating lever shall prevent any attempts to re-open immediately after closing of the switch or earthing switch.

All manual operations will be carried out on the front of the switchboard.

The effort exerted on the lever by the operator should not be more than 250 N for the switch and circuit breaker.

The overall dimensions of the RMU shall not be increased due to the use of the operating handle. The operating handle should have two workable positions 180° apart.

#### **16. Front plate**

The front shall include a clear mimic diagram which indicates different functions.

The position indicators shall give a true reflection of the position of the main contacts. They shall be clearly visible to the operator.

The lever operating direction shall be clearly indicated in the mimic diagram.

The manufacturer's plate shall include the switchboard's main electrical characteristics.

#### **17. Danger Board :**

The danger Board plate as per relevant IS shall be riveted on the front plate of the RMU.

### **18. TYPE and ROUTINE TESTS :**

#### **a) Type tests:**

- a) The equipment offered in the tender should have been successfully type tested at NABL laboratories in India or equivalent International Laboratories in line with the relevant standard and technical specification, within the last 5 (five) years from the date of offer. The bidder shall be required to submit complete set of the type test reports in physical format along with the offer.
- b) In case these type tests are conducted earlier than five years, all the type tests as per the relevant standard shall be carried out by the successful bidder at NABL in presence of purchaser's representative free of cost before commencement of supply. The undertaking to this effect should be furnished along with the offer without which the offer shall be liable for rejection.
- c) The list of type tests is as follows:
  - 7.1 Short time current withstand test and peak current withstand test.
  - 7.2 Lightning Impulse voltage with-stand test
  - 7.3 Temperature rise test.
  - 7.4 Short Circuit current making and breaking tests.
  - 7.5 Power frequency voltage withstand test (dry).
  - 7.6 Capacitive current switching test confirming to IEC.
  - 7.7 Mechanical operation test.
  - 7.8 Measurement of the resistance of the main circuit.
  - 7.9 Degree of protection of main tank and outer enclosure
  - 7.10 Switch, circuit breaker, earthing switch making capacity.
  - 7.11 Switch, circuit breaker breaking capacity.
  - 7.12 Internal arc withstand.
  - 7.13 Checking of partial discharge on complete unit.

The details of type test certificate according to the composition of the Switchboard shall be submitted with the offer.

In addition, for switches, test reports on rated breaking and making capacity shall be supplied.

For earthing switches, test reports on making capacity, short-time withstand current and peak short-circuit current shall be supplied.

### **19. ACCEPTANCE & ROUTINE TESTS:**

- a) All acceptance and routine tests as stipulated in the respective applicable standards amended up-to-date for all the equipment shall be carried out by the supplier in the presence of purchaser's representative without any extra cost to the purchaser before dispatch.
- b) The tenderer shall have full facilities to carry out all the acceptance and routine test as per the applicable standards.

- c) After finalisation of the program of type/acceptance/routine testing, the supplier shall give 15 days advance intimation to the purchaser, to enable him to depute his representatives for witnessing the tests.
- d) The routine tests should be carried out by the manufacturer at his works in presence of EE (testing) MSEDCL and EE ( IW) , STORES, MSEDCL.
- e) The routine tests are as follows:
  - i. Conformity with drawings and diagrams,
  - ii. Measurement of closing and opening speeds,
  - iii. Measurement of operating torque,
  - iv. Checking of filling pressure,
  - v. Checking of gas-tightness,
  - vi. Dielectric testing and main circuit resistance measurement.
  - vii. Power frequency voltage
  - viii. Resistance test for the circuit
  - ix. Mechanical operation tests.
- f) All major type tests shall have been certified at an independent authority with the tests carried outside country of manufacture shall be translated in English and submitted in hard copy.
- g) The supplier in the presence of MSEDCL's representative shall carry out all above acceptance and routine tests. The supplier shall give at least 15 days advance intimation to the MSEDCL to enable them to depute their representative for witnessing the tests. The cost towards transport, stay and other expenses shall be borne by the supplier.

## **20. INSPECTION:**

The inspection may be carried out by the purchaser at any stage of manufacture. The successful tenderer shall grant free access to the purchaser's representative/s at a reasonable notice when the work is in progress. Inspection and acceptance of any equipment under this specification by the purchaser, shall not relieve the supplier of his obligation of furnishing equipment in accordance with the specification and shall not prevent subsequent rejection if the equipment is found to be defective.

The supplier shall keep the purchaser informed, in advance, about the manufacturing programme so that arrangement can be made for stage inspection.

The purchaser reserves the right to insist for witnessing the acceptance/routine testing of the bought-out items. The supplier shall keep the purchaser informed, in advance, about such testing programme.

## **21. MANUFACTURING FACILITIES:**

- a) As RMU are having sealed pressure system in compliance with IEC 298, manufacturer shall have complete facility with state-of-the-art equipments for ensuring the quality of product delivered strictly adhering to IEC 298 GUIDELINES. Following are the work station at manufacturer place to ensure the adherence: -
- b) Robotic welding station for stainless steel main tank ensuring the leak rate less than 0.1% per annum
- c) Work stations with adjustable work benches and torque wrenches, giving flexibility to workmen for proper tightness of internal components of sealed tank.
- d) State of the Gas leak testing system ensuring the quality of sealing and have precision to measure leak rate less than 0.1% per annum.
- e) High voltage testing station to have high voltage power frequency test and partial discharge measurement.
- f) Computerized system to measure time travel characteristic of breaker before sealing the tank.

22. The Tenderer shall submit following documents along with the tender :

- i) Schematic diagram of the RMU panel

- ii) Instruction manuals
- iii) Catalogues of spares recommended with drawing to indicate each items of spares
- iv) List of spares and special tools recommended by the supplier.
- v) Copies of Type Test Certificates as per latest IS/IEC.
- vi) Drawings of equipments, relays, control wiring circuit, etc.
- vii) Foundation drawings of RMU.
- viii) Dimensional drawings of each material used for item Vii.
- ix) Actual single line diagram of RMUs with or without extra combinations shall be made displayed on the front portion of the RMU so as to carry out the operations easily.

23. Each RMU and its associated equipments shall be provided with a nameplate legible and indelibly marked with at least the following information.

- (a) Name of manufacturer,
- (b) Type,
- (c) Serial number,
- (d) Voltage
- (e) Current,
- (f) Frequency
- (g) Symmetrical breaking capacity,
- (h) Making capacity
- (i) Short time current and its duration,
- (j) Purchase Order number and date
- (k) Month and Year of supply
- (l) Rated lightning impulse withstand voltage

### **LIST OF ACCEPTABLE MAKES OF ELECTRICAL MATERIAL**

| <b>Sl. No.</b> | <b>MATERIAL</b>                                                                                             | <b>ACCEPTABLE MAKE</b>                                          |
|----------------|-------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------|
| 1              | Cable gland/ Lugs                                                                                           | Commet/Dowels/ Jainsons/ HMI                                    |
| 2              | Jointing Kit                                                                                                | Raychem/Denson/3M/M-Seal                                        |
| 3              | 1.1 KV Grade XLPE Insulated Aluminum Conductor Power Cable, 22 KV Grade XLPE Aluminum Conductor Power Cable | Polycab/ Havells/ RR Kable/ Grandlay                            |
| 4              | DWC HDPE pipe                                                                                               | Rex/ Gemini/ Dura line/ Crown                                   |
| 5              | RMU (as per MSEDCL specification)                                                                           | Crompton Greaves/ Lucy / ABB/Schneider Electric/ Siemens/ C-Sec |
| 6              | Metering Kiosk                                                                                              | Huphen Fabricators Private Limited/ Huphen Electromech Pvt. Ltd |
| 7              | GI Pipe                                                                                                     | Jindal Hissar/ TATA/ SAIL                                       |
| 8              | Chemical Earthing                                                                                           | Indelec/ Universal/ U-Protec/ Earthplus/ OBO/ Truepo            |
| 9              | Any Other Material                                                                                          | To be approved by Engineer – In - Charge.                       |

**Assistant Engineer (E) (P),  
CPWD, Pune – 37.**

**Executive Engineer (E),  
CPWD, Pune – 37.**

# **PART – C**

## **(Schedule of Quantity)**

## **SCHEULE OF WORK**

**Name of work: Providing additional 11kV HT metering cubicle and HT Cable for existing MSEDCL HT Connection at NCCS, University Campus at GaneshKhind Pune.**

| Sr.No | Description of Item                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Qty  | Unit | Rate Including Cost Index 110.68 on DSR 2025 items | Amount    |
|-------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|------|----------------------------------------------------|-----------|
| 1     | Supplying, installation, Testing and commssioning of outdoor type 11 KV ,3 phase,50 Hz metering cubicle (Kiosk) with epoxy resin moulded CT's of ratio 100/5A Class 0.2, burdon 10 VA and PT's of ratio 11000/ $\sqrt{3}$ /110/ $\sqrt{3}$ V, VA50, Class 0.2, Tinned copper bus-bars totally covered by HT insulating sleeves, <b>but with out HT Static TOD Tri-vector meter</b> complete etc. as required. <b>(The metering cubicle (Kiosk) shall be as per the MSEDCL Technical specification No. CE/QC-T/MSC-II, Date 29.08.2019 ammended upto date and approved as per testing Norms)</b> | 2    | Job  | 192992.00                                          | 385984.00 |
| 2     | Supplying and laying of following sizes XLPE insulated round armoured aluminium conductor power cable of 11 KV grade confirming to IS 7098 (Part II) amended upto date in the existing masonry open duct/cable tray as required                                                                                                                                                                                                                                                                                                                                                                 |      |      |                                                    |           |
| 2.1   | 3 x 185 Sq. mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 20.0 | mtr  | 3352.00                                            | 67040.00  |
| 3     | supplying and making indoor cable end termination with heat shrinkable jointing kit complete with all accessories including lugs suitable for following size of 3 core, XLPE aluminium conductor cable of 11 KV grade as required:                                                                                                                                                                                                                                                                                                                                                              |      |      |                                                    |           |
| 3.1   | 3 x 185 Sq. mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 4    | Sets | 18817.00                                           | 75268.00  |

|                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |     |      |           |                   |
|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|------|-----------|-------------------|
| 4                | Supply, Installation, Testing and commissioning of chemical Earthing by providing special earth electrode having 17.20 mm dia copper bonded and 3.0 meter long with bonding thickness not less than 250 micron duly filled up with superior quality hygroscopic, non magnetic and non corrosive BFC compound minimum 50 kg for good value of earthing and high conductive & non-corrosive compound & excavation of earth having 120 mm dia size bore of 3.5 m depth by boring machine and providing masonry enclosure with cover plate having locking arrangement etc. complete as required. | 12  | Sets | 15019.00  | 180228.00         |
| 5                | Earthing with G.I. earth pipe 4.5 Meter long, 40 mm dia including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe etc. with charcoal/coke and salt as required.                                                                                                                                                                                                                                                                                                                                                                   | 8   | Sets | 8476.00   | 67808.00          |
| 6                | Providing and fixing 25 mm X 5 mm G.I. strip on surface or in recess for connections etc. as required.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 50  | Mtr  | 318.00    | 15900.00          |
| 7                | Providing and fixing 25 mm X 5 mm G.I. strip in 40 mm dia G.I. pipe from earth electrode including connection with G.I. nut, bolt, spring, washer excavation and re-filling etc. as required.                                                                                                                                                                                                                                                                                                                                                                                                | 100 | Mtr  | 836.00    | 83600.00          |
| 8                | Providing and fixing 25 mm X 5 mm copper strip on surface or in recess for connections etc. as required.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 100 | Mtr  | 1379.00   | 137900.00         |
| 9                | Dismanteling of existing 11 KV HT metering kiosk i/c removal from the location and storing the same as per direction of Engineer-In-Charge complete with disconnection of cables and earthings etc complete as required                                                                                                                                                                                                                                                                                                                                                                      | 1   | Job  | 4285.00   | 4285.00           |
| 10               | Credit for HT 11 KV HT metering kiosk on as is where it is basis and as per directions of Engineer- In- Charge etc as required.                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 1   | Job  | -15000.00 | -15000.00         |
| 11               | Credit for 25mm X 5mm/25mm X 3mm copper strip on as is where it is basis and as per the direction of Engineer in charge etc as required.                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 5   | Kg   | -600.00   | -3000.00          |
| <b>Total Rs.</b> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |     |      |           | <b>1000013.00</b> |

**Assistant Engineer (E) (P),  
CPWD, Pune – 37.**

**Executive Engineer (E),  
CPWD, Pune – 37.**

# **PART – D**

## **(PRICE BID)**



## Central Public Works Department

NIT No. 31/NIT/EE(E)/PCED/2026-27.

**Name of Work: Providing additional 11kV HT metering cubicle and HT Cable for existing MSEDCL HT Connection at NCCS, University Campus at GaneshKhind Pune.**

### PRICE BID

| Name of the Contractor |                  |                                              |              |            |
|------------------------|------------------|----------------------------------------------|--------------|------------|
| Name of component      | Estimated cost   | percentage above or below the estimated cost | % in Figures | Total Cost |
| E & M Services         | Rs. 10,00,013.00 |                                              |              |            |
| GRAND TOTAL            | Rs. 10,00,013.00 |                                              |              |            |
| GRAND TOTAL IN WORDS   |                  | (Rupees Ten- Lakh Thirteen Only)             |              |            |