



## **TENDER FOR**

**“Replacement of existing distribution board with new distribution board with MCB’s in 36 flats” at Harish-Chandra Research Institute, Chhatnag Road, Jhunsi, Allahabad-211019.**

***PART- 1 (TECHNICAL BID)***

***TENDER NOTICE NO. HRI/21/2018***

# Harish-Chandra Research Institute

Chhatnag Road, Jhunsi, Allahabad

## **INVITING TENDER FOR**

**“Replacement of existing distribution board with new distribution board with MCB’s in 36 flats” at Harish-Chandra Research Institute, Allahabad.**

Bid Reference No. : NIT – HRI/21/2018

Last date and time for submission of bids : 21.12.2018 up-to 1500 Hrs.

Date and time of opening of Bid : 21.12.2018 up-to 1530 Hrs.

Place of Opening of Bids : Harish-Chandra Research Institute  
Chhatnag Road, Jhunsi, Allahabad-211019

*The dates for submission and opening of the tender mentioned above are final. In case some other dates for these are mentioned elsewhere in the tender document, the above shall prevail over them.*

Address for any clarification/communication : Mr. Ajay Srivastava SO-C,  
0532-2274333,  
ajay@hri.res.in),  
Mr. Manish Sharma SO-E,  
0532-227 4358,  
manish@hri.res.in)

*ENGINEERING SECTION,*  
HARISH-CHANDRA RESEARCH  
INSTITUTE, ALLAHABAD

***This document contains : 22 Pages***

It will be the responsibility of the bidders to check website <http://www.hri.res.in> for any amendment through corrigendum in the tender document. In case of any amendment, bidders will have to incorporate the amendments in their bid accordingly.

**Sd/-**  
Seal & Signature of Registrar

**Harish-Chandra Research Institute**  
*Chhatnag Road, Jhunsi, Allahabad*

**Name of work: “Replacement of existing distribution board with new distribution board with MCB’s in 36 flats” at Harish-Chandra Research Institute, Allahabad.**

**Tender Notice No.: HRI/21/2018**

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# Harish-Chandra Research Institute

Chhatnag Road, Jhunsi, Allahabad

## Check list

<i>Sl. No.</i>	<i>Description</i>	<i>Party has to specify whether they have submitted the relevant details with their technical bid in YES or NO</i>
1.	Proof of Electrical license ....(Ref. point no. 5a of terms & conditions)	
2.	Proof of average annual turnover ....(Ref. point no. 5b of terms & conditions)	
3.	Experience of having successfully completed works ....(Ref. point no. 5c of terms & conditions)	
4.	Attested copy of PAN & GST registration ....(Ref. point no. 5e & 7 of terms & conditions)	
5.	Earnest Money Deposit of Rs. 11,200/- ....(Ref. point no. 13 of terms & conditions)	

Signature of the tenderer  
Address & Seal

**SECTION - I**

**NOTICE INVITING TENDERS**

**HARISH-CHANDRA RESEARCH INSTITUTE**  
**CHHATNAG, ROAD, JHUNSI, ALLAHABAD – 211 019**

**TENDER NOTICE NO. HRI/21/2018**

On behalf of the Director, Harish-Chandra Research Institute, sealed tenders are invited (**in two bids**) from eligible ‘A’ Class approved **Electrical License** contractors up to **3.00 p.m.** on **21.12.2018** and only technical bid shall be opened at **3.30 p.m.** on the same day for the work of **“Replacement of existing distribution board with new distribution board with MCB’s in 36 flats”** at Harish-Chandra Research Institute, Allahabad.

Estimated Cost	EMD	Performance Security	Security Deposit	Time of Completion	Tender Cost
Rs 5.6 lakh	Rs. 11,200/-	@ 5% of tendered amount	@ 5% of tendered amount	3 Month	Rs. 590/-

Interested parties may collect the Tender documents from the Accounts Officer, HRI on recommendation of Engineer, HRI on payment of tender cost (non Refundable) in cash from **30.11.2018** to **20.12.2018** during working days (11.00 a.m. to 4.00 p.m.).

*The party may also download the tender document from HRI web-site address: <http://www.hri.res.in>. In that case they have to submit a Demand draft of the tender cost alongwith the technical bid of the tender.*

**Director, HRI reserves the right to accept or reject any or all the Tenders without assigning any reason.**

*Sd/-*  
**Registrar**  
HRI, Allahabad.

**SECTION - II**

**TERMS & CONDITIONS**

**“Replacement of existing distribution board with new distribution board with MCB’s in 36 flats” at Harish-Chandra Research Institute, Allahabad**

**TERMS & CONDITIONS**

*Following instructions should be strictly followed while submitting your tender.*

1. Your offer should valid for a period of **120 days** from the date of opening of technical bid.
2. Please note that your tender will not be considered unless it is received in sealed envelope super scribed with tender number and due date. It should be put in the Tender Box kept at Reception of Institute building, Harish-Chandra Research Institute at Chhatnag Road, Jhunsi, Allahabad – 211 019. It should be noted that the delay of receiving of tender by Post will not be entertained.
3. Deadline for receipt of tenders (Part-1 & Part-2) is **3.00 p.m.** on or before **21.12.2018**. Late submission will not be entertained on any account. Part-1 (Technical bid) and part-2 (Price bid) will be in two separate envelop.
4. The Part-I of tender will be opened at the above office at **3.30 p.m.** on **21.11.2018** and your authorized representatives can be present at the time when the tenders are so opened and opening time of Part-2 (Price Bid) will be intimated later on to qualified bidder of Part-1 only. If on the day of opening of tender, holiday is declared in HRI then tender will be opened on next working day at same time.
5. Tenderer has to submit the following with the technical bid.
  - a. Proof of valid ‘A’ class Electrical license.
  - b. Proof of average annual turnover of not less than Rs. 5.6 lakh during last three years ending 31.03.2018
    - (i) Year 2015-2016
    - (ii) Year 2016-2017
    - (iii) Year 2017-2018
  - c. Experience of having successfully completed works during last seven years ending 20.12.2018. The party has to submit work order copy, Performance and completion certificate of the concerned work. Without required experience party will not be considered in this tender:
    - 3 similar works completed costing not less than Rs 2.2 lakh each OR
    - 2 similar works completed costing not less than Rs. 3.4 lakh each OR
    - 1 similar works completed costing not less than Rs. 4.5 lakhSimilar work shall mean: Electrical 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 last date of receipt of application for tenders.

and

One completed similar work (either part of (c) or a separate one) costing not less than Rs. 2.2 lakh with some Central/State Government Organization/Central Autonomous Body/Central Public Sector undertaking during last seven years ending 20.12.2018.
  - d. Full address of firm along with /Telephone no./Fax no./E-mail address :
  - e. Attested copy of PAN
6. Tender containing erasures or alterations will not be considered.
7. The party should be registered under GST. They have to submit a proof of Registration with their technical bid otherwise they will not be considered in this tender.
8. If bidder do not quote rate of any item under schedule of quantities or left the rate column blank then their bid will be treated as unresponsive & not be considered



9. The tender must be signed by the authorized persons only (Proprietor/Power of attorney/By all partners etc. as applicable).
10. All labour regulation applicable by the central Labour Commissioner of Govt. of India shall be adhered to strictly.
11. The time of completion of work is **Three Months** and shall be reckoned from the date of issue of work order.
12. **In case the contractor leaves the work or shows unwillingness to do work within stipulated contract period then EMD, Performance security & Security money deposited by party will be forfeited to HRI.**
13. A deposit at call Receipt or Demand Draft/FDR of scheduled Bank guaranteed by the Reserve Bank of India for the **Earnest Money Deposit of Rs. 11,200/-** in favour of Registrar, HRI, Allahabad is to be enclosed with the Tender Document (part-1) at the time of submission. No exemption in earnest money shall be given. All tenders submitted without requisite amount of earnest money shall be rejected.
14. An amount equal to 5% of tendered value towards Security Deposit shall be recovered. This amount will be recovered @ 10% from your each bill till the amount deducted is equal to concerned security deposit amount. The security money will be returned after 12 months from the date of completion of work and submission of certificate by contractor that there is no statutory liability (taxes etc.) due on him for this work. In addition the contractor shall be required to deposit an amount equal to 5% of the tendered value of the contract as performance security within the period prescribed for commencement of the work in the letter of award issued to contractor and will be released alongwith the final bill.
15. The time allowed for carrying out the work as entered in the tender shall be strictly observed by the contractor. The work shall throughout the stipulated period of the contract be proceeded with all due diligence. For delay in work, the contractor shall pay a compensation an amount equal to 0.25 percent of the order value per week from the end of stipulated period or (extended the period if any) of contract till the actual completion of work. The penalty so impose should not be more than 10% value of order. If it is found that party is not taking interest during delay period for completing the work then competent authority of Institute may also take decision for terminating the order/contract of concerned work. In this case, their Performance security and any other Security money may also be forfeited.
16. Contractor has to make their own arrangement for supply of water at their site. If contractor use Institute's water for their work then 0.5% of work order value will deducted from their bill. However, necessary arrangement for supply of water at their site from source of water supply will be done by contractor separately. Similarly if power of Institute is taken by contractor then an electricity meter will be installed and charges for electricity consumed will be recovered as per UPPCL tariff for Institute will be deducted from their bill.
17. The schedule of quantity is indicative are tentative. Actual quantity will vary based on the actual requirement.
18. Contractor has to make their own arrangement for staying their labourers as Institute will not allow any labourers inside the campus after working period.
19. The lowest bidder will be finalized based on overall quoted amount in this tender. However, total amount will be considered based on sum of individual items.
20. Procedure for dealing with ambiguities in rates: That if on check there are differences between the rates given by the contractor in words and in figures or in amount worked out by him, the following procedure shall be followed:
  - (a) When there is a difference between the rates in figures and in words, the rates which correspond to the amounts worked out by the contractor shall be taken as correct.

- (b) When the amount of an item is not worked out by the contractor, or if it does not correspond with the rates written either in figures or in words, then the rate quoted by the contractor in words shall be taken as correct.
  - (c) When the rate quoted by the contractor in figures and in words tallies, but the amount is not worked out correctly, the rates quoted by the contractor shall be taken as correct and not the amount.
21. **Payment terms:** Party may submit RA bill for payment. The party may claim GST if applicable in this work with their bill. Institute will pay the amount for GST. However, the liability of depositing tax (GST) to concerned Department will be totally on the contractor
  22. For electricity uses of Institute, contractor has to install electric meter and charges for electricity consumed will be recovered by Institute as per UPPCL tariff from their bill.
  23. **In case any discrepancy between terms & conditions and General condition of tender then terms & condition of tender shall take precedence.**
  24. Party has to ensure gate entry (at Security gate, HRI) for any material before bringing at site. In this connection, they have to submit challan copy of materials in Engineering office at HRI for records.
  25. Don't detach any paper from the tender document and put the signature & seal at all the papers of the tender document.
  26. For any information/clarification in this tender, you may contact Engineering Section, HARISH-CHANDRA RESEARCH INSTITUTE, during office hrs. (9.00 a.m. to 5.30 p.m.) on any working days.
  27. Decision of the Director of the Institute will be final & binding for all concerned.
  28. Director, Harish-Chandra Research Institute reserves the right to reject any or all tenders without assigning any reason whatsoever. Harish-Chandra Research Institute would not be under any obligation to give any clarifications to those contractors whose tenders are rejected.
  29. All disputes will be subject to Allahabad jurisdiction.

**Note: The contractor should acknowledge that he has satisfied himself as to the nature and location of the work before submitting the tender. They should also acknowledge that they are quoting their rate properly after knowing all terms & conditions of tender.**

### **DECLARATION BY THE CONTRACTOR**

It is hereby declared that I/We the undersigned, have read and examined all the terms and conditions etc. of the tender document for which I/We have signed and submitted the tender under proper lawful Power of Attorney. It is also certified that all the terms and conditions of the tender document are fully acceptable to me/us and I/We will abide by the conditions from serial no. 1 to 29. This is also certified that I/We/our principal manufacturing firms have no objection in signing the contract if the opportunity for the items against this tender is given to me/us.

Date:

Signature:

Address:

Name:

Designation:

On behalf of company Seal:

**SECTION - III**

**GENERAL RULES AND DIRECTIONS**

## **GENERAL RULES AND DIRECTIONS**

1. In the event of the tender being submitted by a firm, it must be signed separately by each partner thereof or in the event of the absence of any partner, it must signed on his behalf by a person holding a power-of attorney authorising him to do so, such power of attorney to be produced with the tender and it must disclose that the firm is duly registered under the Indian Partnership Act.
2. Receipts for payments made on account of work when executed by a firm must also be signed by the several partners except where the contractors are described in their tender as a firm in which case the receipts must be signed in the name of the partners or by some other person having authority to give effectual receipts for the firm.
3. Any person who submits a tender shall fill up the usual printed form, stating at what rate he is willing to undertaken each item of the work. Tenders, which proposes any alteration in the work specified in the said form of invitation to tender, or in the time allowed for carrying out the work, or which contain any other condition of any sort including conditional rebates, will be summarily rejected. However, tenders with unconditional rebates(s) will be acceptable. Tenders shall have the name and of the works to which they refer, written on the envelopes.
4. The officer inviting tenders shall have the right of rejecting all or any of the tenders and will not be bound to accept the lowest tender.
5. If it is found that the tender is not submitted in proper manner or contains too much corrections and/or absurd rates or amount, it would be open for the officer inviting tenders to take suitable disciplinary action against the contractor. The tenderers shall sign a declaration under the official Secret Act for maintaining secrecy of the tender documents, drawings or any other records connected with the work given to them. The unsuccessful tenderers shall return all the drawings given to them.

### **CLAUSES OF CONTRACT**

#### **CLAUSE 1: PERFORMANCE GUARANTEE**

- i The contractor shall submit an irrevocable Performance Guarantee of 5% (Five percent of the tendered amount in addition to other deposits mentioned elsewhere in the contract for his proper performance of the contract agreement, (not withstanding and/or without prejudice to any other provisions in the contract) within 15 days of issue of letter of intent and / or work order. This period can be further extended by the Engineer-in-charge upto a maximum period of 7 days on written request of the contractor stating the reason for delays in procuring the bank Guarantee, to the satisfaction of the Engineer-in-charge. This guarantee shall be in the form of Government Securities or fixed deposit receipts or Guarantee Bonds of any Scheduled Bank or the State Bank of India. In case a fixed deposit receipt of any Bank is furnished by the contractor to the Government as part of the performance guarantee and the Bank is unable to make payment against the said fixed deposit receipt, the loss caused thereby shall fall on the contractor and the contractor shall forthwith on demand furnish additional security to the to HRI to make good the deficit.
- ii A letter of intent shall be issued in the first instance informing the successful tenderer of the decision of the competent authority to accept his tender and the award letter shall be issued only after the performance Guarantee in any of the prescribed form is received. In case of failure by the contractor to furnish the performance guarantee within the specified period. Director, HRI shall without prejudice to any other right or remedy available in law, be at liberty to forfeit the earnest money absolutely.
- iii The performance Guarantee shall be initially valid upto the stipulated date of completion plus 60 days beyond that. In case the time for completion of work gets enlarged, the contractor shall get the validity of performance Guarantee extended to cover such enlarged time for completion of work. After recording of the completion certificate for the work by the competent authority, the performance guarantee shall be returned to the contractor, without any interest.

## **CLAUSE 1-A: RECOVERY OF SECURITY DEPOSIT**

The person (s) whose tender(s) may be accepted (hereinafter called the contractor) shall permit HRI at the time of making any payment to him for work done under the contract to deduct a sum at the rate of 10% of the gross amount to each running bill till the sum alongwith the sum already deposited as earnest money, will amount to security deposit of 5% of the tendered value of the work. Such deductions will be made and held by HRI by way of Security Deposit unless he has / they have deposited the amount of Security at the rate mentioned above in cash or in the form of Government Securities or fixed Deposit Receipts. In case a fixed deposit receipt of any bank is furnished by the contractor to the Government as part of the security deposit and the bank is unable to make payment against the said fixed deposit receipt, the loss caused thereby shall fall on the contractor and the contractor shall forthwith on demand furnish additional security to the to the HRI to make good the deficit.

All compensation or the other sums of money payable by the contractor under the terms of this contract may be deducted from, or paid by the sale of a sufficient part of his security deposit or from the interest arising there from or from any sums which may be due to or may become due to the contractor by HRI or any account whatsoever and in the events of his Security Deposit being reduced by reason of any such deductions or sale as aforesaid, the contractor shall within 10 days make good in cash or flexed deposit receipt tendered by the state Bank of India or by scheduled banks or Government Securities (if deposited for more than 12 months) endorsed in favour the Accounts Officer, HRI any sum or sums which may have been deducted from, or raised by sale of his security deposit or any part thereof. The security deposit shall be collected from the running bills of the contractor at the rates mentioned above and the Earnest money if deposited in cash at the time of tenders will be treated a part of the Security Deposit.

## **CLAUSE 2: COMPENSATION FOR DELAY AND BUFFER PERIOD:**

The time allowed for carrying out the work as entered in the tender shall be strictly observed by the contractor. The work shall throughout the stipulated period of the contract be proceeded with all due diligence. For delay in work, the contractor shall pay a compensation an amount equal to 0.25 percent of the order value per week from the end of stipulated period or (extended the period if any with or without penalty) of contract till the actual completion of work. The penalty so impose should not be more than 10% value of order. If it is found that party is not taking interest during delay period for completing the work then competent authority of Institute may also take decision for terminating the order/contract of concerned work. In this case, their Performance security and any other Security money may also be forfeited.

### **BUFFER PERIOD:**

Compensation will be recovered from the contractor if the work is not completed within 10 days after due date of completion. The buffer period of 10 days relates to only to the final completion of the work as whole and does not apply to the interim schedule of progress. In the event of the work being completed beyond the period of 10 days after the date of completion specified in the tender, the entire period inclusive of the buffer period shall be taken into account for calculating the amount of compensation.

## **CLAUSE-3: DETERMINATION OF CONTRACT: POWERS OF ENGINEERS –IN-CHARGE.**

Subject to other provisions contained in this clause, the Engineer-in-charge may, without prejudice to his any other right or remedy against the contractor in respect of any delay, inferior workmanship, otherwise or to any rights or remedies under any of the provisions of this contract or otherwise and whether the date of completion has or has not elapsed, by notice in writing absolutely determine the contract in any of the following cases:

- i. If the contractor having been given by the Engineer-in-Charge a notice in writing to rectify, reconstruct or replace any defective work or that the work is being performed in any inefficient or otherwise improper or un-workman-like manner shall omit to comply with the requirements of such notice for a period of seven days thereafter or if the contractor shall delay or suspend the execution of the work so that either in the judgment of the Engineer-in-charge (which shall be final and binding) he will be unable to secure completion of the work by the date for completion or he has already failed to complete the work by that date.
- ii. If the contractor being a company shall pass a resolution or the court shall make an order that the company shall be wound up or if a receiver or a manager on behalf of a creditor shall be appointed or if circumstances shall arise which entitle the court or creditor to appoint a receiver or a manager or which entitle the court to make a winding up order.
- iii. If the contractor commits breach of any of the terms and conditions of this contract.
- iv. If the contractor commits any acts mentioned in Clause 2 hereof.

When the contractor has made himself liable for action under any of the cases aforesaid, the Engineer-in-Charge on behalf of the Director, HRI have powers:

- a. To determine or rescind the contract as aforesaid (of which termination or rescission notice in writing to the contractor under the hand of the Engineer-in-Charge shall be conclusive evidence). Upon such determination or rescission, the Earnest Money Deposit, the Security Deposit already recovered and Performance Guarantee under the contract, shall be liable to be forfeited, and shall be absolutely at the disposal of the HRI.
- b. To employ labour paid by the HRI and to supply materials to carry out the work or any part of the work debiting the contractor with the cost of the labour and the price of the materials (of the amount of which cost and price certified by the Engineer-in-charge shall be final and conclusive against the contractor) and crediting him with the value of the work done in all respect in the same manner and at the same rates as if it has been carried out by the contractor under the terms of his contract. The certificate of the Engineer-in-Charge as to the value of the work done shall be final and conclusive against the contractor, provided always that action under the sub-clause shall only be taken after giving notice in writing to the contractor. Provided also that if the expenses incurred by the Department are less than the amount payable to the contractor at his agreement rates, the difference should not be paid to the contractor.
- c. After giving notice to the contractor to measure up the work of the contractor and to take such part thereof as shall be unexecuted out of his hands and to give it to another contract to complete in which case any expenses which may be incurred in excess of the sum which would have been paid to the original contractor if the whole work had been executed by him (of the amount of which excess the certificate in writing of the Engineer-in-Charge shall be final and conclusive) shall be borne and paid by the original contractor and may be deducted from any money due to him by HRI under this contract or on any other account whatsoever or from his security deposit or the proceeds of sales thereof or a sufficient part thereof as the case may be.

In the event of any one or more of the above courses being adopted by the Engineer-in-charges the contractor shall have no claim to compensation for any loss sustained by him reason of his having purchased or procured any materials or entered into any engagements or made any advances on account or with a view to the execution of the work or the performance of the contract. And incase action is taken under any of the provisions aforesaid, the contractor shall not be entitled to recover or be paid any sum for any work thereto for actually performed under this contract unless and until the Engineer-in-charge has certified in writing the performance of such work and the value payable in respect thereof and he shall only be entitled to be paid the value so certified.

**CLAUSE 3A:** In case the work cannot be started due to reasons not within the control of the contractor within 1/8<sup>th</sup> of the stipulated time for completion of work, either party may close the contract. In such eventuality, the Earnest Money Deposit and the Performance Guarantee of the contractor shall be refunded, but no payment on account of interest, loss of profit or damages etc. shall be payable at all.

**CLAUSE 4:** Contractor liable to pay compensation even if action not taken under Clause 3:

In any case in which any of the powers conferred upon the Engineer-in-Charge by clause 3 thereof shall not constitute a waiver of any of the conditions hereof and such powers shall notwithstanding be exercisable in the event of any future case of default by the contractor and the liability of the contractor for compensation shall remain unaffected. In the event of the Engineer-in-Charge putting in force all or any of the powers vested in him under the preceding clause he may, if he so desires after giving a notice in writing to the contractor, take possession of or (at sole discretion of the Engineer-in-Charge which shall be final) use as on hire (the amount of the hire money being also in the final determination of the Engineer-in-Charge all or any tools, plant, materials and stores, in or upon the works, or the site thereof, belonging to the contractor, or allowing for the same in account at the contract rates, or, in the case of these not being applicable, at current market rates to be certified by the Engineer-in-charge whose certificate thereof shall be final, otherwise the Engineer-in-Charge may remove them at the contractor's expense or sell them by auction or private sale on account of the contractor and at his risk in all respects and the certificates of the Engineer-in-Charge as to the expense of any such removal and the amount of the proceeds and expense of any such sale shall be final and conclusive against the contractor.

**CLAUSE 5: TIME EXTENSION AND FOR DELAY:**

The time allowed for execution of the works as stipulated in the NIT / Tender documents, or the extended time in accordance with these conditions shall be the essence of the Contract. The execution of the works shall commence from such time period as mentioned in letter of acceptance or from the date of handing over of the site whichever is later. If the contractor commits default in commencing the execution of the work as aforesaid, HRI shall without prejudice to any other right or remedy available in law, be at liberty to forfeit the earnest money performance guarantee absolutely.

**5.1** As soon as possible after the contract is concluded the Contractor shall submit a Time and Progress Chart for each mile stone and get it approved by the Department. The Chart shall be prepared in direct relation to the time stated in the contract documents for completion of items of the works. It shall indicate the forecast of the dates of commencement and completion of various trades of sections of the work and may be amended as necessary by agreement between the Engineer-in-Charge and the Contractor within the limitations of time imposed in the Contract documents, and further to ensure good progress during the execution of the work, the contractor shall in all cases in which the time allowed for any work, exceeds one month (save for special jobs for which a separate programme has been agreed upon) complete the work as per mile stones mutually agreed as above.

**5.2** If the works (s) be delayed by:

- (i) Force majeure, or
- (ii) Abnormally bad weather, or
- (iii) Serious loss or damage by fire, or
- (iv) Civil commotion, local commotion of workmen, strike or lock out, affecting any of the trades employed on the work, or
- (v) Delay on the part of other contractors or tradesmen engaged by Engineer-in-Charge in executing work not forming part of the Contract, or
- (vi) Non availability or break down of tools and plant to be supplied or supplied by HRI or
- (vii) Non-availability or break down of tools and plant to be supplied or supplied by HRI or
- (viii) Any other cause which, in the absolute discretion of the Engineer-in-Charge is beyond the Contractor's control.

Then upon the happening of any such event causing delay, the Contractor shall immediately give notice thereof in writing to the Engineer-in-Charge but shall nevertheless use constantly his best endeavors to prevent or make good the delay and shall do all that may be reasonably required to the satisfaction of the Engineer-in-Charge to proceed with the works.

**5.3** Request for rescheduling of Mile stones and extension of time, to be eligible for consideration, shall be made by the contractor in writing within fourteen days of the happening of the event causing delay on the prescribed form. The Contractor may also, if practicable, indicate in such a request the period for which extension is desired.

In any such case the Engineer-in- Charge may give a fair and reasonable extension of time and reschedule the mile stones for completion of work. Such extension shall be communicated to the Contractor by the Engineer-in-Charge in writing, within 3 months of the date of receipt of such request. Non application by the contractor for extension of time shall not be a bar for giving a fair and reasonable extension by the engineer-in-Charge and this shall be binding on the contractor.

#### **CLAUSE 6: COMPLETION CERTIFICATE & COMPLETION PLANS.**

Within ten days of the completion of the work, the contractor shall give notice of such completion to the Engineer-in-Charge. On the receipt of such notice the Engineer-in-Charge shall inspect the work, and if there is no defect in the work shall furnish the contractor with a certificate of completion otherwise a provisional certificate of completion indicating defects (a) to be rectified by the contractor and/or (b) for which payment will be made at reduced rates, shall be issued but no certificate of completion, provisional or otherwise, shall be issued, nor shall the work be considered to be complete until the contractor shall have removed from the premises on which the work shall be executed, all scaffolding, surplus materials, rubbish and all huts and sanitary arrangements, required for his/their work people on the site in connection with the execution of the works as shall have been erected or constructed by the contractor(s) and cleaned off the dirt from all wood work, doors, windows walls, floors or other parts of any building, in upon or about which the work is to be executed or of which he may have had possession for the purpose of the execution thereof, and not until the work shall have been measured by the Engineer-in-charge. If the contractor shall fail to comply with the requirements of this clause as to removal of scaffolding, surplus materials and rubbish and all huts and sanitary arrangements as aforesaid and cleaning off dirt on or before the date fixed for the completion of the work, the Engineer-in-Charge may at the expense of the contractor remove such scaffolding, surplus materials and rubbish, etc, and dispose off the same as he thinks fit and clean off such dirt as aforesaid; and the contractor shall have no claim in respect of any such scaffolding or surplus material as aforesaid except for any sum actually realized by the sale thereof.

**6. A: CONTRACTOR TO KEEP SITE CLEAN:** When the work is carried out, the splashes and droppings from white washing, colour washing, painting etc. on wall, floors, doors, windows etc. shall be removed and the surface cleaned simultaneously with the completion of these item of work in the individual rooms, quarters or premises etc. where the work is done without waiting for the actual completion of all other items of work in contract. In case the contractor fails to comply with the requirements of this clause, the Engineer-in-Charge shall have the right to get this work done at the cost of the contractor either departmentally or through another agency. Before taking such action, the Engineer-in-Charge shall give two days notice in writing to the contractor.

#### **CLAUSE 7: MEASURMENTS OF WORK & SUBMISSION OF BILLS:**

A bill shall be submitted by the contractor each month on or before the date fixed by the Engineer-in-Charge for all works executed in the previous months, and the Engineer-in-Charge shall take or cause to be taken the requisite measurement for the purpose of having the same verified and the claim, as far as admissible, adjusted as far as possible, before the expiry of ten days from the presentation of the bill. If the contractor does not submit the bill within the time fixed as aforesaid, the Engineer-in-Charge may



depute within 7 days of the date fixed as aforesaid, a subordinate to measure up the said work in the presence of the contractor whose countersignature to the measurement list will be sufficient warrant; and the Engineer-in-Charge at his discretion on the basis of a certificate from the Engineer to the effect that the work has been completed upto the level in question.

**CLAUSE 7A: MEASUREMENT IN ABSENCE OF THE CONTRACTOR:**

Before taking any measurement of any work as has been referred in above clause thereof, the Engineer-in-Charge or a subordinate deputed by him shall give reasonable notice to the contractor. If the contractor fails to attend at the measurements after such notice or fails to countersign or to record the difference within a week from the date of measurement in the manner required by the Engineer-in-Charge then in any such event the measurements taken by the Engineer-in-Charge or by subordinate deputed by the him as the case may be shall be final and binding on the contractor and the contractor shall have no right to dispute the same.

**CAUSE 8: EXCAVATED /DISMANTLED MATERIALS WILL BE GOVT. PROPERTY:** The contractor shall treat all materials obtained during dismantling of a structure, excavation of the site for a work etc. as HRI property and such materials shall be disposed off to the best advantage of HRI according to the instructions in writing issued by the Engineer-in-Charge.

**CLAUSE 9: WORK TO BE EXECUTED AS PER SPECIFICATIONS, DRAWINGS, ORDERS, ETC:**

The contractor shall execute the whole and every part of the work in the most substantial and otherwise in every respect in strict accordance with the specifications.

# Scope of Work

## **1. CIVIL WORK**

- (a) The Distribution board should be refitted in the existing SDB in the wall vertically/Horizontally. After refitting the surface should be finished nicely. All civil work in fixing of distribution board has to be carried out by contractor. The contractor should ensure that wherever wall, roof, floor cable trench are chipped/cut for installation of distribution board/electrical works the surface is finished neatly to the same surface as before. Damage if any done to the above should be made good by contractor at his cost.
- (b) The contractor shall thoroughly study the structural and architect arrangements of the concerned building and wherever necessary shall in consultation with Engineer-in Charge at site, make suitable adjustment in fixing of distribution board with a view to avoid interface with any part of buildings, structure, equipment or any other work in the building or to effect any improvement in the arrangement.

## **2. DISTRIBUTION BOARD ( For Lighting and Power)**

DB shall be made by the reputed company, 500 V- Type : SP DB with neutral link and of the size as required and indicated in the applicable drawings.

The number of ways of circuits shall be as specified in schedule of quantity and as per requirement. Each way shall have MCB for each circuit. The neutral bus whenever required shall have as many tapped holes as necessary to receive the neutral leads. Suitable size 1/2" long round head brass screws shall be provided for 1 BA size.

Each circuit shall be separated from the other by a separate SP MCB.

Means shall be provided for any identification of each branch circuit. Each DB shall have its main disconnect or switch of the type and size as required and indicated. The main disconnect shall be mounted directly or otherwise below or above the distribution board as required.

The distribution board shall be suitable in size such a way that it can be fitted in the existing sub distribution board. Contractor shall make his own arrangement to refitting the new DB in the existing box of SDB. While fitting contractor will provide additional temporary DB complete with required MCB's and ensure that the user will get continuous power supply while doing work. To make this arrangement contractor will arrange additional 2 sets of DB, MCB's, ELCB and other required accessories. The DB shall be fabricated with 2 mm thick M.S. CRCA Sheet. Necessary hold fasts shall be provided. Necessary danger board (as per IS) shall be fixed on the door and arrangement shall be made for two earthing terminal which are diagonally opposite. 6 mm x 30 mm long brass earthing stud with nuts & washers shall be provided.

Distribution Board manufacture by MCB manufacturer would be considered if the general specifications are in line with department specification.

Make of DBs should be MDS/Legrand/HAGER/Schneider/Havells

### **3. MINIATURE CIRCUIT BREAKERS**

The MCBs to be used in the Distribution Board shall be of completely moulded design suitable in 240 volts, 50 Hz AC System. The capacity shall be of 6 Amp to 32 amp as per requirement approved by Engineer-In-Charge. The MCBs shall have overload and short circuit protection. The MCB time current characteristic shall co-ordinate with HRC/PVC cable characteristics unit shall comply with latest edition of IS 8828, BS 3871 etc.

Make of MCBs should be MDS/Legrand/HAGER/Schneider

### **4. EARTH LEAKAGE CIRCUIT BREAKER/RESIDUAL CURRENT CIRCUIT BREAKER**

Supply of earth leakage circuit breaker of 30 mA sensitivity and Ip 54 degree protection approved make of following salient details and of 40 Amp/63Amp capacity as required for operation on 240 V single phase (2 Pole).

1. Unit to be purely current operated.
2. Tripping through switch lock of electromagnetic type.
3. Trip free with test switch facility.
4. To operate even in case of neutral failure.
5. Neutral advance mechanism.
6. Repeat accuracy of plus /minus 50.
7. Unit to operate for nominal voltage well below maximum safe value of 10V.

Unit shall comply with latest BS 3871 & 4293, I.S. , and firm shall submit test reports including latest report from CPRI and to meet the new I E Rule 61(A) regarding providing earth leakage protection device.

The contractor shall be completely responsible for the testing and commissioning of all electrical installation as per standards and specification before handing over the installation to the department.

Make of ELCB/RCCB should be MDS/Legrand/HAGER/Schneider

### **5. CONDUITS AND CONDUIT ACCESSORIES**

Conduit should be used heavy gauge rigid steel conduit as approved by Engineer-in-Charge and schedule of quantities conforming to IS 1653-1964 (with latest amendment). All conduits pipes shall be finished with stove enamelled or galvanised as per requirement in Schedule of quantities.

The inside of conduit should be clean and smooth without any burrs which may damage the insulation of wires. The size of conduits to be used for installation shall be 25mm & 32 mm as required. The installation of conduit shall be concealed unless otherwise specified.

The conduit accessories and fittings shall be made of heavy gauge steel or cast iron, screwed type with smooth finish. Deep junction boxes should be used in case of concealed conduit installation.

Flexible conduits, if required shall be of good quality, water tight and suitable for indoor and outdoor duty as approved by Engineer-in-Charge.

All conduits should be supported on their horizontal or vertical runs either with saddles or pressed steel saddles fixed to MS spacer with machine screws. The lengths of conduits shall be joint by means of threaded couplers and threaded accessories only. Thead shall be free from grease or oil.

## **TENDER FOR**

**“Replacement of existing distribution board with new distribution board with MCB’s in 36 flats” at Harish-Chandra Research Institute, Chhatnag Road, Jhunsi, Allahabad**

***PART- 2 (FINANCIAL BID)***

Sl. No.	Item	Qty.	Unit	Rate in words & figures		Total Amount	
				Rs.	Ps.	Rs.	Ps.
1	Supply and fixing following way, single pole and neutral, sheet steel, MCB distribution board, 240V, on surface/recess complete with tinned copper bus bar, neutral bus bar, earth bar, din bar, interconnection, powder painted including earthing etc. as required (But without MCB/RCCB/Isolator).  The new Distribution Board will be fixed inside the existing SDB. Contractor has to arrange two set of DB's as stand by to provide the temporary connection to the user while fixing a new DB to His /Her house.						
	2W + 12/16 way Single door	36	Nos.				
2	Supply and fixing 5A to 32A rating 240 volts "C" curve MCB suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required.						
	6 A to 32 A single pole	432	Nos.				
3	Supplying & fixing 63 Amp rating double pole (single phase & neutral), 240V, Residual Current Circuit Breaker (RCCB) having a sensitivity current 30 mA in the existing MCB DB complete with connections, testing and commissioning etc. as required.	36	Nos.				
4	Wiring for circuit/ sub main wiring alongwith earth wire with the following sizes of PVC insulated copper conductor, single core cable in surface/recessed steel conduit as required.						
a	2x1.5 sq. mm +1x1.5 sq.mm earth wire	150	Mtr.				
b	2x2.5 sq. mm +1x2.5 sq.mm earth wire	150	Mtr.				

Sl. No.	Item	Qty.	Unit	Rate in words & figures		Total Amount	
				Rs.	Ps.	Rs.	Ps.
c	2x4.0 sq. mm + 1x4.0 sq.mm earth wire	200	Mtr.				
d	2x10.0 sq. mm + 1x6.0 sq.mm earth wire	400	Mtr.				
5	Supply and fixing of following sizes of steel conduit along with accessories in surface/ recess including cutting the wall and making good the same case of recessed conduit as required.						
a	25 mm conduit	100	Mtr.				
b	32 mm conduit	100	Mtr.				
6	Providing & applying white cement based putty of average thickness 1 mm, of approved brand and manufacturer, over the plastered wall surface to prepare the surface even and smooth complete	25	Sqm.				
7	Wall Painting with acrylic emulsion paint of approved brand and manufacturer to give an even shade(Two or more coats on new work)	72	Sqm.				
<b>Total</b>							

(Total amount in words Rupees .....)

- Note: 1. The contractor should quote their rate including all charges **except GST**. The bids will be evaluated accordingly.
2. In case of applicability of GST in this work, party may claim GST with their bill and Institute will consider the payment for GST in this regard.

Signature of the tenderer  
Address & Seal