



*e-tendering*

NIT No. **045/EDM/FTIIPUNE/2022-23/R001**

Estimated cost: ₹. 17,78,703/-

**PRASAR BHARATI  
(INDIA'S PUBLIC SERVICE BROADCASTER)  
EXECUTIVE ENGINEER (ELECTRICAL)  
CIVIL CONSTRUCTION WING:  
1<sup>st</sup> Floor New Broad Casting House,  
All India Radio, H T Parikh Marg,  
Opposite MLAs Hostel, Mumbai- 400020**

E-mail: [ccwelect.airmum@nic.in](mailto:ccwelect.airmum@nic.in)  
[ccwelect@rediffmail.com](mailto:ccwelect@rediffmail.com)

**CONTACT 022-20821161**

**Name of Work: ARMO Electrical works at FTII  
PUNE (Sub Head: Non Comprehensive  
Maintenance of EFA and Fire Fighting System  
and operation of water supply pump sets)**



## INDEX

**Name of work: ARMO Electrical works at FTII PUNE (Sub Head: Non Comprehensive Maintenance of EFA and Fire Fighting System and operation of water supply pump sets)**

Sr. No.	Description	Page Numbers	
		From	To
1	Index	1	1
2	INFORMATION AND INSTRUCTIONS FOR BIDDERS FOR e-TENDERING FORMING PART OF BID DOCUMENT AND TO BE POSTED ON WEBSITE	2	3
3	CPWD-6	4	7
4	CPWD-7	8	14
5	INTEGRITY PACT	15	20
6	Form of Bank Guarantee for Performance Guarantee/ Security Deposit/Mobilization Advance	21	22
7	TERMINATION OF CONTRACTOR ON DEATH	23	23
8	Special Condition for Internal Electrical Installation works	24	24
9	Scope of work	25	26
10	SPECIAL CONDITION (EFA & FF system)	27	33
11	Schedule of Work (Price Bid)	34	35

**INFORMATION AND INSTRUCTIONS FOR BIDDERS FOR e-TENDERING  
FORMING PART OF BID DOCUMENT AND TO BE POSTED ON WEBSITE**

The Executive Engineer (E), CCW, AIR, Mumbai on behalf of President of India invites e-tender in two Bid system [Cover-1: Qualification of agencies as per eligibility criteria & Cover-2: Price bid] from approved and eligible Licensed Agencies for the purpose of the Maharashtra Fire Prevention and Life Safety Measures Act, 2006 of EFA & Fire Fighting System and contractors of CPWD by associating the Licensed Agencies for the purpose of the Maharashtra Fire Prevention and Life Safety Measures Act, 2006 of EFA & Fire Fighting System for the work:

<b>NIT Number</b>	<b>045/EDM/FTIIPUNE/2022-23/R001</b>
<b>Name of work:</b>	<b>ARMO Electrical works at FTII PUNE (Sub Head: Non Comprehensive Maintenance of EFA and Fire Fighting System and operation of water supply pump sets)</b>
<b>Estimated Cost put to Tender</b>	<b>₹.17,78,703=00</b>
<b>Earnest Money Deposit</b>	<b>₹. 35,574=00</b>
<b>Period of completion</b>	<b>12 (Twelve) Months</b>
<b>Last date and time of submission of Tender</b>	<b>Up to 14:00 Hrs. on 03/04/2023</b>
<b>Time and date of opening of Cover-1</b>	<b>14:30 Hrs. of 03/04/2023</b>

- 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 documents required.
- Information and instructions for bidders posted on website shall form part of bid document.
- The bid document consisting of plans, specifications, 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 the website <https://air.ewizard.in/> free of cost.
- But the bid can only be submitted after depositing Processing Fee in favour of M/s. ITI Limited and deposition of original EMD online through E-Wizard portal within the period of bid submission and other documents as specified.
- Detailed procedure can be seen in the CPWD-6 for e-Tendering
- Contractors, who are not registered on the website mentioned above, are required to get registered beforehand. If needed they can be imparted training on online bidding process as per details available on the said website
- The intending bidder must have valid **Class-III** Digital Signature to submit the bid.
- On the date of opening of the Bid, the bidder can login and see the bid opening process. After opening of Bids he will receive the competitor bid sheets.
- Bidder can upload documents in the JPG or PDF format.
- SC/ST bidders enlisted under Class-V category are exempted from processing fee of e-Tender payable to M/s. ITI Ltd.
- ~~The Technical Bid shall be opened first on due date and time as mentioned above. The time and date of opening of financial bid of contractors qualifying the technical bid shall be communicated to them at a later date.~~
- ~~Pre Bid conference shall be held in the chamber of O/o EE (E), CCW, AIR, Mumbai on \_\_\_\_\_ at Mumbai \_\_\_\_\_ am/pm to clear the doubt of intending bidders if any. The intending bidders shall send their queries if any on or before \_\_\_\_\_ Hrs. of \_\_\_\_\_ by email to [cewelect.airmum@nic.in](mailto:cewelect.airmum@nic.in) or [cewelect@rediffmail.com](mailto:cewelect@rediffmail.com)~~

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

<b>1</b>	EMD payment will be online through E-Wizard portal
<b>2</b>	Certificate of Registration for GST or UNDERTAKING If work is awarded to me, I/we shall obtain GST registration certificate as applicable within one month from the date of receipt of award letter or before release of any payment by CCW AIR, 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 CCW AIR or GST department in this regard.
<b>3</b>	<p>Certificates of <b>Work Experience</b>, of similar nature in Para 1.2 of Form CPWD-6.  <b>(Conditions for Non-CPWD registered contractors only)</b>  The agency should have experience of having successfully completed in Central Government, State Government, PSUs and other Government Local bodies during last seven years ending last day of the month previous to the one in which applications are invited.  <b>Three</b> similar completed works each of value not less than 40% of the estimated cost put to tender <b>OR Two</b> similar completed works each of value not less than 60% of the estimated cost put to tender <b>OR One</b> similar completed work of value not less than 80% of the estimated cost put to tender. All amounts rounded off to a convenient figure.  Attested copies of completion certificate issued by the officer of the client department of the rank of Executive Engineer or equivalent will have to be furnished along with the application, the completion certificate must clearly indicate:</p> <ol style="list-style-type: none"> <li>1. Name of work:</li> <li>2. Value of work:</li> <li>3. The date of completion of work:</li> <li>4. Performance of the work:</li> </ol> <p>The agency should submit schedule of work against the completion certificate to assess the nature of similar work as per NIT</p>
<b>4</b>	Affidavit as per clause 1.2.2 of CPWD-6 on non-judicial stamp paper of Rs. 100/- duly notarized
<b>5</b>	Valid license for the purposes of the Maharashtra Fire Prevention and Life Safety Measures Act, 2006 of EFA & Fire Fighting System or CPWD enlistment order
<b>6</b>	<b>Electrical Contractors license</b>
<b>7</b>	<p>Certificate or Registration of EPF and ESI should be uploaded or in case the contractor feels that the EPF and ESI Acts are not applicable in his case and such registration certificates are not required for the work he shall upload the necessary undertaking to this effect</p> <p><b>Note:</b>  Tenderer shall be allowed to enter into the agreement only on production of Indemnity bond in favor of CCW-AIR against any EPF and ESI liability with a copy of PAN card. (In the event of failure on the part of the contractor, to comply with condition stated above, full EMD will be forfeited in favor of CCW-AIR and no claim what so ever shall be entertained on this account)</p>

**EXECUTIVE ENGINEER (ELECTRICAL)  
CCW AIR PB (IPSB) MUMBAI-20**

**No.EE (E)/MUM/CCW/NIT-045R01/2022-23/**

**Date: 23/03/2023**

1. The Superintending Engineer (Elect.), CCW, AIR Nagpur
2. The Executive Engineer (Civil), CCW, AIR Mumbai/Pune/Vadodara.
3. The Assistant Engineer (Civil.) I/II, CCW, AIR MUMBAI/Pune/Vadodara/Ahmedabad/Rajkot.
4. The Assistant Engineer (E) CCW, AIR, MUMBAI/Pune.
5. Notice Board.
6. By mail to [webupdates.pbns@gmail.com](mailto:webupdates.pbns@gmail.com) for uploading on Prasar Bharati Web site.

**EXECUTIVE ENGINEER (ELECTRICAL)**

**PRASAR BHARATI**  
(India's Public Service Broadcaster)  
**CIVIL CONSTRUCTION WING, ALL INDIA RADIO**

**NOTICE INVITING e-TENDER**

1. The Executive Engineer (E), CCW, AIR, Mumbai on behalf of President of India invites e-tender in two Bid system [Cover-1: Qualification of agencies as per eligibility criteria & Cover-2: Price bid] from approved and eligible Licensed Agencies for the purpose of the Maharashtra Fire Prevention and Life Safety Measures Act, 2006 of EFA & Fire Fighting System and contractors of CPWD by associating the Licensed Agencies for the purpose of the Maharashtra Fire Prevention and Life Safety Measures Act, 2006 of EFA & Fire Fighting System for the work: ARMO Electrical works at FTII PUNE (Sub Head: Non Comprehensive Maintenance of EFA and Fire Fighting System and operation of water supply pump sets)

The enlistment of the contractors should be valid on the last date of sale of tenders.

- 1.1 The work is estimated to cost **₹. 17,78,703/-**. 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 bidder is eligible to submit the bid provided he has definite proof from the appropriate authority i.e. not below the rank of Executive Engineer, which shall be to the satisfaction of the competent authority, of having satisfactorily completed similar works, **(Similar work means SITC or Maintenance of Early Fire alarm & Fire Fighting System)** in the last seven years ending in Central Government, State Government, PSUs and other Government Local bodies. The works completed up to previous day of last date of submission of tender shall also be considered.

**Criteria of eligibility for submission of bid documents**

- 1.2.1. Conditions for Non-CPWD registered contractors only, if bids are also open to non-CPWD Contractors

For works estimated cost up to tendering limit of class -I Buildings & Roads (erstwhile Composite/ Building/ infrastructure) category Contractor (However, for Horticulture category, it may be modified as per bidding limit of CPWD class I contractors of Horticulture category).

- (i) **Three** similar completed works each of value not less than 40% of the estimated cost put to tender  
**OR Two** similar completed works each of value not less than 60% of the estimated cost put to tender  
**OR One** similar completed work of value not less than 80% of the estimated cost put to tender

- (ii) ~~For EPC tender under Mode-I/II only (Applicable for CPWD enlisted contractors of appropriate class also).~~

~~One completed work costing not less than Rs. \_\_\_\_\_ executed with the structural system technology as proposed by bidder in the letter of transmittal during the last 7 years ending last day of the month previous to the one in which tenders are invited. This work can be part of eligible work at 1.2.1 (i) above or as a separate work~~

**Note:-**

For works costing above tendering limit of class -II Buildings & Roads (erstwhile Composite/ Building/ infrastructure) category contractors but up to tendering limit of Class-I Buildings & Roads (erstwhile Composite/ Building/ infrastructure) category Contractor ( However, for Horticulture category, it may be modified as per bidding limit of CPWD class II and CPWD Class I contractors respectively of Horticulture Category) when bids are open to non-CPWD contractors also, then class II contractors of CPWD registered shall also be eligible if they satisfy the eligibility criteria specified in 1.2.1 above

**1.2.2. Criteria of eligibility for CPWD as well as non-CPWD contractors,**

~~For works estimated to cost above the tendering limit of class -I (Super) Buildings & Roads (erstwhile Composite/ Building/ infrastructure) category Contractor (However for Horticulture category, it may be modified as per bidding limit of CPWD class I contractors of Horticulture Category).~~

~~(i) Three similar completed works each of value not less than 40% of the estimated cost put to tender OR Two similar completed works each of value not less than 60% of the estimated cost put to tender OR One similar completed work of value not less than 80% of the estimated cost put to tender~~  
~~For EPC tender under Mode-I/II only (Applicable for CPWD enlisted contractors of appropriate class also).~~

~~One completed work costing not less than Rs. \_\_\_\_\_ executed with the structural system technology as proposed by bidder in the letter of transmittal during the last 7 years ending last day of the month previous to the one in which tenders are invited. This work can be part of eligible work at 1.2.1 (i) above or as a separate work~~

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. This is applicable for 1.2.1 as well as 1.2.2 (Para 1.2.1(i) and Para 1.2.2(i) are not applicable for CPWD enlisted contractors of appropriate class. Para 1.2.1(ii) and Para 1.2.2(ii) are also applicable for CPWD enlisted contractors of appropriate class).

**To become eligible for issue of bid, the bidders shall have to furnish an affidavit in this regard on non-judicial stamp paper of Rs. 100/- duly notarized as under (~~Applicable if work experience is stipulated in para 1.2 above~~):**

***"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 bidding in CCW-AIR 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."*** (Scanned copy is to be uploaded at the time of submission of bid).

- 1.2.3.** When bids are invited from non CPWD contractors and CPWD class II contractors as per provisions of clause 1.2.1 above, it will be mandatory for non CPWD contractors and CPWD class-II contractors to upload the work experience certificate(s) and the affidavit as per the provisions of clause 1.2.2. But for such bids, Class-I contractors of CPWD are eligible to submit the bids without submission of work experience certificate and affidavit. Therefore, CPWD class-I contractors shall upload two separate letters for experience certificate and affidavit that these documents are not required to be submitted by them. Uploading of these two letters is mandatory otherwise system will not clear mandatory fields
2. Agreement shall be drawn with the successful tenderer on prescribed **Form No. 7**, which is available as a Govt. of India Publication. Tenderer 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 **12 (Twelve) 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 tender documents.
  4. The site for the work is available.
  5. Tender documents consisting of plans, specifications, the schedule of quantities of the various classes of work to be done and the set of terms & conditions of contract to be complied with by the contractor whose tender may be accepted and other necessary documents can be seen from website <https://air.ewizard.in/> free of cost.
  6. After submission of the Tender the contractor can re-submit revised tender any number of times but before last time and date of submission of tender as notified.
  7. While submitting the revised tender, contractor can revise the rate of one or more item/s any number of times (he need not re-enter rate of all items) but before last time and date of submission of tender as notified.
  8. When tenders 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 tender submitted earlier shall become invalid.
  9. Earnest Money of ₹ 35,574=00 the form of in the form of online.

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.

Interested contractor who wish to participate in the bid has also to make following payments within the period of bid submission:

E-Tender Processing Fee admissible shall be payable to M/s. ITI Limited through their e-gateway by credit/debit card, internet banking or RTGS/NEFT facility.

Copy of Enlistment Order and certificates of work experience and other documents as specified in the tender/press notice shall be scanned and uploaded to the e-Tendering website within the period of bid submission. However, certified copy of all the scanned and uploaded documents as specified in the tender notice shall have to be submitted by the lowest bidder only 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, who have deposited e-Tender Processing Fee with M/s. ITI Limited and EMD within the period of bid submission and other documents scanned and uploaded are found in order.

The bid submitted shall be opened at 14:30 Hrs. on **03/04/2023**

10. The bid submitted shall become invalid and e-Tender Processing Fee shall not be refunded, if:
  - (i) The bidder is found ineligible;
  - (ii) The bidder does not upload all the documents (including GST) as stipulated in the bid document including online EMD
  - (iii) If any discrepancy is noticed between the documents as uploaded at the time of submission of bid and hard copies as submitted physically by the lowest tenderer in the office of tendering opening authority;
11. The contractor whose tender is accepted will be required to furnish Performance Guarantee of 3% (Three percent) of the tendered amount 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.
12. Tenderers are advised to inspect and examine the site and its surroundings and satisfy themselves before submitting their tenders 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 tender. A tenderer shall be deemed to have full knowledge of the site whether he inspects it or not and no extra charges consequent on any misunderstanding or otherwise shall be allowed. The tenderer 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 tender by a tenderer 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 President of India does not bind himself to accept the lowest or any other tender, and reserves to himself the authority to reject any or all of the tenders received without the assignment of a reason. All tenders, in which any of the prescribed conditions is not fulfilled or any condition including that of conditional rebate is put forth by the tenderer, shall be summarily rejected.



14. Canvassing whether directly or indirectly, in connection with tenders is strictly prohibited and the tenders submitted by the contractors who resort to canvassing will be liable to 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 tender and the tenderer shall be bound to perform the same at the rate quoted.
16. The contractor shall not be permitted to tender for works in the CCW AIR PB(BCI) Circle (responsible for award and execution of contracts) in which his near relative is posted as 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 Civil Construction Wing of All India Radio or in the Ministry of Information & Broadcasting. 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 Gazette rank or other Gazette 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 two years after his retirement from Government service, without the previous 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 tender or engagement in the contractor's service.
18. The tender for the works shall remain open for acceptance for a period of **30 (Thirty) days** from the date of opening of **Price Bid**. If any tenderer withdraws his tender before the said period or issue of letter of acceptance, whichever is earlier, or makes any modifications in the terms and conditions of the tender which are not acceptable to the Department, then the Government shall, without prejudice to any other right or remedy, be at liberty to forfeit **50%** of the said earnest money as aforesaid.
19. This Notice Inviting Tender shall form a part of the contract document. The successful tenderer/contractor, on acceptance of his tender by the Accepting Authority, shall, within 7 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.
  - b) Standard C.P.W.D. **Form No. 7**.

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EXECUTIVE ENGINEER (E)  
CCW AIR PB (IPSB) MUMBAI-20



P R A S A R B H A R A T I  
(INDIAS PUBLIC SERVICE BROADCASTER)  
**CIVIL CONSTRUCTION WING, ALL INDIA RADIO**

State : **MAHARASHTRA**  
Branch : E & M.  
Zone : WEST

Circle : NAGPUR  
Division : MUMBAI  
Sub-Division : **FTII Pune**

**Percentage rate Tender & Contract for Works**

**Name of work: ARMO Electrical works at FTII PUNE for 2022-23 Phase I Main campus.**  
**(Sub Head: Non Comprehensive Maintenance of Early Fire alarm & Fire Fighting System & operation of water supply pump sets ).**

- (i) To be submitted online through the website <https://air.ewizard.in/> by 14:00 hours on **03/04/2023** to the Executive Engineer (E), Civil Construction Wing, All India Radio, Prasar Bharati (IPSB), Mumbai-20.
- (ii) To be opened online at the website <https://air.ewizard.in/> in presence of tenderers who may be present online at 14:30 hours on **03/04/2023** in the office of the Executive Engineer (E), Civil Construction Wing, All India Radio, Prasar Bharati (IPSB), Mumbai-20.

Tender submitted online at the website <https://air.ewizard.in/> by the contractor

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 respects with the specifications, designs, drawings 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 respects in accordance with, such conditions so far as applicable.

We agree to keep the tender open for **30 (Thirty) days** from the Opening of **Price Bid** thereof and not to make any modifications in its terms and conditions.

A sum of ₹ 35,574=00 the form of Insurance Surety Bonds, Account Payee Demand Draft, Fixed Deposit Receipt, Banker's Cheque or Bank Guarantee (for balance amount as prescribed) from any of the Commercial Banks as Earnest Money. 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 the work specified I/we agree that the said President of India or his 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 Earnest Money or Performance Guarantee as aforesaid, I/we shall be debarred for participation in the re-tendering process of the work.

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

Postal Address: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Witness:

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 ` \_\_\_\_\_  
(Rupees \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_)

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

i)

ii)

iii)

For and on behalf of the President of India,

Dated: \_\_\_\_\_

Signature: \_\_\_\_\_

Designation: **Executive Engineer (E)**  
**Civil Construction Wing**  
**All India Radio, PB (IPSB)**  
**MUMBAI-400 020.**

## SCHEDULES

**Name of work:** ARMO Electrical works at FTII PUNE (Sub Head: Non Comprehensive Maintenance of EFA and Fire Fighting System and operation of water supply pump sets)

### **SCHEDULE 'A'**

Schedule of quantities - As per "schedule of quantity" from Page No. 34

### **SCHEDULE 'D'**

Extra Schedule for specific requirements/documents for the work, if any.	Additional Commercial Conditions /documents & Technical Specifications attached
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### **SCHEDULE 'E'**

Reference to General Conditions of Contract:-	GCC 2020 for maintenance works with amendments up to last date of submission of Bid.
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Name of Work	<b>ARMO Electrical works at FTII PUNE (Sub Head: Non Comprehensive Maintenance of EFA and Fire Fighting System and operation of water supply pump sets)</b>	
i)	Estimated cost work	<b>Rs 17,78,703=00</b>
ii)	Earnest Money	<b>Rs 35,574=00</b>
iii)	Performance Guarantee	<b>3% of Tendered Amount</b>
iv)	Security Deposit	2.5% of tendered value <del>Plus 50% of stipulated P.G</del>

### **SCHEDULE 'F'**

#### **General Rules & Directions:**

Officer inviting Tender	:	Executive Engineer (E),CCW, AIR, PB (IPSB), Mumbai-20
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	:	As per Clause 12
<b>Definitions :</b>		
2(v) Engineer-in-Charge	:	Executive Engineer (E),CCW, AIR, PB (IPSB), Mumbai-20
2 (viii) Accepting Authority	:	Executive Engineer (E), CCW AIR Mumbai
2 (x) Percentage on cost of materials and labor to cover all overheads and profits	:	15%
2 (xi) Standard schedule of Rates	:	CPWD DSR 2022 with amendments up to last date of submission of Bid
2 (xii) Department	:	Civil Construction Wing, All India Radio
9 (ii) Standard CPWD contract form	:	CPWD form 7 (Percentage rate) with amendments up to last date of submission of Bid

**Clause 1**

Time allowed for submission of Performance Guarantee from the date of issue of letter of acceptance, Program Chart (Time and Progress) and applicable labor licenses, registration with EPFO, ESIC, and BOCW welfare Board or proof of applying thereof from the date of issue of letter of acceptance.	:	07 days
Maximum allowable extension with late fee 0.1% per day of Performance Guarantee amount beyond the period provided in (i) above.	:	05 days

**Clause 2**

Authority for fixing compensation under clause – 2	:	Superintending Engineer (E) Civil Construction Wing, All India Radio, Nagpur
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**Clause 2A**

Whether Clause 2A shall be applicable	:	YES / NO
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**Clause 5**

Number of days from the date of issue of letter of acceptance for reckoning date of start	:	07 (Seven) Days
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**MILE STONE (S) AS PER TABLE GIVEN BELOW****Table of Milestone (s)**

S.N o.	Description of Milestone (Physical)	Time allowed in days (from date of start)	Amount to be with-held in case of non-achievement of mile stone
1			
2			
3			
4			

Time allowed for execution of work	:	12 (Twelve) Months
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**Authority to Decide:**

1. Extension of time	:	Executive Engineer (E) Civil Construction Wing, All India Radio, Mumbai
2. Rescheduling of mile stones	:	Executive Engineer (E) Civil Construction Wing, All India Radio, Mumbai
3. Shifting of date of start in case of delay in handing over of site	:	Executive Engineer (E) Civil Construction Wing, All India Radio, Mumbai

**Clause 7**

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.	:	Quarterly
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**Clause 7 A**

Whether Clause 7A shall be applicable. No running account bill shall be paid for the work till the application labour licenses, registration with EPFO, ESIC and BOCW welfare board which ever applicable are submitted by the contractor to the Engineer-in-Charge.	:	Yes/No
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**Clause 8 A**

Authority to decide compensation on account if contractor fails to submit completion plans	:	Engineer-in-Charge
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**Clause 10 A**

List of testing equipment to be provided by the contractor at site lab.	:	As per instruction of Engineer-in-charge & requirement of work
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**Clause 10-B (ii)**

Whether clause 10-B(ii) shall be applicable	:	No
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**Clause 10-C.**

Component of labour expressed as percent of value of work	:	20%
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**Clause 10 CA****Applicable/Not Applicable**

S. No	Materials covered under this clause	Nearest material (other than cement, reinforcement bars and structural steel) for which All India Wholesale price index to be followed	Base price of all the materials covered under clause 10CA
1			
2			
3			

**Clause 10CC**

Clause 10CC to be applicable in contracts with stipulated period of completion exceeding the period shown in next column.	:	More Than 12 Months
Schedule of component of other Materials, Labour, POL etc. for price escalation.	:	Not Applicable

Component of civil (Except materials covered under clause 10 CA)/ Electrical construction materials expressed as percent of total value of work.	Xm	Not Applicable
Component of labour expressed as percent of total value of work.	Y	
Component of POL expressed as percent of total value of work	Z	

**Clause 11**

Specifications to be followed for execution of work	:	CPWD General Specifications for Electrical works Part V Wet Riser & Sprinkler Systems – 2020 and Part VI Fire Detection and Alarm System – 2018 with up to date amendments and additional commercial & technical conditions attached.
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**Clause 12**

Authority to decide deviation up to 1.5 times of tendered amount : Engineer-in Charge

Type of Work	:	ORIGINAL/MAINTENANCE
12.2. & 12.3		
(i) Deviation limit beyond which clauses 12.2 & 12.3 shall apply for foundation work (except earth work)	:	<del>100%</del> / No Limit
(ii) Deviation Limit for items in earth work sub head of DSR or related items	:	Not applicable

**Clause 16**

Competent authority for deciding reduced rates	:	Superintending Engineer (E) Civil Construction Wing, All India Radio, PB(IPSB), Nagpur
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**Clause 18**

List of mandatory machinery, tools & plants to be deployed by the contractor at site.	:	As per requirement at site
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**Clause 19C .....**

Authority to decide penalty for each default Clause	:	Engineer-in Charge
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**Clause 19D**

Authority to decide penalty for each default Clause	:	Engineer-in Charge
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**Clause 19G**

Authority to decide penalty for each default Clause	:	Engineer-in Charge
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**Clause 19K**

Authority to decide penalty for each default Clause	:	Engineer-in Charge
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**Clause 25**

Constitution of Dispute Redressal Committee (DRC)

For all claims in dispute

Chairman-		
Member-1		
Member-2		

**Clause 32****Requirement of Technical Representative(s) and recovery Rate**

Cost of work (Rs. in crores)	Requirement of Technical Staff		Minimum experience (Years)	Designation Technical staff	Rate at which recovery shall be made from the contractors in the event of not fulfilling
	Qualification	Number (of Major + Minor component)			
More than 15 lakh to 1.5 crore	Graduate Engineer or Diploma Engineer (E&M)	1 of major component	2 or 5 respectively	Project Manager Cum planning/ quality/ site/ billing Engineer	Rs. 15,000/- 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 year relevant experience with a reputed construction company 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.

**Clause 38**

- i. (a) Schedule/statement for determining theoretical quantity of cement & bitumen on the basis of N.A. printed by CPWD
- ii. Variation permissible on theoretical quantities:

a) Cement for works with estimated cost put to tender not more than Rs. 5 lakhs	:	Not Applicable
for works with estimated cost put to tender more than Rs 5 lakh	:	Not Applicable
b) Bitumen for all works.	:	Not Applicable
c) Steel Reinforcement and structural steel sections for each diameter, section and category.	:	Not Applicable
d) All other materials	:	Nil



## INTEGRITY PACT

To,

.....,

.....,

.....

Sub: NIT No **045/EDM/FTIIPUNE/2022-23/R001** for the work **ARMO Electrical works at FTII PUNE (Sub Head: Non Comprehensive Maintenance of EFA and Fire Fighting System and operation of water supply pump sets)**

Dear Sir,

It is here by declared that CCW AIR is committed to follow the principle of transparency, equity and competitiveness in public procurement.

The subject Notice Inviting Tender (NIT) is an invitation to offer made on the condition that the Bidder will sign the integrity Agreement, which is an integral part of tender/bid documents, failing which the tenderer/bidder will stand disqualified from the tendering process and the bid of the bidder would be summarily rejected.

This declaration shall form part and parcel of the Integrity Agreement and signing of the same shall be deemed as acceptance and signing of the Integrity Agreement on behalf of the CCW AIR.

Yours faithfully

Executive Engineer

## INTEGRITY PACT

To,  
Executive Engineer (Electrical),  
Civil Construction Wing,  
All India Radio, Mumbai

Sub: Submission of Tender for the work of **ARMO Electrical works at FTII PUNE (Sub Head: Non Comprehensive Maintenance of EFA and Fire Fighting System and operation of water supply pump sets)**

Dear Sir,

I/We acknowledge that CCW AIR is committed to follow the principles thereof as enumerated in the Integrity Agreement enclosed with the tender/bid document.

I/We agree that the Notice Inviting Tender (NIT) is an invitation to offer made on the condition that I/We will sign the enclosed integrity Agreement, which is an integral part of tender documents, failing which I/We will stand disqualified from the tendering process.

I/We acknowledge that THE MAKING OF THE BID SHALL BE REGARDED AS AN UNCONDITIONAL AND ABSOLUTE ACCEPTANCE of this condition of the NIT.

I/We confirm acceptance and compliance with the Integrity Agreement in letter and spirit and further agree that execution of the said Integrity Agreement shall be separate and distinct from the main contract, which will come into existence when tender/bid is finally accepted by CCW AIR.

I/We acknowledge and accept the duration of the Integrity Agreement, which shall be in the line with Article 1 of the enclosed Integrity Agreement.

I/We acknowledge that in the event of my/our failure to sign and accept the Integrity Agreement, while submitting the tender/bid, CCW AIR shall have unqualified, absolute and unfettered right to disqualify the tenderer/bidder and reject the tender/bid in accordance with terms and conditions of the tender/ bid.

Yours faithfully

(Duly authorized signatory of the Bidder)

**To be signed by the bidder and same signatory competent / authorized to sign the relevant contract on behalf of CCW AIR.**

## **INTEGRITY AGREEMENT**

This Integrity Agreement is made at **Mumbai** on this..... Day of..... 20.....

### **BETWEEN**

President of India represented through Executive Engineer (E) CCW AIR Mumbai, (Hereinafter referred as the (Address of Sub Division) 'Principal/Owner', which expression shall unless repugnant to the meaning or context hereof include its successors and permitted assigns)

### **AND**

..... (Name and Address of the Individual/firm/Company) through..... (Hereinafter referred to as the (Details of duly authorized signatory) "Bidder/Contractor" and which expression shall unless repugnant to the meaning or context hereof include its successors and permitted assigns)

### **Preamble**

WHEREAS the Principal / Owner have floated the Tender (NIT No. **045/EDM/FTIIPUNE/2022-23/R001** (hereinafter referred to as "Tender/Bid") and intends to award, under laid down organizational procedure, contract for **ARMO Electrical works at FTII PUNE (Sub Head: Non Comprehensive Maintenance of EFA and Fire Fighting System and operation of water supply pump sets)**

Hereinafter referred to as the "Contract". AND WHEREAS the Principal/Owner values full compliance with all relevant laws of the land, rules, regulations, economic use of resources and of fairness/transparency in its relation with its Bidder(s) and Contractor(s).

AND WHEREAS to meet the purpose aforesaid both the parties have agreed to enter into this Integrity Agreement (hereinafter referred to as "Integrity Pact" or "Pact"), the terms and conditions of which shall also be read as integral part and parcel of the Tender/Bid documents and Contract between the parties.

NOW, THEREFORE, in consideration of mutual covenants contained in this Pact, the parties hereby agree as follows and this Pact witnesses as under:

#### **Article 1: Commitment of the Principal/Owner**

1. The Principal/Owner commits itself to take all measures necessary to prevent corruption and to observe the following principles:
  - a) No employee of the Principal/Owner, personally or through any of his/her family members, will in connection with the Tender, or the execution of the Contract, demand, take a promise for or accept, for self or third person, any material or immaterial benefit which the person is not legally entitled to.
  - b) The Principal/Owner will, during the Tender process, treat all Bidder(s) with equity and reason. The Principal/Owner will, in particular, before and during the Tender process, provide to all Bidder(s) the same information and will not provide to any Bidder(s) confidential / additional information through which the Bidder(s) could obtain an advantage in relation to the Tender process or the Contract execution.
2. The Principal/Owner shall endeavor to exclude from the Tender process any person, whose conduct in the past has been of biased nature.
3. If the Principal/Owner obtains information on the conduct of any of its employees which is a criminal offence under the Indian Penal code (IPC)/Prevention of Corruption Act, 1988 (PC Act) or is in violation of the principles herein mentioned or if there be a substantive suspicion in this regard, the Principal/Owner will inform the Chief Vigilance Officer and in addition can also initiate disciplinary actions as per its internal laid down policies and procedures

## **Article 2: Commitment of the Bidder(s)/Contractor(s)**

1. It is required that each Bidder/Contractor (including their respective officers, employees and agents) adhere to the highest ethical standards, and report to the Government / Department all suspected acts of fraud or corruption or Coercion or Collusion of which it has knowledge or becomes aware, during the tendering process and throughout the negotiation or award of a contract.
2. The Bidder(s)/Contractor(s) commit himself to take all measures necessary to prevent corruption. He commits himself to observe the following principles during his participation in the Tender process and during the Contract execution:
  - a) The Bidder(s)/Contractor(s) will not, directly or through any other person or firm, offer, promise or give to any of the Principal/Owner's employees involved in the Tender process or execution of the Contract or to any third person any material or other benefit which he/she is not legally entitled to, in order to obtain in exchange any advantage of any kind whatsoever during the Tender process or during the execution of the Contract.
  - b) The Bidder(s)/Contractor(s) will not enter with other Bidder(s) into any undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to cartelize in the bidding process
  - c) The Bidder(s)/Contractor(s) will not commit any offence under the relevant IPC/PC Act. Further the Bidder(s)/Contractor(s) will not use improperly, (for the purpose of competition or personal gain), or pass on to others, any information or documents provided by the Principal/Owner as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically
  - d) The Bidder(s)/Contractor(s) of foreign origin shall disclose the names and addresses of agents/representatives in India, if any. Similarly Bidder(s)/Contractor(s) of Indian Nationality shall disclose names and addresses of foreign agents/representatives, if any. Either the Indian agent on behalf of the foreign principal or the foreign principal directly could bid in a tender but not both. Further, in cases where an agent participate in a tender on behalf of one manufacturer, he shall not be allowed to quote on behalf of another manufacturer along with the first manufacturer in a subsequent/parallel tender for the same item
  - e) The Bidder(s)/Contractor(s) will, when presenting his bid, disclose any and all payments he has made, is committed to or intends to make to agents, brokers or any other intermediaries in connection with the award of the Contract.
3. The Bidder(s)/Contractor(s) will not instigate third persons to commit offences outlined above or be an accessory to such offences
4. The Bidder(s)/Contractor(s) will not, directly or through any other person or firm indulge in fraudulent practice means a willful misrepresentation or omission of facts or submission of fake/forged documents in order to induce public official to act in reliance thereof, with the purpose of obtaining unjust advantage by or causing damage to justified interest of others and/or to influence the procurement process to the detriment of the Government interests.
5. The Bidder(s)/Contractor(s) will not, directly or through any other person or firm use Coercive Practices (means the act of obtaining something, compelling an action or influencing a decision through intimidation, threat or the use of force directly or indirectly, where potential or actual injury may befall upon a person, his/ her reputation or property to influence their participation in the tendering process).

## **Article 3: Consequences of Breach**

Without prejudice to any rights that may be available to the Principal/Owner under law or the Contract or its established policies and laid down procedures, the Principal/Owner shall have the following rights in case of breach of this Integrity Pact by the Bidder(s)/Contractor(s) and the Bidder/ Contractor accepts and undertakes to respect and uphold the Principal/Owner's absolute right:

1. If the Bidder(s)/Contractor(s), either before award or during execution of Contract has committed a transgression through a violation of Article 2 above or in any other form, such as to put his reliability or credibility in question, the Principal/Owner after giving 14 days' notice to the contractor shall have powers to disqualify the Bidder(s)/Contractor(s) from the Tender process or terminate/determine the Contract, if already executed or exclude the Bidder/Contractor from future contract award processes. The imposition and duration of the exclusion will be determined by the severity of transgression and determined by the Principal/Owner. Such exclusion may be forever or for a limited period as decided by the Principal/Owner.

2. Forfeiture of EMD/Performance Guarantee/Security Deposit: If the Principal/Owner has disqualified the Bidder(s) from the Tender process prior to the award of the Contract or terminated/determined the Contract or has accrued the right to terminate/determine the Contract according to Article 3(1), the Principal/Owner apart from exercising any legal rights that may have accrued to the Principal/Owner, may in its considered opinion forfeit the entire amount of Earnest Money Deposit, Performance Guarantee and Security Deposit of the Bidder/Contractor.
3. Criminal Liability: If the Principal/Owner obtains knowledge of conduct of a Bidder or Contractor, or of an employee or a representative or an associate of a Bidder or Contractor which constitutes corruption within the meaning of IPC Act, or if the Principal/Owner has substantive suspicion in this regard, the Principal/Owner will inform the same to law enforcing agencies for further investigation.

#### **Article 4: Previous Transgression**

1. The Bidder declares that no previous transgressions occurred in the last 5 years with any other Company in any country confirming to the anticorruption approach or with Central Government or State Government or any other Central/State Public Sector Enterprises in India that could justify his exclusion from the Tender process.
2. If the Bidder makes incorrect statement on this subject, he can be disqualified from the Tender process or action can be taken for banning of business dealings/ holiday listing of the Bidder/Contractor as deemed fit by the Principal/ Owner.
3. If the Bidder/Contractor can prove that he has resorted / recouped the damage caused by him and has installed a suitable corruption prevention system, the Principal/Owner may, at its own discretion, revoke the exclusion prematurely.

#### **Article 5: Equal Treatment of all Bidders/Contractors/Subcontractors**

1. The Bidder(s)/Contractor(s) undertake(s) to demand from all subcontractors a commitment in conformity with this Integrity Pact. The Bidder/Contractor shall be responsible for any violation(s) of the principles laid down in this agreement/Pact by any of its Subcontractors/sub-vendors
2. The Principal/Owner will enter into Pacts on identical terms as this one with all Bidders and Contractors
3. The Principal/Owner will disqualify Bidders, who do not submit, the duly signed Pact between the Principal/ Owner and the bidder, along with the Tender or violate its provisions at any stage of the Tender process, from the Tender process

#### **Article 6- Duration of the Pact**

This Pact begins when both the parties have legally signed it. It expires for the Contractor/Vendor 12 months after the completion of work under the contract or till the continuation of defect liability period, whichever is more and for all other bidders, till the Contract has been awarded. If any claim is made/lodged during the time, the same shall be binding and continue to be valid despite the lapse of this Pacts as specified above, unless it is discharged/determined by the Competent Authority, CCW AIR.

#### **Article 7- Other Provisions**

1. This Pact is subject to Indian Law, place of performance and jurisdiction is the Headquarters of the Division of the Principal/Owner, who has floated the Tender.
2. Changes and supplements need to be made in writing. Side agreements have not been made.
3. If the Contractor is a partnership or a consortium, this Pact must be signed by all the partners or by one or more partner holding power of attorney signed by all partners and consortium members. In case of a Company, the Pact must be signed by a representative duly authorized by board resolution.
4. Should one or several provisions of this Pact turn out to be invalid; the remainder of this Pact remains valid. In this case, the parties will strive to come to an agreement to their original intentions.
5. It is agreed term and condition that any dispute or difference arising between the parties with regard to the terms of this Integrity Agreement / Pact, any action taken by the Owner/Principal in accordance with this Integrity Agreement/ Pact or interpretation thereof shall not be subject to arbitration.

**Article 8- LEGAL AND PRIOR RIGHTS**

All rights and remedies of the parties hereto shall be in addition to all the other legal rights and remedies belonging to such parties under the Contract and/or law and the same shall be deemed to be cumulative and not alternative to such legal rights and remedies aforesaid. For the sake of brevity, both the Parties agree that this Integrity Pact will have precedence over the Tender/Contact documents with regard any of the provisions covered under this Integrity Pact.

IN WITNESS WHEREOF the parties have signed and executed this Integrity Pact at the place and date first above mentioned in the presence of following witnesses:

.....  
(For and on behalf of Principal/Owner)  
**EXECUTIVE ENGINEER (E)**  
**CCW AIR MUMBAI**

.....  
(For and on behalf of Bidder/Contractor)

WITNESSES:

1. ....  
(Signature, name and address)

2. ....  
(Signature, name and address)  
Place:

Dated:

(On Non Judicial stamp paper of minimum Rs. 100)  
(Guarantee offered by Bank to CCW AIR 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 (Electrical) CCW AIR Mumbai on behalf of the President of India (hereinafter called "The Government") has invited bids under NIT No. **045/EDM/FTIIPUNE/2022-23/R001** for **ARMO Electrical works at FTII PUNE (Sub Head: Non Comprehensive Maintenance of EFA and Fire Fighting System and operation of water supply pump sets)**~~
- ~~2. The Government has further agreed to accept irrevocable Bank Guarantee for Rs. .... (Rupees ..... only) valid up to ..... (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**

1. Whereas the Executive Engineer (Electrical) CCW AIR Mumbai on behalf of the President of India (hereinafter called "The Government") has invited bids under NIT NO **045/EDM/FTIIPUNE/2022-23/R001** for **ARMO Electrical works at FTII PUNE (Sub Head: Non Comprehensive Maintenance of EFA and Fire Fighting System and operation of water supply pump sets)**
2. The Government has further agreed to accept irrevocable Bank Guarantee for Rs..... (Rupees .... only) valid up to..... (Date)\*..... as Performance Guarantee/ Security Deposit/Mobilization Advance 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.
3. We \_\_\_\_\_ (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.
4. We \_\_\_\_\_ (Bank) \_\_\_\_\_ do hereby undertake to pay the amounts due and payable under this Guarantee without any demure, merely on 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(s). 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).
5. We, the said bank further undertake to pay to the Government any money so demanded notwithstanding any dispute or disputes raised by the contractor(s) in any suit or proceeding pending before any court or tribunal relating thereto, our liability under this present being absolute and unequivocal. The payment so made by us under this bond shall be a valid discharge of our liability for payment thereunder and the contractor(s) shall have no claim against us for making such payment.
6. We \_\_\_\_\_ (Bank) \_\_\_\_\_ further agree with the Government that the Government shall have the fullest liberty without our consent and without effecting in any manner our obligations hereunder to vary any of the terms and conditions of the said agreement or to extend time of performance by the said contractor(s) from time to time or to postpone for any time or from time to time any of the powers exercisable by the Government against the said contractor(s) and to for-bear or enforce any of the terms and conditions relating to the said agreement and we shall not be relieved from our liability by reason of any such variation, or extension being granted to the said contractor(s) or for any forbearance, act of omission on the part of the Government or any indulgence by the Government to the said contractor(s) or by any such matter or thing whatsoever which under the law relating to sureties would, but for this provision, have effect of so relieving us.
7. We \_\_\_\_\_ (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
8. This guarantee will not be discharged due to the change in the constitution of the Bank or the contractor(s).
9. We \_\_\_\_\_ (Bank) \_\_\_\_\_ lastly undertake not to revoke this guarantee except with the previous consent of the Government in writing.



10. This guarantee shall be valid up to \_\_\_\_\_ unless extended on demand by 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 six months of the date of expiry or the extended date of expiry of this guarantee all our liabilities under this guarantee shall stand discharged.

Date:

Witnesses:

Authorized signatory

Name:

Designation:

Staff Code No:

Bank Seal

1 Signature  
Name and Address

2 Signature  
Name and Address

\*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

## **TERMINATION OF CONTRACT ON DEATH**

Without prejudice to any of the rights or remedies under this contract if the contractor dies, the Divisional Officer on behalf of the President of India shall have the option of terminating the contract without compensation to the contractor.

Whenever any claim, against the contractor from the payment of sum money arises out or under the contractor, Government shall be entitled to recover such by appropriating. In part or whole, the security deposit of the contractor and he shall any Government promise notes, etc. forming the whole or part of such security. In the event of the security being insufficient or if no sum recoverable as the case may be shall be deducted from any sum then due which at any time. where after may become due from the contractor under this or any other contract with Government should this sum be not sufficient to cover the full amount recoverable the contractor shall be to Government on demand the balance remaining due.

Government shall have the right to cause any audit and technical examination of the works and the bill of the contractor including all supporting vouchers, abstracts etc. to be made after payment of the final bill and if as a result of such audit and technical examination any sum is found to have been overpaid in respect of any work done by him under contract and found not to have been executed the contractor shall be liable to refund the amount cover the same from him the manner prescribed in sub-clause(1) of this clause or in any other manner legally permissible and if as result of audit and technical examination it is found that the contractor was paid less than that was due to him under if the amount of such under payment shall be fully paid by the Government to the contractor.

Provided the Government shall not entitled to recover any such overpaid, nor the contractor shall be entitled to payment of any such paid short where as payment has been agreed upon between the Superintending Engineer or Executive Engineer on the one hand and the contractor on the other hand under any term of the contract permitting payment of work after assessment by the Superintending Engineer or the Executive Engineer.

EXECUTIVE ENGINEER (ELECT)

#### Special Condition for Internal Electrical Installation works

- 1) All material required to be used on work shall be got approved from the Engineer-In-Charge, we in advance.
- 2) Earthing, Cable laying, Cement concrete works and testing of the installation shall be done in presence of the Engineer-In-Charge or his authorized representative.
- 3) On completion of work the Contractor shall test the installation and produce Test Certificate along with completion plan in accordance with the CPWD specification failing which a recovery shall be made from the bill of the Contractor as per Clause 8B.
- 4) Description of items underlined in the Schedule of work shall be used for abbreviation nomenclature of items for measurement and running account bills only.
- 5) All debris at site shall have to be removed by the contractor before handing over the installation to the Department.
- 6) The Main board shall be fabricated in consultation with the Engineer-In-Charge. Adequate space for providing energy meter, Cut out for providing Energy Meter, Cut out for providing Service Connection shall also be made on the Main Board.
- 7) The Successful tendered shall be making his own arrangement for storage and watch and ward of materials whether the same brought by him or supplied by the department. He shall remain responsible for watch and ward of installation and other fitting till these are commissioned and handed over to the department.
- 8) Cement required for the work shall have to be procured by the Contractor himself.
- 9) Electrical contractor will make recess in-brick work by cutting chases for provision of Electrical conduit and metal box according to the electric drawings for electrical services. Electrical Contractor will fix the conduits and boxes and there after close the chases up to the surface of masonry work in cement mortar 1:4 (1 Cement 4 Sand). There after surface of chases shall be plastered and finished by the Contractor (Civil Contractor) with mix and specification same as for plaster to ensure smooth and even surface. Nothing extra shall be paid to the contractor for above operations irrespective of whether the chases are not before or after plastering of the Wall.
- 10) All the fitting and fans should be proper Earthed.
- 11) Termination of wiring inside the DB's and Main Board should be by crimped connection. For which no extra payment shall be made.
- 12) The brass batten angle holder should be ISI marked.
- 13) The agency will have to return back the dismantled material if any except as specified in the item, to the concerned AE (E)/JE (E) at his store, for which no extra cartage shall be paid.
- 14) Before starting the fabrication. The Contractor shall prepare drawing of the Main Board, shall be got approved from the Engineer-In-Charge.
- 15) Following makes for use in the work are preferred. Prior approval of Engineer in charge is necessary for deviation from the preferred makes.
- 16) 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
- 17) 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 a binding on the contractor.
- 18) No claim for idle labour shall be entertained.
- 19) The connection, inter connection, earthing and inter earthing shall be done by the contractor wherever required and nothing extra shall be paid on this account.
- 20) Any accident liabilities will be the responsibility of the Contractor.
- 21) No T & P will be issued to the Contractor

## SCOPE OF WORK

Scope of work for Item No 1				
1	It is mandatory for the agency to deploy the following manpower:			
	S. No.	Description of manpower	Quantity	Duration per Month
	1	Service Engineer	1 No	01 Day
	2	Supervisor	1 No	01 Day
	3	EFA attendant/E & M Operator semiskilled	3 Nos	01 Month in each shift
	4	Helper	1 Nos	01 Month in General shift
	5	Reliever for EFA attendant	1 No	03 Days per week
2	The contractor is to render service through its own staff, tools and plants, materials to maintain the EFA and Firefighting system efficiently so as to maintain the healthy status of EFA system and required pressure conditions of Firefighting system as well as to provide efficient preventive maintenance of the machinery to ensure optimum utilization and upkeep of the machinery in its top working conditions			
3	The services shall be provided as per Maintenance schedule. The agency shall also attend any breakdown without any extra cost as and when required during the period of agreement			
4	The contractor has to provide their staff for operation and preventive maintenance of all the system. However for attending breakdowns / carrying out repairing works / separate labour shall be provided as per actual requirements of works to be undertaken by the agency			
5	The staff engaged shall be technically qualified and have experience of the trade. The contractor is to furnish bio-data along with testimonials of staff proposed with 3 nos. latest photographs to be engaged to the Engg-In-Charge / Site-In-Charge at least a week before obtaining clearance from the Engg-In-Charge			
6	The department will not absolve responsibility of the contractor for misconduct of his staff member. During the period of contract, Engg-In-Charge will have authority to ask the contractor to remove / replace any staff member in the event of misconduct of the labour. For this purpose the decision of the Engg-In-Charge shall be final			
7	The staff engage by the contractor shall possess necessary License as per relevant rules of MAHARASHTRA STATE and as applicable			
8	The contractor shall follow all CPWD safety rules & procedures as per the tender documents and shall be fully responsible for any type of accidents to his staff engaged and no claim on this account will be entertained by the department			
9	Local security rules will be observed by the contractor and his staff			
10	The log book will be maintained by the contractor. These log books will be made available to all inspecting officers of the CCW & FTII authorities			
11	During the surprise visit of any authorized representative of Engg-In-Charge if any EFA & Fire Fighting System is found non-operational due to carelessness & negligence of the operating staff a penalty of Rs. 1000/- (Rupees One Thousand Only) per event will be imposed on the contractor and will be recovered from his next bill			
12	The Engineer & supervisor of the contractor will visit / inspect the whole installation monthly and as and when required by the CCW authorities and will ensure that the whole installation is in satisfactory working conditions			
13	In all working areas of the FTII and inside of any room smoking is strictly prohibited			
14	The contractor will organize proper preventive maintenance services as per Schedule of maintenance. The record in this regard shall also be maintained suitably and the contractor shall get it countersigned from the departmental supervisory staff			
15	In case the contractor fails to provide efficient service as prescribed in tender documents, the department has the right to terminate the contract by one months 'notice			
16	The contractor will not affect any change in the original arrangement of EFA & Fire Fighting System without approval of Engineer-In-Charge			
17	The quarterly running payment will be made on the basis of services rendered by the contractor as per conditions of the contract			
18	The agency shall issue Six monthly certificate in every January and July for compliance of the Fire Prevention and Life Safety Measures in Form B [See Section 3(3) and Rule 4(2)] of The Maharashtra State Fire Prevention and Life Safety Measures Act 2006 as amended up to date.			

Scope of work for Item No 2	
1	The job of CHECKING, H.PRESSURE TESTING, PAINTING, REFILLING, FIXING OF DAMAGED PARTS LIKE HOSE PIPE& HORN.WHEEL ETC.
2	The agency should give valid test certificate, refilling done date, next due date etc.
3	The agency should give valid test certificate for chemicals, powders used in the fire extinguisher.
4	The agency should give original HP test certificate along with refilling test certificate.
5	The agency has to collect the fire extinguishers from various floors / offices of National Film Archives of India Pune take it out for the job and after completion of work extinguishers to be displayed at various places as per the direction of CCW/Film & Television Institute of India Pune duly labeling due date and refilling date

This contract includes following services:

1. Monitoring and attending the system for 24 Hours as well as operational maintenance & Non comprehensive/ comprehensive maintenance of the system as per schedule of work, with desired status and conditions specified
2. Preventive maintenance of every component of system
3. Minor repairs which are necessarily to be carried out at site including replacement of any spares for EFA & Firefighting System
4. Supplying and replacement of gland packing for Firefighting System pump sets / all necessary materials for preventive of leakage in water system. All type of hardware required like nuts, bolts, washers etc. grease / cotton waste etc.
5. All dismantled materials will be returned to the department against the replacement done
6. The contractor shall take over the system before the commencement of the work and handover the plant at the time of completion of the contract in original and satisfactory working condition. However, normal wear and tear of the system will not be the responsibility of the contractor
7. The contractor shall make good all the damage caused to the system due to faulty and negligent operations
8. The contractor will assess requirement of all probable spare parts with their technical specifications and available make well in advance so as to enable the department to procure the same. However, non-availability of spare parts from the department (if it happens so) the contractor will procure the necessary spare parts and the cost of spare parts will be paid to him as an extra item of the agreement as per prevailing market rates as per Clause 12 of the contract documents
9. Operating of water supply pump set in morning & evening shift as per details in items

This contract does not include the following:

1. Spare parts for repairs other than specified
2. Major repairs necessary to be carried out in the factory / complete dismantling of EFA control panel/Pump sets
3. Overhauling & rewinding of electric motors of the Pump sets etc.
4. Any spare for LT Power panel except minor wires / insulation tapes.

CONTRACTOR

EXECUTIVE ENGINEER (E)

SPECIAL CONDITION (EFA & FF system)

1	The agency should have valid GST registration or receipt of application for GST.
2	The agency should have valid enlistment in CPWD or should have valid license for the purposes of the Maharashtra Fire Prevention and Life Safety Measures Act, 2006 of EFA & Fire Fighting System.
3	Engaged labour should be physically fit and shall have trained in EFA & Firefighting system
4	The contractor shall be responsible for smooth preventive and running maintenance of the system as per "Appendix C, D and E" and satisfactory operation of the system
5	The contractor shall have to provide the trained personnel required to carry out the relevant maintenance as may be required for the purpose
6	The contractor shall be responsible for maintaining compliant register for the installation and shall be made available for inspection by Engineer-in-Charge or his authorized representative on demand
7	The contractor shall be responsible for all repairing works including replacement of the materials as in Sl. No 9.1 to 9.4 for which nothing will be paid as extra. Any other material required from 10.1 to 10.7 for the purpose will either be supplied by the department free of cost to the agency for replacement, or the Agency will arrange to procure the materials as per actual requirement which shall be of original / approved make for which the agency will be paid separately. All dismantled materials shall be deposited by the agency to the department within 7(seven) days, failing which no reimbursement will be made for the contractor's supplied materials and in case of departmental issue of materials recovery will be made from the contractor's monthly bill at double the issue rate
8	The contractor shall be responsible for replacement / making good the installation by supplying the following materials free of cost:-
9	Break glasses of manual call points, LEDs, capacitors, transistors, resistors line matching transformers and connecting wires in LCPs, MCP and PA system
9.1	Battery leads between battery terminal and MCP, electrolyte for battery, distilled water, petroleum jelly
9.2	Screws, Nuts Bolts, washers, solvent, cleaner as may be required for the maintenance of the installation
9.3	Soldering material, soldering flux, connecting wires
9.4	The contractor shall be responsible for replacement of following parts & making good the installation
10	Smoke / heat detectors/Manual call points etc.
10.1	Low intensity hooter and sounders
10.2	Response Indicator
10.3	Lead Acid battery
10.4	Power & control Contactor, fuses, pilot lamps for firefighting control panel, gland packing for pump sets valves etc.
10.5	Replacement of defective and outdated rubber reels/hose reels worn out Components
10.6	Repairs/replacement of all types of valves
10.7	The contractor shall have to make their own arrangement for T & P, measuring instruments etc. as will be required for routine maintenance and for which nothing will be paid as extra
11	The contractor shall be responsible for any incident / accident of his workmen and for any short of theft / missing of accessories of the system under this contract during operation and maintenance
12	The contractor shall not make any addition / alteration of the system on its own unless is directed / allowed to do so by the Engineer-in-Charge
13	The telephone number of the contractor is to be available at site and any break- down to the system to be attended immediately
14	Payment to contractor will be made on monthly basis or at a regular higher interval if so claimed by the contractor
15	The contractor shall be responsible for availability of his staff at site. The worker engaged by the contractor shall have to follow all security rules as is applicable to the institution
16	The agency has to take over the installation at the time of commencement of the work and to hand over the installation after completion of the maintenance period
17	All workmen deputed by the agency shall adhere to all rules and regulations in general, enforcing law and order of the institution
18	The agency has to submit the monthly service report stating the healthiness of the system and requirements for up gradation if any for the system The agency has to submit the monthly service report stating the healthiness of the system and requirements for up gradation if any for the system
19	The rates shall be inclusive of all sorts of levies and taxes The rates shall be inclusive of all sorts of levies and taxes

## APPENDIX -C

### C.1 INTRODUCTION

This appendix cover suggestive guidelines for maintenance and operation of the Wet Riser System.

#### C.1.1 OBJECTIVE:-

- (i) To keep the entire system fully operational and functional at all times.
- (ii) In case full system cannot be kept functional for unavoidable reason, as much as possible, the installation shall be retained functional by isolating the defective section.

### C.2 MAINTENANCE REQUIREMENT OF SYSTEM COMPONENTS

For maintaining fire fighting system following points are to be taken care of:-

C.2.1 To ensure availability of water in UG tank and terrace tank all the time and to maintain the tanks in clean condition.

C.2.2 To ensure that the piping system is free from leakage. Any portion found to be leaking is to be isolated, rectified and connected with healthy system in shortest possible time.

C.2.3 To ensure that all pumps are in good running condition. Any pump found to be defective is to be isolated by closing valves and attended immediately and put in to service in minimum time. All pump glands shall be maintained in efficient working condition and the packing renewed as required to maintain the efficiency. All working parts shall be kept clean and lightly oiled. Any necessary repairs shall be put in hand and carried out immediately.

C.2.4 To ensure availability of power for electrical pumps, working of starters, switch gear and other electrical components.

C.2.5 To ensure healthiness of diesel engine starting system, battery voltage, battery charger and availability of adequate diesel for engine operation.

C.2.6 To check all landing valves of internal and external hydrants, isolating valves and replace the defective ones whenever necessary

C.2.7 To check automatic operation of entire system by opening landing valves at different locations.

C.2.8 To conduct fire drill at regular interval.

### C.3 PERIODICAL TESTING

For achieving the objectives of Para C.1.1 and meeting the requirement of Para C.2 periodical testing and checking the system is essential. Various activities and their duration have been tabulated in Table C.1.

#### C.4 PROCEDURE

C.4.1 Though the fire fighting system operation is automatic, however for daily checking and attending to the system in case of operation, a trained pump operator shall be available round the clock.

C.4.2 Operation and Maintenance instructions shall be available in the pump room and fire control room.

C.4.3 Water for fire fighting purpose is not to be used for any other purpose. However in order to avoid stagnation, the same shall be changed / cleaned regularly.

C.4.4 Maintaining Diesel Engine is very important for the system operation since during fire, power supply is deliberately or un-deliberately switched off. Annual Maintenance Contract (AMC) of engine shall be given to the authorized service centre of engine manufacturer. Adequate diesel should either be available in the pump house or nearby so that operation is not discontinued for want of diesel.

C.4.5 Hydrant Mains / Ring Mains shall be tested once a fortnight with a pump delivering at its maximum pressure. A running test with two or more hose lines each 30m long operating shall be carried out.

C.4.6 If any out let is found to be defective and replacement is not easily available the whole assembly should be removed and be replaced by blank off plate so that the system remains operational.

C.4.7 Hose reels shall be subjected to regular inspection to ensure that all valve are functional, out let nozzle not choked. At least once in a year the same shall be subjected to operation to ensure that hose reel is in good condition and that the coupling joints are water tight. Flow should also be checked for the leakage of hose reel.

C.4.8 All hydrants shall be examined systematically once a week to ensure that valves and spring catches are maintained in good condition.

Spare washers shall be kept for hydrant valve seats.

C.4.9 Cut-off valves shall be thoroughly overhauled annually to remove sludge and other foreign matter collected in the valve seating.

C.4.10 All isolating valves shall be checked for operation. The valves in closed position be opened and closed couple of times and the valves in open position be closed and opened couple of times so that when required, the valves perform their function.



C.4.11 All hose boxes/hose stations shall be inspected externally once every week to ensure that the equipment installed therein is intact. Further, the hose boxes/hose stations shall be cleaned internally and externally once a month.

When the hose gets worn out at the tail end of the coupling(s), it is permissible to cut the end(s) of the hose. However should the lengths of the hose after cutting(s) fall below 90 percent of its original, the hose shall be discarded.

A hose register shall be kept showing Information such as date purchased, date brought into use, date cut (if reduced in length), is useful.

Any hose becoming inefficient through use, neglect or from any other cause, shall be discarded.

Fire protection hose shall not be used for purposes other than fire protection and drill.

Hose pipes and their couplings shall be checked to ensure there is no leakage during their use. The female coupling cam tooth mechanism be operated and lubricated for ensuring ease of operation.

C.4.12 Power supply to the pump house is not to be discontinued for any reason. Alternative arrangement shall be made in case any feeding switch gear is under repair / replacement.

C.4.13 It has to be ensured that there are no obstructions in front of the hydrants impeding accessibility

## C.5 FIRE DRILL

For making the users familiar with the system, Fire Drills shall be conducted for high rise buildings, in accordance with the fire safety plan, at least once every three months for buildings during the first two years. Thereafter, fire drills shall be conducted at least once every six months.

All occupants of the building shall participate in the fire drill. However, occupants of the building, other than building service employees are not required to leave the floor or use the exits during the drill.

A written record of such drill shall be kept on the premises for a three years period and shall be readily available for fire brigade inspection.

For other buildings, fire drill shall be carried out once in six months.

Local fire service and nodal officer-in-charge of various parts of the building shall be involved in conducting fire drill. Operation of the system shall be demonstrated so that all users are confident of the system and aware of their duties and responsibilities during fire.

For further details, Annexure D- Guidelines for fire drill and evacuation procedures for high rise buildings of Vol-1, Part-4 of NBC 2016 may be referred.

Contactor

Executive Engineer (E)

TABLE C.1

S. No.	System Component	Activity	Duration
1.	Water Tanks	(i) Level Check	Daily
		(ii) Cleaning	Once in a year
2.	Pumps	(i) Running	Daily (for min. 5 minutes)
		(ii) Test flow	Annually
		(iii) Lubrication	Quarterly
		iv) Gland packing check	Weekly
Electrically Driven Pumps:			
	i) Bearing grease cup	Weekly	
3.	Engine	(i) Running	Daily (for 5 minutes)
		(ii) Lubrication	Quarterly
		(iii) Battery Status	Weekly
		(iv) Fuel Tank check	Daily
4.	Motor	(i) Running	Daily
		(ii) Starter contact checking	Weekly
		(iii) Insulation Resistance	Half yearly
5.	Hydrant Mains / Ring Mains	i) Testing	Fortnightly
6.	Piping	(i) Pressure	Daily
		(ii) Flushing	once in a year
7.	Hydrants	examination	Weekly
8.	Valves (Landing, Cut -off and Isolation)	(i) operation and oiling if necessary (ii) Overhauling of all Cut- off valves	Monthly Annually
9.	Valves (Suction and Delivery)	(i) Examination	Half yearly
10.	Electrical Panels and Control System	(i) Operation	Monthly
	(ii) Connection and system components	Quarterly	
11.	Hose boxes	i) External Inspection ii) Internal and External cleaning	Weekly Monthly
12.	Hose Reel and Hose Pipes	(i) Physical check	Monthly
		(ii) Operation check	Annually
		(iii) Replacement	Depending upon physical condition.
13.	Fire Brigade Connections/ Inlet	(i) Physical check	Monthly.
	(ii) Operation check	Annually	
14.	Instantaneous Coupling	(i) Physical check	Monthly.
		(ii) Lubrication	Once in Six months.
15.	Painting	(i) Out Door	Once in a year.
		(ii) In Door	Once in two years.

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Executive Engineer (E)

APPENDIX -D  
MAINTENANCE OF AUTOMATIC SPRINKLER SYSTEM

D.1 Maintenance of other firefighting installation has been described in Appendix- 'C' which hold good for sprinkler installations also. In addition following points shall be taken care.

D.1.1 Sprinkler shall not be re-conditioned or repaired. Used and/or defective sprinklers shall be replaced by new ones.

D.1.2 Sprinklers shall not be painted after installation.

D.1.3 Spare Sprinklers - A stock of spare sprinklers shall be kept in Fire Control Room so that prompt replacement is possible after operation/damage of a sprinkler head. A minimum of 5% of the installed capacity or 25 sprinklers of all types whichever is more shall be kept in stock.

Spanners for sprinklers and Teflon tape shall also be kept along with spare sprinklers in readiness.

D.1.4 As far as possible, the installation shall be maintained in operating condition by blanking off pipe work feeding the inoperative part or parts where work is taking place.

D.1.5 The inoperative part, if defective shall be attended to and connected with the operative system.

D.1.6 Action following sprinkler operation

D.1.6.1 Following the operation of sprinklers, the operated head shall be replaced with new ones and water supply shall be restored.

D.1.6.2 The sprinklers in the vicinity of the operated sprinklers shall also be checked for damage by heat or any other cause and replaced if necessary.

D.1.6.3 The sprinkler pump shall not be shut off until complete extinguishment of the fire. The starting of the pump shall be automatic but the stopping of the pump after an extinguishment shall be manual.

D.1.7 All piping shall be examined to determine its conditions at least once a year.

D.1.8 All Installation Control Valves and associated equipment shall be serviced and tested annually.

D.1.9 Discharge test of sprinklers shall be carried out at least once in six months.

D.1.10 Manual testing of the system shall be carried out once in six months.

D.1.11 When normally opened valves are closed following system operation or test, suitable procedure shall be instituted to ensure that they are re-opened.

D.1.12 The entire system shall flushed at least once in a year.

D.1.13 The sprinkler bulbs shall be kept free from paint or dust.

D.2 MAINTENANCE GUIDELINES

Following guidelines shall be followed for sprinkler maintenance.

D.2.1 Maintenance and testing shall be carried out in a planned and systematic manner and records kept.

D.2.2 Only trained personnel shall be engaged in the work. Contract with qualified agency for service, test and operation is recommended.

D.2.3 Other firefighting installations are operated manually i.e. to operate a first aid hose reel or internal/external hydrant a person is required. As such during fire, when the system is in operation, somebody in the building is aware of it. In case of sprinkler operation, no one will come to know. For looking after sprinkler installation following personnel shall be available at all hours.

(a) A trained pump operator shall be available in the pump room.

(b) Depending upon the size of installations at least two or more trained personnel shall be available in fire control room.

Contactor

Executive Engineer (E)

APPENDIX -E  
MAINTENANCE OF THE FIRE ALARM SYSTEM

1.0 SCOPE:

This section covers the inspection and maintenance schedule for all types of Fire Alarm installation. Even a well-designed and properly installed fire alarm system will not be able to render reliable and trouble-free service unless high standards of maintenance and supervision are ensured during the entire service period of the system. Regular inspections and scheduled preventive maintenance are critical and should include all the components of the system.

1.1 Servicing / Periodical Maintenance

1.1.1 To ensure that regular and reliable servicing /maintenance of the systems and its components is carried out, any of the following methods should be adopted.

(a) Through an agreement/contract with the same contractor who had executed the work as far as possible for a period of 5 years for maintenance & repair of system or any other competent agency as decided by department.

(b) Where no such service contract can be entered into for any reason, at least one qualified employee of the user with suitable experience of electrical equipment should undergo special training to deal with all aspects of basic servicing and maintenance, including routine sensitivity test/ checks of the detectors, as and when require.

1.2 Maintenance Schedule:

1.2.1 The user of the equipment to ensure that proper instructions are obtained from the manufacture/supplier or installer regarding the routine maintenance and test procedures.

1.2.2 The routine to be adopted in individual premises may vary with the use of the premises, equipment installed in corrosive or dirty environmental conditions will need to be checked more thoroughly and at more frequent intervals than that in clear dry situations.

1.2.3 Daily Attention by the user:

A check should be made every day to ascertain that:

(a) The panel indicates normal operations: if not, that any fault indicated is recorded in the log book and is receiving urgent attention: and

(b) Any fault warning recoded the previous day has received attention.

MAINTENANCE OF THE FIRE ALARM SYSTEM

1.2.4 Weekly attention by the user:

The following tests should be made every week to ensure that the system is capable of operating under alarm conditions.

(a) Once a week, at least one trigger device or end of line switch on one zone circuit should be operated to test the ability of the control and indicating equipment to receive a signal and to sound the alarm and operate other warning devices. If there is more than one zone on a system having unmonitored wiring, each unmonitored zone should be tested each week, but without sounding the alarm more than once.

For systems having monitored wiring and up to 13 zones, each zone should be tested in turn but if there are more than 13 zones, more than one zone may need to be tested in any week so that the interval between tests on one zone does not exceed 13 weeks. It is preferable that each time a particular zone is tested, a different trigger device is used. An entry should be made in the log book quoting the particular trigger device that has been used to initiate the test. If the operation of the alarm sounder and/or the transmission of the alarm signal has been prevented by disconnection, then a further test should be carried out to prove the final reinstatement to the sounders, and if permissible, the alarm transmission circuits: and (b) A visual examination of the battery and connections should be made to ensure that they are in good condition. Action should be taken to remedy any defect.

Any defect noticed should be recorded in the log book and reported to the responsible person, and action should be taken to correct it.

1.2.5 Quarterly inspection and test by the User:

The following check- list and test sequence should be carried out:

(a) Entries in the log book since the previous inspection should be checked and any necessary action taken.

(b) Batteries and their connections should be examined and tested to ensure that they are in good serviceable condition.

(c) Check the Batteries for their proper functioning.

(d) The alarm function of control and indicating equipment should be checked by the operation of a trigger device in each zone as described. The operation of alarm sounders and any link to a remote manned center should be tested. All ancillary functions of the control panel should also be tested where practicable. All fault indicator and their circuits should be checked preferable by situation of fault conditions.

(e) Any defect should be recorded in the log book and reported to the responsible person, and action should be taken to correct it.

#### 1.2.6 Annual Inspection Tests:

The following checks and test sequence should be carried out.

- (a) Operation of at least 5 percent of the detector in an installation should be checked each year.
- (b) Each detector should be checked for correct operation using specified test equipment and method.
- (c) Visual inspection should be made to confirm that all cable fittings and equipment are secure, undamaged and adequately protected.
- (d) On completion of the annual inspection, the entry should be made in register in respect of defects found. After the defects are rectified the entries should then again be made.

#### 1.2.7 Clearing and Maintenance:

Detectors require periodic cleaning to remove dust or dirt that has accumulated the frequency of cleaning depending on the type of detector and the local ambient conditions.

In any case, the interval should not exceed a period of 6 months. For each detector, the cleaning, checking, operating and sensitivity adjustment should be attempted only consulting manufactures instructions. These instructions should details method such as creating vacuum to remove loose dust and insects, and cleaning heavy greasy deposits, etc.

#### 1.2.8 Tests following an Alarm or Fire:

All detectors suspected of exposure to a fire condition should be tested in accordance with the provisions contained in this code pertaining to annual inspection test. In addition, a visual check of the battery charger should be carried out to ensure perfect serviceability.

However, a check should be made to the extent of damage, if any, to the cables and other components and also the systems as whole.

#### 1.2.9 System Disconnection during Testing:

Care should be taken to minimize the disruption of the normal use of the building by alarm sounding during detector testing. If detectors are removed for testing or servicing, replacement detectors should be provided.

1.2.10 It shall be the responsibility of the contractor to get the installation inspected and passed by the local authorities concerned; as may be required by the local bylaws, payment of necessary inspection fee shall be paid by Department.

Contactora

Executive Engineer (E)

## SCHEDULE OF WORK (PRICE BID)

**NIT No. 045/EDM/FTIIPUNE/2022-23/R001**

**Name Of Work:- ARMO Electrical works at FTII PUNE (Sub Head: Non Comprehensive Maintenance of EFA and Fire Fighting System and operation of water supply pump sets)**

SL.	Description Of Items	Quantity	Unit	Rate	Amount
1)	Round the clock monitoring of EFA & FF system including Non-Comprehensive, preventive & break down maintenance of conventional and addressable type Early Fire Alarm system installed in Lab Building/TV Building -TV studios in ground floor ,PCR on first floor and addressable type Early Fire Alarm system installed in New CRT, New Acting Studio, 3rd floor TV building and Old Sound Building and Firefighting system complete with One No of Electric driven Main fire pump, One No Diesel driven pump set, One no of pressurisation pump sets, Main control panel, water sprinkler pipe line grid in Film Studio-I & II, external yard hydrants, internal yard hydrants, first aid hose reel swing type, 63 mm dia hose pipes with couplers & nozzles, Hose cabinets, 4 way Siamese for fire brigade inlets complete with suction & delivery pipes associated sluice valves, pressure switches, fire hydrant grid pipeline etc. Including conducting Mock Fire Drill Quarterly.	12	Month	₹ 1,33,956.00	₹ 16,07,472.00
	Fire attendant of morning & Evening shift will Operate the water supply pumps at various offices ,hostels & guest houses in two shifts i.e. Morning & evening shifts on all days in a year including Saturday Sundays & holidays with essential observations & noting in the log book during the shift. Pump details are as below. Pump details are as below.. a) Staff Quarters in front of main campus of FTII i) 7.5 HP Open Pump Standby 1 No's ii) 10 HP Open well submersible Pumps . ( One No Standby) 2 No's b)New Boys Hostel in staff quarter campus ii) 10 HP Open well submersible Pumps (One No Standby) 2 No's				
	c) TV building in main campus i) 10 HP Open well submersible Pumps (One No Standby) 3 No's d) Film Laboratory in main campus i) 5 HP Open well submersible Pumps (One No Standby) 2 No's e) Bore well in main campus At girls hostel , at jungle i) 1.5/2 HP ( One standby ) 2 No's f) New girls Hostel--Open well submersible Pumps--02 Nos				
2	Refilling, Servicing and Hydro testing of following capacity and types of first aid fire extinguishers using proper refill, providing of updated stickers etc. complete as required.				
2.1	DCP of 5 Kg. Capacity.	11	Each	₹ 1,646.00	₹ 18,106.00
2.2	DCP of 10 Kg. Capacity.	2	Each	₹ 2,190.00	₹ 4,380.00
2.3	Co2 of 4.5 Kg. Capacity.	33	Each	₹ 1,883.00	₹ 62,139.00
2.4	Co2 of 6.5 Kg. Capacity.	14	Each	₹ 2,301.00	₹ 32,214.00
2.5	Co2 of 22.5 Kg. Capacity.	2	Each	₹ 4,254.00	₹ 8,508.00
2.6	ABC of 5 Kg. Capacity.	1	Each	₹ 1,952.00	₹ 1,952.00

2.7	ABC of 6 Kg. Capacity.	21	Each	₹ 2,092.00	₹ 43,932.00
					₹ 17,78,703.00
<b>Name of the Contractor</b>					
<b>S. No</b>	<b>Description of Items</b>	<b>Estimated cost(Rs.)</b>	<b>Percentage above or below the estimated cost</b>	<b>% in Figures</b>	<b>Total (Rs)</b>
1	Name Of Work:- ARMO Electrical works at FTII PUNE (Sub Head: Non Comprehensive Maintenance of EFA and Fire Fighting System and operation of water supply pump sets)	17,78,703.00			-