

INDIAN INSTITUTE OF TECHNOLOGY DELHI <u>HAUZ KHAS, NEW DELHI – 110016</u> NOTICE INVITING E-TENDER

IITD/WORKS (SP-2956)/2020

Executive Engineer [Electrical], Indian Institute of Technology Delhi, Hauz Khas, New Delhi – 100016 [Phone No. 011-26591742] on behalf of Board of Governors Invites on line **Item Rate Tender** from OEM of **Carrier**, **Blue Star**, **Voltas** or their authorized dealer. **or** Contractors Registered with CPWD/MES/BSNL in appropriate class and category dealing with the following work:

Note:- OEM & their authorized dealers both cannot quote simultaneously)

| 1 | Name of Work | : | Name of Work: A.R & M.O Central AC Plant , package units ,Solar generation systems and D.G. Sets at IIT Delhi. Sub Head: Annual operation and Comprehensive maintenance of Package and Ductable type Cooling System of Vishwakarma Bhawan at IIT Delhi. |
|---|------------------------------------|---|--|
| 2 | NIT No. | : | 9730/79/EW/IITD/2019-20 |
| 3 | Estimated cost | : | Rs.26,34,662/- |
| 4 | Earnest Money | : | Rs. 52,693/- (No Exemption Allowed) |
| 5 | Period of completion | : | 12 Months |
| 6 | Last date & time of bid submission | : | 23 -03-2020 upto 03:00 PM |
| 7 | Performance Bank Guarantee | : | 5% of the tendered amount |

The bid forms and other details may be downloaded from Central Public Procurement Portal http://eprocure.gov.in/eprocure/app. Aspiring Bidders who have not enrolled / registered in e-procurement should enroll / register before participating through the website http://eprocure.gov.in/eprocure/app. The portal enrolment is free of cost. Bidders are advised to go through instructions provided at 'Instructions for online Bid Submission '.

Bidders can access Quotation / tender documents on the website (For searching in the NIC site, kindly go to Quotation Search option and type 'IIT'. Thereafter, Click on "GO" button to view all IIT Delhi Quotations). Select the appropriate Quotation / tender and fill them with all relevant information and submit the completed Quotation / tender document online on the website http://eprocure.gov.in/eprocure/app as per the schedule given in the next page.

No manual bids will be accepted. All bids (both Technical and Financial should be submitted in the E-procurement portal).

Executive Engineer [E], For & on Behalf of BOG, IIT Delhi

<u>CH. Head</u> NPN-18/23 Work code (W03395)

C....Nil I....Nil O....Nil



Copy to: -

- 1. Institute Engineer
- 2. D.A. (Works Accounts) for opening of tenders in the office of D.R. [SPS]
- 3. A.E.E. (E) Plg.
- 4. A.E (E) Renovation.
- 5. D.R. (A/Cs)
- 6. D.R. [SPS]
- 7. Notice Boards.
- 8. Office Copy
- 9. Web site Administrator, IITD



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SCHEDULE

| 1 | Name of Organisation | : | Indian Institute of Technology Delhi |
|----|---|---|--|
| 2 | Tender / Quotation Type [open / limited / EOI / auction / single] | : | Open |
| 3 | Tender / Quotation Category [services / goods / works] | : | Goods & Works |
| 4 | Type / Form of Contract [work / supply / auction / service / buy / empanelment / sell] | : | Work & Supply |
| 5 | Product Category [civil works / electrical works / fleet management / computer systems] | : | Electrical Works |
| 6 | Is Multi Currency Allowed? | : | No |
| 7 | Date of issue / publishing /start | : | 13-03-2020, 3:00 PM |
| 8 | Document download start date | : | 13-03-2020, 3:00 PM |
| 9 | Document download end date | : | 23-03-2020, 3:00 PM |
| 8 | Last date & time of uploading of bids | : | 23-03-2020, 3:00 PM |
| 9 | Date & time of opening of Technical Bids | : | 24-03-2020 at 03:00 PM |
| 10 | Tender fee | : | Nil. |
| 11 | EMD | : | Rs. 52693/- [For EMD] (To be paid through RTGS/NEFT. IIT Delhi Bank details are as under: Name of the Bank A/C : IITD Revenue Account SBI A/C No. : 10773572622 Name of the Bank : State Bank of India, IIT Delhi, HauzKhas, New Delhi-110016 IFSC Code : SBIN0001077 MICR Code : 110002156 Swift No. : SBININBB547 (This is mandatory that UTR Number is provided in the on-line quotation/bid. (Kindly refer to the UTR Column of the Declaration Sheet at Annexure-I) |
| 12 | No. of covers [1/2/3/4] | : | 02 |
| 13 | Address for communication | : | Executive Engineer [Electrical], Works Organization, HauzKhas, IIT Delhi, New Delhi – 110016 |
| 14 | Contact No. | : | 011- 2659 1742, 1461,1733 |
| 15 | E-mail address | : | a26342@admin.iitd.ac.in; a26335@admin.iitd.ac.in |

<u>INSTRUCTIONS FOR ONLINE BID SUBMISSION</u>

C....Nil I....Nil O....Nil



As per the directives of Department of Expenditure, this Quotation / tender document has been published on the Central Public Procurement Portal (URL:http://eprocure.gov.in/eprocure/app). The bidders are required to submit soft copies of their bids electronically on the CPP Portal, using valid Digital Signature Certificates. The instructions given below are meant to assist the bidders in registering on the CPP Portal, prepare their bids in accordance with the requirements and submitting their bids online on the CPP Portal.

More information useful for submitting online bids on the CPP Portal may be obtained at:

http://eprocure.gov.in/eprocure/app

REGISTRATION

- 1) Bidders are required to enroll on the e-Procurement module of the Central Public Procurement Portal (URL:http://eprocure.gov.in/eprocure/app) by clicking on the link "Click here to Enroll". Enrolment on the CPP Portal is free of charge.
- 2) As part of the enrolment process, the bidders will be required to choose a unique username and assign a password for their accounts.
- 3) Bidders are advised to register their valid email address and mobile numbers as part of the registration process. These would be used for any communication from the CPP Portal.
- 4) Upon enrolment, the bidders will be required to register their valid Digital Signature Certificate (Class II or Class III Certificates with signing key usage) issued by any Certifying Authority recognized by CCA India (e.g. Sify / TCS / nCode / eMudhra etc.), with their profile.
- 5) Only one valid DSC should be registered by a bidder. Please note that the bidders are responsible to ensure that they do not lend their DSCs to others which may lead to misuse.
- 6) Bidder then logs in to the site through the secured log-in by entering their user ID / password and the password of the DSC / e-Token.

SEARCHING FOR QUOTATION /TENDER DOCUMENTS

- 1) There are various search options built in the CPP Portal, to facilitate bidders to search active Quotations / Tender by several parameters. These parameters could include Quotation ID, organization name, location, date, value, etc. There is also an option of advanced search for Quotations, wherein the bidders may combine a number of search parameters such as organization name, form of contract, location, date, other keywords etc. to search for a Quotation published on the CPP Portal.
- 2) Once the bidders have selected the Quotations they are interested in, they may download the required documents / Quotation schedules. These Quotations can be moved to the respective 'My Quotations' folder. This would enable the CPP Portal to intimate the bidders through SMS / e-mail in case there is any corrigendum issued to the Quotation document.
- 3) The bidder should make a note of the unique Quotation ID assigned to each Quotation / Tender, in case they want to obtain any clarification / help from the Helpdesk.

PREPARATION OF BIDS

1) Bidder should take into account any corrigendum published on the Quotation document before submitting their bids.



- 2) Please go through the Quotation / Tender advertisement and the Quotation / Tender document carefully to understand the documents required to be submitted as part of the bid. Please note the number of covers in which the bid documents have to be submitted, the number of documents including the names and content of each of the document that need to be submitted. Any deviations from these may lead to rejection of the bid.
- 3) Bidder, in advance, should get ready the bid documents to be submitted as indicated in the Quotation document / schedule and generally, they can be in PDF / XLS / RAR / DWF formats. Bid documents may be scanned with 100 dpi with black and white option.
- 4) To avoid the time and effort required in uploading the same set of standard documents which are required to be submitted as a part of every bid, a provision of uploading such standard documents (e.g. PAN card copy, annual reports, auditor certificates etc.) has been provided to the bidders. Bidders can use "My Space" area available to them to upload such documents. These documents may be directly submitted from the "My Space" area while submitting a bid, and need not be uploaded again and again. This will lead to a reduction in the time required for bid submission process.

SUBMISSION OF BIDS

- Bidder should log into the site well in advance for bid submission so that he/she upload the bid in time i.e. on or before the bid submission time. Bidder will be responsible for any delay due to other issues.
- 2) The bidder has to digitally sign and upload the required bid documents one by one as indicated in the Quotation document.
- 3) Bidder has to select the payment option as "offline" to pay the Quotation fee / EMD as applicable and enter details of the instrument.
- 4) A standard BoQ format has been provided with the Quotation document to be filled by all the bidders. Bidders are requested to note that they should necessarily submit their financial bids in the format provided and no other format is acceptable. Bidders are required to download the BoQ file, open it and complete the white coloured (unprotected) cells with their respective financial quotes and other details (such as name of the bidder). No other cells should be changed. Once the details have been completed, the bidder should save it and submit it online, without changing the filename. If the BOQ file is found to be modified by the bidder, the bid will be rejected.

OR

In some cases Financial Bids can be submitted in PDF format as well (in lieu of BOQ).

- 5) The server time (which is displayed on the bidders' dashboard) will be considered as the standard time for referencing the deadlines for submission of the bids by the bidders, opening of bids etc. The bidders should follow this time during bid submission.
- 6) All the documents being submitted by the bidders would be encrypted using PKI encryption techniques to ensure the secrecy of the data. The data entered cannot be viewed by unauthorized persons until the time of bid opening. The confidentiality of the bids is maintained using the secured Socket Layer 128 bit encryption technology. Data storage encryption of sensitive fields is done.



- 7) The uploaded Quotation documents become readable only after the Quotation opening by the authorized bid openers.
- 8) Upon the successful and timely submission of bids, the portal will give a successful bid submission message & a bid summary will be displayed with the bid no. and the date & time of submission of the bid with all other relevant details.
- 9) Kindly add scanned PDF of all relevant documents in a single PDF file of compliance sheet.

ASSISTANCE TO BIDDERS

- 1) Any queries relating to the Quotation document and the terms and conditions contained therein should be addressed to the Quotation Inviting Authority for a Quotation or the relevant contact person indicated in the Quotation.
- 2) Any queries relating to the process of online bid submission or queries relating to CPP Portal in general may be directed to the 24x7 CPP Portal Helpdesk. The contact number for the helpdesk is 1800 233 7315.

GENERAL INSTRUCTIONS TO THE BIDDERS

- 1) The Quotations will be received online through portal http://eprocure.gov.in/eprocure/app. In the Technical Bids, the bidders are required to upload all the documents in .pdf format.
- 2) Possession of a Valid Class II/III Digital Signature Certificate (DSC) in the form of smart card/e-token in the company's name is a prerequisite for registration and participating in the bid submission activities through https://eprocure.gov.in/eprocure/app. Digital Signature Certificates can be obtained from the authorized certifying agencies, details of which are available in the web site https://eprocure.gov.in/eprocure/app under the link "Information about DSC".

Bidders are advised to follow the instructions provided in the 'Instructions to the Bidder for the e-submission of the bids online through the Central Public Procurement Portal for e Procurement at https://eprocure.gov.in/eprocure/app

INFORMATION AND INSTRUCTIONS TO BIDDERS FOR E-TENDERING

Executive Engineer [Electrical], Indian Institute of Technology Delhi, HauzKhas, New Delhi – 100016 [Phone No. 011-26591742] on behalf of Board of Governors Invites on line **Item Rate Tender** from OEM of **Carrier, Blue Star, Voltas** or their authorized dealer. **or** Contractors

C....Nil I....Nil O....Nil



Registered with CPWD/MES/BSNL in appropriate class and category dealing with the following work:

Note:- OEM & their authorized dealers both can not quote simultaneously)

| SI. No. | N.I.T. No. | Name of work & Location | Estimated cost put to bid | Earnest Money | Period of completion | Last date & time of submission of bid (online mode) | Time & date of opening of Technical Bid | Time & date of opening of Financial Bid |
|---------|--------------------------|---|---------------------------|---------------|----------------------|---|---|--|
| [1] | [2] | [3] Name of Work: A.R & M.O Central AC Plant , package units | [4] | [5] | [O] | [7] | [8] | |
| 1 | 9730 /79 /EW/HTD/2019-20 | ,Solar generation systems and D.G. Sets at IIT Delhi. Sub Head : Annual operation and Comprehensive maintenance of Package and Ductable type Cooling System of Vishwakarma Bhawan at IIT Delhi. | Rs. 26,34,662/- | Rs. 52,693/- | 12 Months | 23-03-2020 up to 03:00 PM | 24-03-2020 at 03:00 PM | To be intimated after assessing technical bid. |

- 1. The successful bidders shall be required to submit a performance guarantee of 5% of the tendered amount in the form of Bank Guarantee or F.D.R. from a Nationalized / Scheduled Bank within 15 days of issue of letter of intent before award of work. In case of failure by the Contractor to submit the performance guarantee within the specified period, full earnest money will be forfeited and the tender shall be treated as null and void. The performance guarantee shall be initially valid up to the stipulated date of completion plus 60 (Sixty) days beyond that.
- **2.** Contractors who fulfill the following requirements shall be eligible to apply. Joint ventures are not accepted.
 - i) Firms/Contractors should have satisfactorily completed one similar work of value not less than Rs. 21,07,770/-or two similar works each of value not less than Rs. 15,80,797/-or three similar works each of value not less than Rs. 10,53,863/-during last 7 years ending previous day of last date of submission of bids.

C....Nil I....Nil O....Nil



- ii) Earnest Money of Rs. 52,693/- to be deposited on-line as indicated in Schedule
- 3. Similar work means Operation and maintenance of Central /Package A.C. Plants.
- 4. The intending bidder must read the terms and conditions [both commercial & Additional] & IITD 6 carefully which will be the part of the Contract. He should only submit his bid if he considers himself eligible and he is in possession of all the documents required.
- 5. Information and Instructions for bidders posted on website shall form part of bid document.
- **6.** The bid document consisting of plans, specifications, the schedule of quantities of various types of items to be executed and the set of terms and conditions of the contract to be complied with and other necessary documents can be seen and downloaded from website e-procure.gov.in.
- 7. But the bid can only be submitted after depositing requisite tender fee and EMD as specified in the schedule.
- **8.** Copy of enlistment order and certificate of work experience and other documents as specified in the Press Notice / web notice shall be scanned and up-loaded to the e-Tendering website within the period of bid submission. However, certified / original copy of all the scanned and up-loaded documents as specified in press notice web / notice shall have to be submitted by the lowest bidder only within a week physically in the office of e-tendering authority.
- **9.** Online bid documents submitted by intending bidders shall be opened only of those bidders, who has deposited requisite tender fee and EMD and other documents scanned and uploaded are found in order.
- **10.** Completion certificates are required to be got issued by an officer not below the rank of Executive Engineer of similar works completed by the Firm. The work experience certificates submitted by the bidders shall clearly indicate that:
 - a. The similar work executed shall be as '3' above
 - b. The completed cost of the work
 - c. Actual date of completion of the work
- 11. Attested copy of registration certificates to be submitted. Registration of firms/ Contractors must be valid on the day of submission of Tenders or extended date of submission of Tenders whichever is later
- 12. Work means only work under Government/ Public Sector Undertaking / Central Autonomous bodies.
- 13. The value of executed work 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 submission of financial bid.
- **14.** IITD is committed to follow the principle of transparency, equity and competitiveness in public procurement. Before submission of bid, **each bidder should sign integrity pact at respective places** and submit the bid. If duly signed integrity pact is not submitted by bidder, such bid shall not be considered.
- **15.** Those contractors 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 website.
- **16.** When bids are invited in two / three stages systems and if it is desired to submit revised financial bid it shall be mandatory to submit revised financial bid. If not submitted then the bid submitted earlier shall become invalid.



17. The department reserves the right to reject any prospective application without assigning any reason and to restrict the list of qualified contractors to any number deemed suitable by it, if too many bids are received satisfying the laid down criterion.

18. The bid submitted shall become invalid if:

- a. The bidder is found ineligible.
- b. The bidder does not upload all the documents (including GST registration) as stipulated in the bid document including the undertaking / declaration.
- c. EMD not deposited as specified
- d. The firm shall be registered with EPFO & ESIC

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

- 1. Annexure I duly filled in and got signed
- 2. Authorization Letter of OEM (For authorized Dealer) **Note:- OEM & their authorized dealers both can not quote simultaneously**)
- 3. Attested certificate of work experience as desired
- 4. Enlistment order (Registered in appropriate class and category with CPWD, MES and BSNL)
- 5. Certificate of Registration for GST
- 6. Affidavit as per Notice Inviting Tender Condition [IITD-6] 1.2.2 [To be submitted on stamp paper]
- 7. Acceptance to execute INTEGRITY PACT [see integrity pact]
- 8. IITD 7 / 8 duly signed (At page 22–23)
- 9. EPF & ESI Registration proof with up to date challan
- 10. Any other document as specified in the NIT
- 11. Valid Electrical License.

(**Note:-**As per CPWD works manual 2019 [MSME firm registered NSIC under PP policy are exempted from payment of EMD for supply of goods and services only. Hence, there is no applicability of EMD exemption for this work. BID without EMD will summarily be rejected.)

Executive Engineer [Electrical] For & on Behalf of BOG, IIT Delhi

C....Nil I....Nil O....Nil



IITD - 6

INDIAN INSTITUTE OF TECHNOLOGY DELHI NOTICE INVITING E-TENDER

Executive Engineer [Electrical], Indian Institute of Technology Delhi, Hauz Khas, New Delhi – 100016 [Phone No. 011-26591742] on behalf of Board of Governors Invites on line **Item Rate Tender** from OEM of **Carrier, Blue Star, Voltas** or their authorized dealer. **or** Contractors Registered with CPWD/MES/BSNL in appropriate class and category dealing with the following work:

Note:- OEM & their authorized dealers both can not quote simultaneously)

Name of Work: A.R & M.O Central AC Plant, package units, Solar generation systems and D.G. Sets at IIT Delhi.

Sub Head: Annual operation and Comprehensive maintenance of Central AC Plant & Package and Ductable type Cooling System of Vishwakarma Bhawan at IIT Delhi.

- 1.1 The work is estimated to cost **Rs. 26,34,662/-.** 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 tender, 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, which shall be to the satisfaction of the competent authority, of having satisfactorily completed similar works of magnitude specified below:

Criteria of eligibility for submission of bid documents.

- iii) Criteria of eligibility for CPWD as well as non-CPWD contractors.
- iv) **Earnest Money of Rs. 52,693/-** to be deposited on-line as indicated in Schedule Three similar works each of value not less than **Rs. 10,53,863/-**or two similar works each of value not less than **Rs. 15,80,797/-**or one similar works each of value not less than **Rs. 21,07,770/-/-**in last 7 years ending previous day of last date of submission of bids.
- 1.2.1 To become eligible for issue of bid, the bidders shall have to furnish an affidavit as under:

 "I / We undertake and confirm that eligible similar works(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 IIT Delhi 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 to be uploaded at the time of submission of bid)"
 - 2. Agreement shall be drawn with the successful bidders on prescribed Form No. IITD 7/8 which is available as IIT Delhi Publication. Bidders shall quote their 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 Months from the date of start as defined in schedule 'F' or from the first date of handing over of the site, whichever is later, in accordance with the phasing, if any, indicated in the bid documents.
- **4.** The site for the work is available.
- 5. The bid document consisting of plans, specifications, the schedule of quantities of various types of items to be executed and the set of terms and conditions of the contract to be complied with and other necessary documents except Standard General Conditions of Contract Form can be seen from the web Site e-procure.gov.in.
- **6.** After submission of the bid the contractor can re-submit revised bid any number of times but before last time and date of submission of tender as notified.
- 7. While submitting the revised bid, contractor can revise the rate of one or more item(s) any number of times (he need not re-enter rate of all the items) but before last time and date of submission of tender as notified.
- **8.** 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 as specified to be paid through RTGS / NEFT.

IIT Delhi Bank details are as under:

Name of the Bank A/C : IITD Revenue Account

SBI A/C No : 10773572622

Name of the Bank : State Bank of India, IIT Delhi,

: HauzKhas, New Delhi-110016

IFSC Code : SBIN0001077 MICR Code : 110002156 Swift No : SBININBB547

(This is mandatory that UTR Number is provided in the on-line quotation/bid. Kindly refer to the UTR Column of the Declaration Sheet at Annexure-II)

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

- (i) Copy of Enlistment Order and certificate of work experience and other documents as specified in the press notice shall be scanned and uploaded to the e-tendering website within the period of bid submission.
- **10.** The bid submitted shall become invalid, if:
 - a) The bidder is found ineligible.
 - b) The bidder does not upload all the documents (GST registration/Technical bid) as stipulated in the bid document.
 - c) EMD not deposited as specified
- 11. The contractor whose bid is accepted will be required to furnish **performance guarantee of 5%** (**Five Percent**) of the bid amount within the period specified in Schedule F. This guarantee shall be in the form of Deposit at Call receipt of any scheduled bank / Banker' cheque of any scheduled bank / Demand Draft of any scheduled bank/Pay order of any Scheduled Bank (in case guarantee amount is less than Rs.1,00,000/-) or Government Securities or Fixed Deposit Receipts or irrevocable Bank Guarantee Bonds of any Scheduled Bank or the State Bank of India 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. Intending Bidders are advised to inspect and examine the site and its surroundings and satisfy themselves before submitting their bids as to the nature of the ground and subsoil (so far as is practicable), the form and nature of the site, the means of access to the site, the accommodation theymay require and in general shall themselves obtain all necessary information as to risks, contingencies and other circumstances which may influence or affect their bid. A bidder shall be deemed to have full knowledge of the site whether he inspects it or not and no extra charge consequent on any misunderstanding or otherwise shall be allowed. The bidders shall be responsible for arranging and maintaining at his own cost all materials, tools & plants, water, electricity access, facilities for workers and all other services required for executing the work unless otherwise specifically provided for in the contract documents. Submission of a bid by a bidder implies that he has read this notice and all other contract documents and has made himself aware of the scope and specifications of the work to be done and of conditions and rates at which stores, tools and plant, etc. will be issued to him by the Government and local conditions and other factors having a bearing on the execution of the work.
- 13. The competent authority on behalf of the Board of Governors does not bind itself to accept the lowest or any other bid and reserves to itself the authority to reject any or all the bids received without the assignment of any reason. All bids in which any of the prescribed condition is not fulfilled or any condition including that of conditional rebate is put forth by the bidder shall be summarily rejected.
- 14. Canvassing whether directly or indirectly, in connection with bidders is strictly prohibited and the bids submitted by the contractors who resort to canvassing will be liable for rejection.
- 15. The competent authority on behalf of the Board of Governors reserves to himself the right of accepting the whole or any part of the bid and the bidder shall be bound to perform the same at the rate quoted.
- 16. The contractor shall not be permitted to bid for works in the IITD responsible for award and execution of contracts, in which his near relative is posted a Divisional Accountant or as an officer in any capacity between the grades of Superintending Engineer and Junior Engineer (both inclusive). He shall also intimate the names of persons who are working with him in any capacity or are subsequently employed by him and who are near relatives to any Gazetted officer in the IIT Delhi. Any breach of this condition by the contractor would render him liable to be debarred from bidding process in future in IIT Delhi.
- 17. No Engineer of Gazetted rank or other Gazetted Officer employed in Engineering or Administrative duties in an Engineering Department of the Government of India is allowed to work as a contractor for a period of one year after his retirement from Government service, without the prior permission of the Government of India in writing. This contract liable to be cancelled, if, either the contractor or any of his employees is found any time to be such a person who had not obtained the permission of the Government of India as aforesaid before submission of the bid or engagement in the contractor's service.
- 18. The bid for the works shall remain open for acceptance for a period of ninety [90] daysfrom the date of opening of financial bids, if any bidder withdraws his bid before the said period or issue of letter of acceptance, whichever is earlier, or makes any modifications in the terms and conditions of the bid which are not acceptable to the department, then the IIT Delhi shall, without prejudice to any other right or remedy, be at liberty to forfeit 50% of the said earnest money as

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aforesaid. Further the bidder shall not be allowed to participate in the re-bidding process of the work.

- 19. This notice inviting bid shall form a part of the contract document. The successful bidder / contractor, on acceptance of his bid by the Accepting Authority shall within 15 days from the stipulated date of start of the work, sign the contract consisting of:-
- a) The Notice Inviting Bid, all the documents including additional conditions, specifications and drawings, if any, forming part of the bid as uploaded at the time of invitation of bid andthe rates quoted online at the time of submission of bid and acceptance thereof together with any correspondence leading thereto.
- b) Standard IITD Form –7/8 or other Standard IITD Form as applicable.
- 20. In case any discrepancy is noticed between the documents as uploaded at the time of submission of the bid online and hard copies as to be submitted physically in IIT Delhi, if so desired by the accepting authority, then the bid submitted shall become invalid and the IIT Delhi shall, without prejudice to any other right or remedy, be at liberty to forfeit 50% of the said earnest money as aforesaid. Further the bidder shall not be allowed to participate in the bidding process of the work.

C....Nil I....Nil O....Nil



INTEGRITY PACT

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| | , |
| | , |
| ,Solar ge | T No. 9730/79/EW/IITD/2019-20 for the work of A.R & M.O Central AC Plant , package units neration systems and D.G. Sets at IIT Delhi. Sub Head: Annual operation and ensive maintenance of Package and Ductable type Cooling System of Vishwakarma Bhaw Delhi. |
| and co | It is here by declared that IITD is committed to follow the principle of transparency, equity mpetitiveness in public procurement. |
| failing | The subject Notice Inviting Tender (NIT) is an invitation to offer made on the condition that dder will sign the Integrity Agreement, which is an integral part of the tender/bid documents, which the tender/bidder will stand disqualified from the tendering process and the bid of the would be summarily rejected. |
| shall b | This declaration shall form part and parcel of the Integrity Agreement and signing of the same edeemed as acceptance and signing of the Integrity Agreement on behalf of the IITD. |
| | Yours faithfully, |
| | Executive Engineer |
| | |

C....Nil I....Nil O....Nil



[TO BE SUBMITTED DULY SIGNED BY THE BIDDER ALONGWITH BID DOCUMENTS]

To

Executive Engineer (Elect.), IIT Delhi, HauzKhas, New Delhi – 110016

<u>Sub:-NIT No:- 9730/79/EW/IITD/2019-20 for the work of A.R & M.O Central AC Plant</u>, package units ,Solar generation systems and D.G. Sets at IIT Delhi. Sub Head: Annual operation and Comprehensive maintenance of Package and Ductable type Cooling System of Vishwakarma Bhawan at IIT Delhi.Dear Sir,

I / We acknowledge that IITD. 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 / bid 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 IITD. 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, IITD shall have unqualified, absolute and unfettered right to disqualify the tenderer /bidder and reject the tender/bid is 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 IITD]

C....Nil I....Nil O....Nil



INTEGRITY AGREEMENT

| This Integrity 20 | - | | le at | | on | this | | day | of |
|--------------------------------------|---------------------------------------|----------------------|-------------------|---------------------------|------|---------|-----|-----|----|
| | | | В | BETWEEN | | | | | |
| The Board of Gov (Elect.), IIT Delhi | | | | | _ | | | | _ |
| as the 'Principal/O | Owner', Address of Div ', which expre | ision) ession sh | | | | | | | |
| | | | | AND | | | | | |
| | | and Addr | ess of | the Individua | | • | • / | | |
| | | authorize and whi | ed sign ch exp | natory) pression shall | (Her | einafte | | | |

Preamble

WHEREAS the Principal / Owner has floated the Tender (NIT No. 9730/79/EW/IITD/2019-20) (hereinafter referred to as "Tender/Bid") and intends to award, under laid down organizational procedure, contract for the work of A.R & M.O Central AC Plant, package units, Solar generation systems and D.G. Sets at IIT Delhi. Sub Head: Annual operation and Comprehensive maintenance of Package and Ductable type Cooling System of Vishwakarma Bhawan at IIT Delhi.. (Name of work) 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:

C....Nil I....Nil O....Nil



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:

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 selfor third person, any material or immaterial benefit which the person is not legally entitled to.

- (a) 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.
- (b) The Principal/Owner shall Endeavour to exclude from the Tender process any person, whose conduct in the past has been of biased nature.
- 2) 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 (PoC 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.
- 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 (PoC 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) commits 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....Nil I....Nil O....Nil



- c) The Bidder(s) / Contractor(s) will not commit any offence under the relevant IPC/PoC 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 practices 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 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 6 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 of IITD.

C....Nil I....Nil O....Nil



Article 7: Other Provisions

- 1) This Pact is subject to Indian Law, place of performance and jurisdiction is the Head Quarters 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 intensions.
- 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) |
| (For and on behalf of Bidder / Contractor) |
| WITNESSES: |
| 1 |
| (Signature, name and address) |
| 2. (Signature, name and address) |
| Place: |
| Dated: |



IITD - 7/8 INDIAN INSTITUTE OF TECHNOLOGY DELHI HAUZ KHAS, NEW DELHI - 110016

Percentage Rate Tender / Item Rate Tender & Contract for Works

Tender for the work of <u>Sub:-</u>NIT No. 9730/79/EW/IITD/2019-20 for the work of A.R & M.O Central AC Plant, package units, Solar generation systems and D.G. Sets at IIT Delhi. Sub Head: Annual operation and Comprehensive maintenance of Package and Ductable type Cooling System of Vishwakarma Bhawan at IIT Delhi.

- (I) To be submitted online by 23/03/ 2020 upto 03:00 PM
- (II) To be opened technical bid on 24/03/2020 at 03:00 PM online

e-TENDER

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 Board of Governors, IIT Delhi within the time specified in Schedule 'F' viz., schedule of quantities and in accordance in all respect with the specifications, designs, drawing and instructions in writing referred to in Rule-1 of General Rules and Directions and in Clause 11 of the Conditions of contract and with such materials as are provided for, by, and in respect of accordance with, such conditions so far as applicable.

We agree to keep the tender open for ninety (90) days from the due date of its opening / ninety days from the date of opening of financial bid in case tenders are invited on 2/3 envelop system (**strike out as the case may be**) and not to make any modification in its terms and conditions.

A sum of Rs.52,693 /- is hereby deposited in IIT Delhi Revenue Account No. 10773572622as earnest money. If I / We fail to furnish the prescribed performance guarantee within prescribed period I / We agree that the said The Board of Governors, IIT Delhi, HauzKhas, New Delhi - 16 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 as specified, I / We agree that The Board of Governors, IIT Delhi, HauzKhas, New Delhi - 16 or the successors in office shall without prejudice to any other right or remedy available in law, be at liberty to forfeit the said earnest money and the performance guarantee absolutely, otherwise they said earnest money shall be retained by him towards security deposit 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 & Performance Guarantee as aforesaid I / We shall be debarred for participation in the re-tendering process of the work.

C....Nil I....Nil O....Nil





C....Nil

I..... Nil

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

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

| Dated: | | | | |
|---|--|--|--|--|
| | Signature of Contractor | | | |
| Witness: | | | | |
| Address: | Postal Address | | | |
| Occupation: | | | | |
| ACC | CEPTANCE | | | |
| The above tender (as modified by you as provided in the letters mentioned hereunder) is accepted by me for an on behalf of The Board of Governors, IIT Delhi, HauzKhas, New Delhi - 110016 for a sum of (Rupees | | | | |
| (a) | | | | |
| (b) | | | | |
| (c) | | | | |
| | For & on behalf of Board of Governors, IIT Delhi | | | |
| | Signature | | | |
| Dated: | Designation | | | |
| | | | | |
| | | | | |

D'Man /J.E. A.E.E / A.E. E.E.

O..... Nil



PROFORMA OF SCHEDULES

[Operative Schedules to be supplied separately to each intending tenderer]

SCHEDULE 'A'

Schedule of quantities (enclosed)

SCHEDULE 'B'

Schedule of materials to be issued to the contractor

| S.No. | Description of item | Quantity | Rates in figures & words at which the material will be charged to the contractor | Place of issue |
|-------|---------------------|----------|--|----------------|
| • | Nil | | | → |

SCHEDULE 'C'

Tools and plants to be hired to the contractor

| S.No. | Description | Hire charges per day | Place of Issue |
|-------|-----------------|----------------------|----------------|
| 4 | Ni l | | |
| | | | |

SCHEDULE 'D'

Extra schedule for specific requirements/document for the work, if any.



C....Nil I....Nil O....Nil



SCHEDULE 'E'

Reference to General Conditions of contract [GCC]

| 1 | Name of work | : | Name of Work: A.R & M.O Central AC Plant, package units ,Solar generation systems and D.G. Sets at IIT Delhi. Sub Head: Annual operation and Comprehensive maintenance of Package and Ductable type Cooling System of Vishwakarma Bhawan at IIT Delhi. | |
|---|------------------------|---|--|--|
| 2 | Estimated cost of work | : | Rs. 26,34,662/- | |
| 3 | Earnest Money | : | Rs. 52,693/- | |
| 4 | Performance Guarantee | : | 5 percent of tendered value | |
| 5 | Security Deposit | : | 5 percent of tendered value | |

SCHEDULE 'F'

GENERAL RULES & DIRECTIONS

: Officer inviting tender

| | im percentage for quantity of items of work to be executed beyond ates are to be determined in accordance with Clauses 12.2 & 12.3 | : | See below |
|----------|--|---|--|
| Definiti | ons: | | |
| 2[v] | Engineer – in - charge | : | Executive Engineer [Elect] |
| 2[vi] | Accepting Authority | : | Executive Engineer [Elect] |
| 2[x] | Percentage on cost of materials and labour to Cover all overheads and profits | : | 15 percent |
| 2[xi] | Standard schedule of rates | : | Market Rate |
| 2[xii] | Department | : | E & W, IIT Delhi |
| 9[ii] | Standard IITD Contract Form | : | General Conditions of Contract 2010,IITD Form 7/8-2010 modified & Corrected up to date of submission of tender |

| Claus | se 1: | | |
|--------|---|----|--------------------|
| [i] | Time allowed for submission of Performance Guarantee from the date of issue of letter of acceptance | : | 15 days |
| [ii] | Maximum allowable extension with late fees @ 0.1% per day of performance guarantee amount beyond the period provided in (i) above | | 1 to 15 days |
| Clause | 2: | | |
| Author | ity for fixing compensation under clause 2 | : | Institute Engineer |
| Clause | 2 A: | | |
| Whethe | er Clause 2A shall be applicable | : | No |
| Clause | 5: | | |
| | er of days from the date of issue of letter of award for ing date of start | •• | 10 [ten] days |

C....Nil I....Nil O....Nil



Milestone(s)as per table given below:-

| S1. | Description of Milestone (Financial) | | Time allowed in Amount to be with-held | | | | | |
|-----------------------------|---|-----|---|---------------------|--|--|--|--|
| No. | • | Ι, | days (from date | in case of non- | | | | |
| | | | of start) | achievement of mile | | | | |
| | | | or start) | stone | | | | |
| | | | | stone | | | | |
| | | - | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | N O T | A l | PPLICABLE | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| l . | | | | | | | | |
| Time | allowed for execution of work | : | 12 Months | | | | | |
| Autho | ority to decide: | | | | | | | |
| Exten | sion of time | : | Executive Engineer [Engineer-in-charge] | | | | | |
| Rescheduling of mile stones | | | Institute Engineer | | | | | |
| Clause Applicable 6 or 6A: | | : | Clause 6A | | | | | |
| Clause 7: | | | <u> </u> | | | | | |
| Claus | SC 7. | | | | | | | |
| Gross | work to be done together with net payment / | : | Not Applicable | | | | | |
| ading | tment of advances for material collected if any since the | | | | | | | |

| Clause 10 A: | |
|---|---|
| last suchpayment for being eligible to interim payment | |
| adjustmentor advances for material confected, if any, since the | l |

| Clause 10 A: | | |
|---|---|--|
| List of testing equipment to be provided by the contractor at | : | As desired by the Engineer-in-charge relating to |
| site lab | | the work |
| Clause 10B(ii): | | |
| Whether Clause 10 B (ii) shall be applicable | : | No |
| Clause 10C: | | |
| Component of labour expressed as percent of value of work | : | 25 % |

Clause 10CA:

| S.N. | Nearest Materials (other than cement, reinforcement bars and the structural steel) for which All India Wholesale Price Index to be followed | Materials covered under |
|------|---|-------------------------|
| 1 | | |
| 2 | Nil | |
| 3 | | |
| 4 | | |

 $^{^{*}}$ Base price of all the materials covered under clause 10 CA is to be mentioned at the time of approval of NIT.

Clause 10CC

| Clause 10 CC to be applicable in contracts with stipulated | 12 months |
|--|-----------|
| period of completion exceeding the period shown in next | |
| column | |
| Schedule of component of other Materials, Labour, POL etc. for | |
| price escalation | |

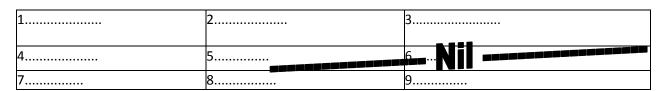
| CNil | I Nil | O Ni |
|------|-------------|--------|
| O | 1 [1 1 1 1 | O I VI |



| Component of civil (except materials covered under clause 10CA)/ Electrical construction Materials expressed as percent of total value of work | : | Nil. |
|--|---|---|
| Component of Labour expressed as percent of total value of work | : | Y: 10 percent |
| Component of P.O.L. expressed as percent of total value of work | : | Not Applicable |
| Clause 11 | | |
| Specifications to be followed for execution of work | : | CPWD General specifications for Electrical work Part-I (Internal) Part-II (External), Part-IV (Substation), HVAC with upto date modifications |
| Clause 12 | | |
| Type of work | : | Maintenance works including works of upgradation, aesthetic, special repair, addition/alteration |
| Clause 12.2. & 12.3 | | |
| Deviation Limit beyond which clauses 12.2 & 12.3 shall apply for building work | : | 30 percent |
| Clause 12.5 | | |
| Deviation Limit beyond which clauses 12.2 & 12.3 shall apply for foundation work | : | 100 percent |
| Clause 16 | | |
| Competent Authority for deciding reduced rates | : | Institute Engineer |
| | | |

Clause 18

List of mandatory machinery, tools & plants to be deployed by the contractor at site:



Clause 36 (i) Requirement of Technical Representative(s) and recovery Rate

| S. | Minimum | Discipline | Designation (Principal | Minimum | Number | Rate at whi | ch recovery shall be |
|-----|------------------|------------|------------------------|------------|--------|-------------|------------------------|
| No. | Qualification of | | Technical/ | Experience | | made from | the contractor in the |
| | Technical | | Technical | (Years) | | event of no | t fulfilling provision |
| | Representative | | Representative) | | | of | clause 36(i) |
| | | | | | | Figures | Words |
| 1 | 1 | Graduate | Technical | | 01 | 10 000 00 | Ton thousand only |
| 1 | 1 | diploma | loma Representative | 05 year | 01 | 10,000.00 | Ten thousand only |

Assistant Engineers retired from Government services that are holding diploma will be treated at par with **Graduate Engineers**

C....Nil I..... Nil O..... Nil



ANNEXURE - I

<< Organization Letter Head >> DECLARATION

| I / V | We, | | hereby declare that all the information and data | | |
|---------------------|---|----|--|--|--|
| furn | furnished by our organization with regard to this tender specification are true and complete to the best of | | | | |
| | | _ | cification, conditions and stipulations in details and agree | | |
| to c | omply with the requirements and intent of | sp | ecification. | | |
| 1 | Name & Address of the bidder | : | | | |
| | | | | | |
| 2 | Phone | : | | | |
| | | | | | |
| 3 | E-mail | : | | | |
| 4 | Contact person name | : | | | |
| - | Mobile number | | | | |
| 5 | Modifie fluffider | : | | | |
| 6 | TIN number | : | | | |
| 7 | PAN number | : | | | |
| 8 | GST No. | : | | | |
| | BANK DETAILS | | | | |
| 9 | Bank name | : | | | |
| 10 | Branch address | : | | | |
| 11 | Branch telephone no. | : | | | |
| 12 | MICR Code of the bank | : | | | |
| 13 | IFSC code | : | | | |
| 14 | Bank Account no. | : | | | |
| 15 | Type of account | : | | | |
| 16 | UTR No | | | | |
| Inst [Sig Nar | itutional agency / Govt. Department / Pub | | been blacklisted / delisted or put to any holiday by any Sector Undertaking in the last three years. | | |
| C | .Nil I Nil O Nil | | | | |



APPENDIX – II

SUBMITTALS TO BE MADE BY THE CONTRACTOR DURING THE EXECUTION OF WORK

- 1. Daily Progress report stating number of men employed under each trading, Equipment at site etc.
- 2. Weekly/ fortnightly progressing report showing progress against programme.
- 3. Programme of work for the forthcoming week.
- 4. Labour and Equipment Deployed at site Programmed Requirement vs. actual deployed fortnightly
- 5. Updated approved monthly PERT CHART along with monthly progress chart Weekly.
- 6. Construction materials by Contractor : Status and mobilization programme Fortnightly.
- 7. Progress Photographs Fortnightly.
- 8. Value of work anticipated to be done in the forth-coming including value of any materials and equipment of large value monthly

C....Nil I....Nil O....Nil



COMMERCIAL AND ADDITIONAL CONDITIONS

1 General

1.1 This specification covers manufacture, testing as may be necessary before dispatch, delivery at site, all preparatory work, assembly and installation, final testing, commissioning, as per the CPWD General Specification for Electrical work Part-I, II & IV and HVAC for the following works.

Name of work & location: A.R & M.O Central AC Plant , package units ,Solar generation systems and D.G. Sets at IIT Delhi. Sub Head: Annual operation and Comprehensive maintenance of Package and Ductable type Cooling System of Vishwakarma Bhawan at IIT Delhi. The work shall be executed as per CPWD General Specifications for Electrical and HVAC works as amended up to date and as per directions of Engineer-in-charge. These additional specifications and conditions are to be read in the Additional specifications and conditions shall apply. However, nothing extra shall be paid on account of these as the same are to be read along with schedule of quantities for the work.

2 COMMERCIAL CONDITIONS

- **2.1** Type of contract
 - The work to be awarded by this tender shall be treated as indivisible works contract.
- 2.2 Submission of Tender:-
 - Bidder shall submit the cost of tender documents, if any, e-tendering processing fee and earnest money, other documents, price bid in prescribed manner as indicated in "INFORMATION AND INSTRUCTIONS FOR CONTRACTORS FOR e-TENDERING FORMING PART OF NIT AND TO BE POSTED ON WEBSITE"
- 2.3 The tenderers are advised not to deviate from the technical specifications / items, commercial terms and conditions of NIT like terms of payment, labour regulation, arbitration clause, escalation etc.
- 2.4 The department reserves the right to reject any or all the price bids and call for fresh price tenders as the case may be without assigning any reason.
- 2.5
- 3.0 Validity

Tenders shall be valid for acceptance for a period of 3 months from the date of opening of price bid.

4.0 Completion period

The completion period indicated in the tender documents is for the entire work of planning, designing, supplying, installation, testing, commissioning and handing over of the entire job to the satisfaction of the Engineer-in-charge.

5.0 SAFETY CODES AND LABOUR REGULATIONS

- (i) In respect of all labour employed directly or indirectly on the work for the performance of the contractor's part of work, the contractor at his own expense, will arrange for the safety provisions as per the statutory provisions, B.I.S. recommendations, factory act, workman's compensation act, CPWD code and instructions issued from time to time. Failure to provide such safety requirements would make the tenderer liable for **penalty as specified in application clause.** In addition the Engineer-In-Charge shall be at liberty to make arrangements and provide facilities as aforesaid and recover the cost from the contractor.
- (ii) The contractor shall provide necessary barriers, warning signals and other safety measures while laying pipelines, cables etc. or wherever necessary so as to avoid accident. He shall also indemnify IITD against claims for compensation arising out of negligence in this respect. Contractor shall be liable, in accordance with the Indian Law and Regulations for any accident



occurring due to any cause. The department shall not be responsible for any accident occurred or damage incurred or claims arising there from during the execution of work. The contractor shall also provide all insurance including third party insurance as may be necessary to cover the risk. No extra payment would be made to the contractor due to the above provisions thereof.

6.0 Payment Terms

- 6.1 Unless otherwise specified, in the additional conditions of the contract, the payment shall be made as per the relevant clauses of form CPWD 7/8 forming a part of the tender documents.
- 6.2 Mechanics / Operator & Helper are to be deployed by the contractor at all strategic sites as per direction of the Engineer-in-charge.

7.0 Security Deposit

Security deposit shall be deducted from each running bill and the final bill to be the extent of 10 percent of the gross amount payable. However the maximum amount of security deposit will be 5 percent of the tendered value. The earnest money deposited shall be adjusted against this security deposit. The security deposit may be released after 6 months of the date of recording completion certificate provided there is no labour issues are pending. Bank guarantee will not be accepted as security deposit.

8.0 Performance Guarantee

The successful tenderer shall submit an irrevocable performance guarantee of 5 percent of the tendered amount in addition to other deposits mentioned elsewhere in the contract in the contract for his proper performance of the contract agreement within 6 months of issued of letter of acceptance of tender. This guarantee shall be in the form of Demand draft/ Pay order or irrevocable bank guarantee bond of any scheduled bank or the State Bank of India in the specified format or in the form of Government security, fixed deposit pledged in favour of Executive Engineer or as specified in the letter of acceptance of tender. **The performance guarantee shall be initially valid up to the stipulated date of completion plus 60 Days beyond**. This bank guarantee shall be kept valid till the recoding of completion certificate for the work by the competent authority.

9.0 Rates

- **9.1** The rates quoted by the tenderer, shall be firm and inclusive of all taxes i/c GST, duties & levies, octroi etc.
- 9.2 Octroi duty shall not be paid separately but octroi exemption certificate can be furnished by the department on demand. However the department is not liable to reimburse the octroi duty in case exemption certificates are not honored by the concerned authorities.

10.0 COMPLETION PERIOD

The completion period of **12 months** indicated in the tender documents is for the entire work of round the clock manning and operation of E.I including deployment of manpower upto the satisfaction of the Engineer - in - charge.

11.0 COMPLETENESS OF TENDER

C....Nil I....Nil O....Nil



All work necessary for providing necessary manpower for smooth running and operation of Electrical maintenance in residential area.

12.0 Care shall be taken by the contractor while handling and operating of switchgears to avoid damage to the E.I. in residential area. He shall also remove at his cost all unwanted and waste material arising out of his activities from the site of work.

13.0 Compliance with Regulations

13.1 That the contractor shall comply with the statutory provisions of Contract Labour (Regulation & Abolition) Act, the Employees Provident Fund (and miscellaneous Provisions) Act, 1952, the Minimum Wages Act, 1948, and/ or any other Rules/Regulations and/or statues that may be applicable to them and shall further keep the IITD indemnified from all acts of omission, fault breaches and /or any claim, demand; loss; injury and expense arising out from the non-compliance of the aforesaid statutory provision. Contractor's failure to fulfill any of the obligations hereunder and/or under the said Act's rules/regulations and/or any bye-laws or rules framed under or any of these the IITD shall be entitled to recover any of the such losses of expenses which it may have to suffer or incur on account of such claims, demands, loss or injury from the contractor's payments.

14.0 Mobilization Advance:

14.1 No mobilization advance shall be paid for this work.

15.0 CLEAN UP WORKS AT SITE

During erection the contractor shall at all times keep the working and storage areas free from waste or rubbish. On completion of erection he shall remove all temporary structures, debris and leave the premises clean to the full satisfaction of the department.

16.0 COOPERATION WITH OTHER AGENCIES

The successful tenderer shall co-ordinate with other contractors and agencies engaged in the construction of buildings, if any, and exchange freely all technical information so as to make the execution of this work / contract smooth.

No remuneration should be claimed from the department for such technical cooperation. If any unreasonable hindrance is caused to other agencies and any completed portion of the work has to be dismantled and re-done for want of cooperation and coordination by the tenderer during the course of work, such expenditure incurred will be recovered from the successful tenderer if the restoration work to the original condition or specification of the dismantled portion of the work was not undertaken by the tenderer himself.

17.0 INDEMNITY

The successful tenderer shall at all times indemnify the department, consequent on this works contract. The successful tenderer shall be liable, in accordance with the Indian Law and Regulations for any accident occurring due to any cause and the contractor shall be responsible for any accident or damage incurred or claims arising there from during the period of operation and manning under the supervision of the successful tenderer in so far as the latter is responsible. The successful tenderer shall also provide all insurance as may be necessary to cover the risk. No extra payment would be made to the successful tenderer on account of the above.

C....Nil I....Nil O....Nil



SPECIAL TERMS AND CONDITIONS

- 1. That it is expressly understood and agreed between the parties to this Agreement that the persons deployed by the contractor for the services mentioned above shall be the employees of the contractor for all intents and purposes and that the persons so deployed shall remain under the control and supervision of the contractor and in no case, shall a relationship of employer and employee between the said persons and the IITD shall accrue/arise implicitly or explicitly.
- 2. That on taking over the responsibility of providing Contractor's Worker, the contractor shall formulate the mechanism and duty assignment under intimation to the Engineer-in-charge. Subsequently, the contractor shall review work arrangement from time to time. The contractor shall further be bound by and carry out the directions/instructions given to him by the Engineer-in-charge in this respect from time to time.
- 3. That the Engineer-in-charge or any other person authorized by him shall be at liberty to carry out surprise check on the persons so deployed by the contractor in order to ensure that persons deployed by him are doing their duties.
- 4. That in case of the persons so deployed by the contractor does not come up to the mark or does not perform his/her duties properly or indulges in any unlawful activities or riots or disorderly conduct, the contractor shall immediately withdraw and take suitable action against such persons on the report of the Engineer-in-charge. Further, the contractor shall immediately replace the particular person so deployed on the demand of the Engineer-in-charge, in case of any of the aforesaid acts on the part of the said person.

That the contractor shall particularly abide by the provisions of Minimum Wages Act, 1948. Minimum wages shall be paid by the Agency / Contractor at the rate fixed by Delhi Govt. / IIT Delhi from time to time to 03 Nos. trained skilled Mechanics / Operator, 03 Nos. Helper, Arrears, if due as result of increase in minimum wages would be reimbursed to the contractor on submission of proof of actual payment to the worker. In case of half yearly increase in Minimum wages by the Govt. of NCT of Delhi, the contractor will submit copy of gazette notification to the Institute and the same may be considered by the Institute. However base rate of wages are considered as @689/- per day for mechanic / Lift Operator, @569/- per day for helper as per latest notification.

If staff not report on duty an amount shall be deducted from the bill of contractor @1000/- per day for Computer Operator/Supervisor, @900/- per day for mechanic / Operator and @800/- per day for helper.

- 5. Mechanic / Operator should be passed ITI course / Wireman license. The contractor shall take all reasonable precautions to prevent any unlawful, riotous or disorderly conduct or acts of his employees so deployed.
- 6. That the contractor shall deploy his persons in such a way that they get weekly rest. The working hour / leave, for which the work is taken from them, do not violate relevant provisions of the Act. The contractor shall in all dealings with the persons in his employment have due regard to all recognized festivals, days of rest and religious or other customs.
- 7. That the contractor shall keep the IITD indemnified against all claims whatsoever in respect of the employees deployed by the contractor. In case any employee of the contractor so deployed enters in dispute of any nature whatsoever, it will be the primarily responsibility of the contractor to contest the same. In case IITD is made party and is supposed to contest the case, IITD will be reimbursed for the

C....Nil I....Nil O....Nil



- actual expenses incurred towards Counsel Fee and other expenses which shall be paid in advance by the contractor to IITD on demand. Further, the contractor shall ensure that no financial or any other liability comes on IITD in this respect of any nature whatsoever and shall keep IITD indemnified in this respect.
- 8. The Work is to be carried out for stipulated period of time and may be extended further as desired by Engineer-in-charge.
- 9. Non Judicial stamp paper worth Rs.10/- (Ten Rupees only) will be submitted by the contractor which will have to be signed as token of acceptance.
- 10. Institute reserves the right to remove any person deployed by the firm, without assigning any reason/notice. This will be without prejudice to the right of the contractor to remove any of his own employees deployed in the Institute.
- 11. That the contractor shall submit detail of the names, present residential address, age, educational qualifications, experiences, etc. with photocopies of documents of the persons deployed by him in the premises of the IIT Delhi for the purpose of proper identification & category of the employees of contractor deployed at various points/sections. He shall issue identity cards bearing their photographs / identification, etc. and such employees shall display their identity cards at the time of duty.
- 12. The contractor shall ensure that the persons are punctual and disciplined and remain vigilant in performance of their duty.
- 13. The Institute can increase or decrease the manpower requirement in case there is a further increase or decrease in area to be maintained. The increase/ decrease in manpower would accordingly affect the billing on pro-rata basis.
- 14. That the contractor shall be required to maintain permanent attendance register in addition to Biometric Attendance (Face detection type provided by IIT Delhi) at the IITD premises which shall be open for inspection and checking by the authorized officers of the IITD.
- 15. That the contractor shall make the payment of wages [not less than minimum wages as & when declared by the Govt. Of NCT Delhi], etc. to persons so deployed monthly basis through Bank Transfer / electronic mode on or before 10th day of every month. Wages shall include bonus @ 8.33% and other allowances of daily wage of the particular worker multiplied by number of days' work actually performed by the worker in a particular month, which shall also be shown separately on the wage sheet of the worker.
- 16. A consolidated wage sheet containing the names of all workers so deployed by the contractor duly signed / acknowledged by the workers after disbursal of wages to be submitted to the Engineer-in charge every month. Proof of disbursal of wages to be submitted before claiming bill. The wage sheet shall contain mandatory fields as per following: [1] Sr. No., [2] Name of the worker, [3] Actual days of duty performed, [4] Total wages, [5] Bonus amount, [6] EPF contribution, [7] ESI Contribution, [8] Total deductions, [9] Net wages received / disbursed, [10] signature of the worker.
- 17. In case of delay of payment of wages beyond 10 days as specified, IIT Delhi shall arrange for payment to the workers at the risk & cost of the contractor. Decision of the Engineer-in-charge in this regard shall be full & final and binding upon the contractor.



- 18. Attendance comparative sheet shall be prepared by the contractor and to be submitted to the Engineer-in-charge after completion of every month as per duty chart, desired days of duty of a particular worker allowing weekly off and actual days of duty performed by the said worker. Summation of the two columns should tie in normal case. Falling short of days of attendance from desired days of attendance shall be got deducted from the bill of the contractor at the rate of the wages.
- 19. EPF & ESI contribution in respect of the workers shall be deposited with the authority concerned in time and employer's share shall be got reimbursed to the contractor by IIT Delhi on production of proof of deposition
- 20. Form IITD-8 [General Conditions of Contract] with correction slip shall form part of the contract
- 21. Tax shall be deducted from bill of the contractor as applicable as per rules.
- 22. Log book as required shall be maintained at site by the contractor.
- 23. Dismantled material shall be returned to AE(E)/AC
- 24. The contractor shall provide all necessary superintendence during execution of the work and all along thereafter as may be necessary for proper fulfilling of the obligation under the contractor.
- 25. Failure to comply any of the clauses(s) or due to unsatisfactory performance as observed by Engineer-in-charge, the contractor shall be terminated at any stage without assigning any reason thereof.
- 26. Bills including GST shall be forwarded only when GST challans are produced by the contractor. Bills after deduction of GST amount shall be forwarded in the case where GST challans are not produced. However, GST shall be reimbursed to the contractor on production of challans there of. GST as applicable will be refunded to the contractor in monthly bills on production of proof / challan. In case the contractor does not submit the GST challans then monthly bill will be forwarded without GST amount and it will be reimbursed through hand receipt later after submission of GST Receipt / Challan.

C....Nil I....Nil O....Nil



ANNEXURE -I

SCOPE OF WORKS

Scope includes the following:

Annual operation and Comprehensive maintenance of Package and Ductable type Cooling System of Vishwakarma Bhawan at IIT Delhi.

| (| Activities | for | Package | and | Ductable | type | Units) |
|-----|------------|-----|---------|-----|-----------------|----------|--------|
| - 1 | \ | | | | | <i>,</i> | , |

| Activities — Daily (1) To check and do the needful in respect of following:- |
|--|
| (a) Over all supervision and observation of daily log sheet which shall be maintained in plant room (Log books and other related stationery shall be supplied by the firm and handed over to the representative of IIT Delhi for record) |
| (b) Compressor for its:- |
| (i) Cleaning |
| (ii) Lubricant |
| (iii) Operating temperature, pressure at various points |

- (c) Pump for:-
- (i) Packing and Mechanical seals for leakages.
- (ii) Bearing Temperature.
- (iii) Noise & Vibration.
- (d) Examining the water hardness and regeneration as and when require.
- (e) Condenser and cooling Tower:-
- (i) Cleaning of strainer, filters etc.
- (ii) Water label in sump and float valve operations.
- (iii) Adjustment of Valves etc.



- (iv) Adjustment of V-Belts.
- (vi) Checking and refilling of oil in oil cane.

(f) Electrical Panels:-

- (i) Electrical Panel / Motors etc.
- (ii) Cleanliness functioning of various contacts,

(g) Piping

(i) Refrigerant / Water piping leakages and for unusual vibration etc.

(h) Indoor units of package and Ductable AC /A.H.U.S.

- (i) cleanliness of Filters
- (ii) For adjustment of dampers etc.
- (iii) For Unusual noise and vibrations.
- (iv) Adjustment of belts and pulleys etc.

Activities - Weekly

- (a) Though cleaning of the premise and equipment including that of cooling towers where require.
- (b) Overhauling of various equipment scheduled to be get done during the preceding week.

Activities - Monthly ,Six Monthly and Annual

It is necessary to follow the maintenance schedule as given below, otherwise, a sum of Rs 100/- per day will be deducted from the bill of contractor for non compliance of work.

| Chiller | Monthly | 1. Check refrigerant level, leak test with electronic leak detector, if abnormal, | | | | |
|---------|----------------|---|--|--|--|--|
| | Inspection and | trace and rectify as necessary, inform department in writing on the | | | | |
| | Service | rectification and top of refrigerant on daily basis and nothing extra shall be | | | | |
| | | paid on this account. | | | | |
| | | 2. Inspect level and condition of oil. If abnormal, trace fault and rectify as | | | | |
| | | necessary. Inform department in writing on the rectification. | | | | |
| | | 3. Check the liquid line sight glasses for proper flow. | | | | |
| | | 4. Check all operating pressure and temperature. | | | | |
| | | 5. Inspect and adjust, if required, all operating safety controls. | | | | |
| | | 6. Check capacity control, adjust if necessary. | | | | |
| | | 7. Lubricate vane/linkage/bearings. | | | | |
| | | 8. Visually inspect machine and associated components, and listen for unusual | | | | |
| | | sound or noise for evidence of unusual conditions. | | | | |
| | | 9. Check lock bolts and chiller spring mount. | | | | |

C....Nil I....Nil O....Nil



| | | 10. Review daily operating log maintained by department's operating personnel. |
|---------|--------------|--|
| | | 11. Providing written report to Department, outlining services carried out, |
| | | adjustment made rectification carried out and if the deficiency is of a major |
| | | nature, arrange with department for shut-down to rectify equipment. |
| Chiller | Annual | Perform all functions for monthly check |
| | inspection | 2. Check all flanges for tightness |
| | mspection | 3. Change oil in oil sump |
| | | 4. Replace filter |
| | | 5. Check oil temperature control |
| | | 6. Check motor terminals |
| | | 7. Check connections in starter |
| Motor | Monthly | Please note that oil filter gasket replacement shall deem to be included in the |
| | Inspection | contract. |
| | inspection . | 1. Check motor earthing, meggar motor and connection wiring on each leg. |
| | | 2. Check motor temperature cut-out, tighten motor terminals. |
| | | 3. Check starter contracts. |
| | | 4. Test and calibrate overload setting. |
| | | 5. Inspect, calibrate and adjust to original specifications all gauges, safety and |
| | | operating controls including low temperature and high pressure cutout, oil |
| | | pressure switch, load limit relay and electrical interlocks. |
| | | 6. For water cooled condenser systems, inspect condenser tubes for fouling. |
| | | If fouling exceeds original specifications, the Contractor shall carry out |
| | | cleaning of the tubes at his own expense. |
| Water | Annual | Perform all function for monthly checks |
| Pumps | Inspection | 2. Check motor earthing, meggar Motor and connection wiring on each leg. |
| | | 3. Tighten motor terminals |
| | | 4. Check starter contracts |
| | | 5. Test and calibrate overload setting. |
| | | |

| Expansio | Annual | 1. Inspect expansion tank, Drain, clean and flush out tanks as necessary. | | | | |
|------------|-------------|---|--|--|--|--|
| n tank | Inspection | | | | | |
| Air | Annual | 1. Perform all functions for monthly checks. | | | | |
| Handling | inspection | 2. Tighten motor terminals | | | | |
| units and | | 3. Check starter contacts. | | | | |
| fan coil | | 4. Test and calibrate overload settings. | | | | |
| units | | | | | | |
| Air | Monthly and | 1. Check operation of all modulating and fixed dampers controlling air flow | | | | |
| distributi | annual | through unit. Lubricate all damper bearings and linkages as necessary. | | | | |
| on | inspection | 2. Carry out space temperature checks on air-conditioned areas with thermo | | | | |
| system | | hydrograph. Balance air flow as necessary to compliance with | | | | |

C....Nil I....Nil O....Nil



| • | T | | | | |
|------------|--------------|--|--|--|--|
| | | requirements of original specifications. These checks include the calibration | | | |
| | | of sensors, thermostat, etc. | | | |
| | | 3. Check noise level of discharged air from diffusers. | | | |
| Ventilati | Monthly | 1. Check adjusts as necessary the air flows of all fans are in compliance with | | | |
| on | check and | the original specifications. | | | |
| | annual | 2. Check the tension of all belt drives and adjust as necessary. | | | |
| | inspection | 3. Check and lubricate all fan bearings. | | | |
| | | 4. Tighten motor terminals. | | | |
| | | 5. Check starter contracts. | | | |
| | | 6. Test and calibrate overload settings. | | | |
| | | 7. A system check shall be carried out for all Mechanical ventilation (MV), | | | |
| | | Pressurization and Exhaust system to verity the performance of the systems. | | | |
| Switch | Six-monthly | 1. Clean and adjust all switch gear, contractors, relays and associated | | | |
| board | and annual | electrical equipment at intervals not exceeding six months. | | | |
| | inspection | 2. Check and prove operation of thermal over load and protection devices. | | | |
| | | 3. Check and ensure tightness of all equipment fastenings and cable | | | |
| | | terminations within switch boards. | | | |
| | | 4. Vacuum clean all switch board cubicles. | | | |
| Piping | Monthly and | 1. Check all piping system for leaks and repair these where they have | | | |
| system | annual | occurred. | | | |
| | inspection | 2. Check for damage & deterioration of insulation or sheathings. Rectify as | | | |
| | | necessary. | | | |
| De- | Six-monthly | 1. De- scaling of condenser, all pipe lines of Condenser, valves installed in | | | |
| Scaling of | or as | system with chemical (Super flow 6110) and rodding. | | | |
| System | required for | | | | |
| | system. | | | | |
| Consumab | le materials | The Firm shall supply the following consumable materials as and when | | | |
| | | required:- | | | |
| | | 1. All oils and greases required for lubrication of compressors, fan bearings, | | | |
| | | motors bearings, pivots and other moving parts. | | | |
| | | 2. All consumable filter elements/rolls. | | | |
| | | 3. All electric contact points required worn electric contact points in | | | |
| | | switchgears, motor starter gears, electronic control gears and electric | | | |
| | | relays. | | | |
| | | 4. All electric fuses/MCB,s required to replace. | | | |
| | | ı. | | | |

Note:-

All tests shall be carried out in the presence of the Engineer-in-Charge or his representative.

C....Nil I....Nil O....Nil



ANNEXURE - II

| | Contractor shall maintain minimum stock of following T&P In case short | |
|-----|--|---------|
| | supply at site of T&P item shall a compensation of Rs 100 /- per set of item | |
| | per day shall be imposed on the contractor and shall be deducted from the | |
| | bill of the contractor. | |
| | | |
| 1. | Hack saw frame with Blades | 01 No. |
| 2. | Flat file Set | 01 Set |
| 3. | Scissor | 01 No. |
| 4. | Air blower | 01 No. |
| 5. | Drill machine | 01 No. |
| 6. | Hammer Set | 01 Set |
| 7. | Ring spanner set | 01 Set |
| 8. | Double End spanner set | 01 Set |
| 9. | L.N. key (Unbreko) inch size | 01 Set |
| 10. | L.N. key set mm. Size | 02 Set |
| 11. | Screw driver set | 01 Set |
| 12. | Oil cane with lubricant ½ Ltr. With 20W40 oil | 02 Nos. |
| 13. | Plier Set | 01 set |
| 14. | Adjustable screw wrench Set | 01 set |



BID SUBMISSION

ONLINE BID SUBMISSION:

The Online bids (Complete in all respect) must be uploaded online in **two** envelops as explained below.

| (Following | Envelope – 1 documents to be provided as single PDF file) | | | | |
|---------------------------|--|---------|--|--|--|
| Sl. No. Documents Content | | | | | |
| Technical Bid | Organization Declaration Sheet as per Annexure - I | PDF. | | | |
| | Attested Certificate of work experience | PDF. | | | |
| | Certificate of registration for GST | PDF. | | | |
| | Affidavit as per NIT condition 1.2.2 on stamp paper | PDF. | | | |
| | Authorization Letter of OEM (For authorized Dealer) Note:- OEM & their authorized dealers both cannot quote simultaneously) | PDF. | | | |
| | Enlistment order (Registered in appropriate class and category with CPWD, MES and BSNL) | PDF. | | | |
| | Acceptance to execute integrity pact Page-16 | PDF. | | | |
| | IITD 7/8 duly signed by the bidder | PDF. | | | |
| | EPFO & ESIC Registration proof with up to date challan | PDF. | | | |
| | Any other document as specified in the NIT | PDF. | | | |
| | Valid Electrical License. | PDF. | | | |
| | Envelope – 2 | | | | |
| TYPES | Content | | | | |
| Financial Bid | Price bid should be submitted in BOQ format. | .XLS | | | |
| | Documents Technical Bid TYPES | Content | | | |

C....Nil I....Nil O....Nil



IITD - 2010 CORRECTION SLIPS

In General condition of contract for IIT Delhi works department 2010 –

| Reference | Existing | Modified |
|-----------|---|--|
| Clause | Before any installment of advance is | Before any installment of advance is |
| 10B | released, the contractor shall execute a Bank Guarantee Bond from Scheduled Bank for | released, the contractor shall execute a Bank Guarantee Bond from Scheduled |
| (ii), | the amount of advance &valid for the | Bank for the amount equal to 110% of |
| Para-2 | from time to time to cover the balance | the amount of advance and valid for the contract period. This (Bank Guarantee |
| | amount and likely period of complete recovery, together with interest. | from Scheduled Bank for the amount equal to 110% of the balance amount of |
| | | advance) shall be kept renewed from time to time to cover the balance amount and likely period of complete recovery. |
| Clause 3 | If the contractor shall obtain a contract with | If the contractor had secured the contract |
| (vii) | Government as a result of wrong tendering or other non-bonafide methods of competitive tendering. | with Government as a result of wrong tendering or other non-bonafide methods of competitive tendering or commits |
| | | breach of Integrity Agreement. |

| Reference | Existing Provision | Modified Provision |
|-------------------|--|--|
| Page 5, IITD 2010 | Page 5, IITD 2010 4A. Applicable for Percentage Rate Tender only (IITD-7) In case of Percentage Rate Tenders, a tenderer shall fill up the usual printed form, stating at what percentage below/above (in figures as well as in words) the total estimated cost given in Schedule of Quantities at Schedule-A, he will be willing to execute the work. Tenders, which propose 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 conditions of any sort including conditional rebates, will be summarily rejected. No single tender shall include more than one work, but contractors who wish to tender for two or more works shall submit separate tender for each. Tender | Page 5, IITD 2010 4A. Applicable for Percentage Rate Tender only (IITD-7) In case of Percentage Rate Tenders, contractor shall fill up the usual printed form, stating at what percentage below/above (in figures as well as in words) the total estimated cost given in Schedule of Quantities at Schedule-A, he will be willing to execute the work. The tender submitted shall be treated as invalid if: 1. The contractor does not quote percentage above/below on the total amount of tender or any section/sub head of the tender. 2. The percentage above/below is not quoted in figures & words both on the total amount of tender or any section/sub head of the tender. |

C....Nil I....Nil O....Nil



shall have the name and number of the works to which they refer, written on the envelopes. 3. The percentage quoted above/below is different in figures & words on the total amount of tender or any section/sub head of the tender: Tenders, which propose 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 conditions of any sort including conditional rebates, will be summarily rejected. No single tender shall include more than one work, but contractors who wish to tender for two or more works shall submit separate tender for each. Tender shall have the name and number of the works to which they refer, written on the envelopes.

New Para 4B is added as below:

4B: In case the lowest tendered amount (estimated cost + amount worked on the basis of percentage above/ below) of two or more contractors is same, such lowest contractors will be asked to submit sealed revised offer in the form of letter mentioning percentage above/below on estimated cost of tender including all sub sections/sub heads as the case may be, but revised percentage quoted above/below on tendered cost or on each sub section/ sub head should not be higher than the percentage quoted at the time of submission of tender. The lowest tender shall be decided on the basis of revised offers.

In case any of such contractor refuses to submit revised offer, then it shall be treated as withdrawal of his tender before acceptance and 50% of earnest money shall be forfeited.

If the revised tendered amount of two more contractors received in revised offer is again found to be equal , the lowest tender, among such contractors, shall be decided by draw of lots in the presence of SE of the circle, EE(s) in-charge of major & minor component(s) (also DDH in case Horticulture work is also included in the tender), EE(P) or EE(HQ) of the circle &the lowest contractors those have quoted equal amount of their tenders.

In case all the lowest contractors those



| | | have quoted same tendered amount, refuse to submit revised offers, then tenders are to be recalled after forfeiting 50% of EMD of each contractor. Contractor(s), whose earnest money is forfeited because of non-submission of revised offer, shall not be allowed to participate in the re-tendering process of the work. |
|--|--|--|
| Reference | Existing Provision | Modified Provision |
| 10A (page 6-7) | In case of Percentage Rate Tenders only percentage quoted shall be considered. Any tender containing item rates is liable to be rejected. Percentage quoted by the contractor in percentage rate tender shall be accurately filled in figures and words, so that there is no discrepancy. However if the contractor has worked out the amount of the tender and if any discrepancy is found in the percentage quoted in words and figures, the percentage which corresponds with the amount worked out by the contractor shall, unless otherwise proved, be taken as correct. If the amount of the tender is not worked out by the contractor or it does not correspond with the percentage written either in figures or in words, then the percentage quoted by the contractor in words shall be taken as correct. Where the percentage quoted by the contractor in figures and in words tally but the amount is not worked out correctly, the percentage quoted by the contractor will, unless | In case of Percentage Rate Tenders only percentage quoted shall be considered. Any tender containing item rates is liable to be rejected. Percentage quoted by the contractor in percentage rate tender shall be accurately filled in figures and words, so that there is no discrepancy. (Remaining part deleted) |
| | otherwise proved, be taken as correct and not the amount. | |
| Reference | Existing Provisions | Modified Provisions |
| Deviations/ Variations Extent and Pricing | CLAUSE 12 The Engineer-in-Charge shall have power (i) to make alteration in, omissions from, additions to, or substitutions for the original specifications, drawings, designs and | CLAUSE 12 The Engineer-in-Charge shall have power (i) to make alteration in, omissions from, additions to, or substitutions for the original specifications, drawings, designs and |



instructions that may appear to him to be necessary or advisable during the progress of the work, and (ii) to omit a part of the works in case of non-availability of a portion of the site or for any other reasons and the contractor shall be bound to carry out the works in accordance with any instructions given to him writing signed by the Engineerin-Charge and such alterations, omissions, additions or substitutions shall form part of the contract as if originally provided therein and any altered, additional or substituted work which the contractor may be directed to do in the manner specified above as part of the works, shall be carried out by the contractor on the same conditions in all respects including price on which he agreed to do the main works except as hereafter provided.

instructions that may appear to him to be necessary or advisable during the progress of the work, and (ii) to omit a part of the works in case of non-availability of a portion of the site or for any other reasons and the contractor shall be bound to carry out the works in accordance with any instructions given to him writing signed by the Engineerin-Charge and such alterations, omissions, additions or substitutions shall form part of the contract as if originally provided therein and any altered, additional or substituted work which the contractor may be directed to do in the manner specified above as part of the works, shall be carried out by the contractor on the same conditions in all respects including price on which he agreed to do the main works except as hereafter provided.

The completion cost of any agreement for Maintenance works including works of upgradation, aesthetic, special repair, addition/ alteration shall not exceed 1.25 times of Tendered amount.

Deviations, Extra Items, Pricing

12.2

In the case of extra items (items that are completely new and are in addition to the items contained in the contract), the contractor may within 90 days of receipt of order or occurrence of the item(s) claim rate, supported by proper analysis, for the work and the Engineer-in-charge shall within one month of the receipt of the claims supported by analysis after giving considerations to the analysis of the rates submitted by the contractor, determined the rates on basis of market rates and the contractor shall be paid in accordance with the rates so determined.

12.2

A. For Project and original works:

In the case of extra items (items that are completely new and are in addition to the items contained in the contract), the contractor may within 90 days of receipt of order or occurrence of the item(s) claim rate, supported by proper analysis, for the work and the Engineer-in-charge shall within one month of the receipt of the claims supported by analysis after giving considerations to the analysis of the rates submitted by the contractor, determined the rates on basis of market rates and the contractor shall be paid in accordance with the rates so determined.



B. For Maintenance including works of upgradation, aesthetic, special repair, addition/alteration:

In the case of Extra Item(s) being the schedule items (Delhi Schedule of Rates items), these shall be paid as per the schedule rate plush cost index (at the time of tender) plus/minus percentage above below quoted contract amount.

Payment of Extra items in case of nonschedule items (Non-DSR items) shall be made as per the prevailing market rate.

Deviation, Substituted Items, Pricing

In the case of substituted items (items that are taken up with partial substitution or lieu of items of work in the contract), the rate for the agreement item (to be substituted) and substituted item shall also be determined in the manner as mentioned in the following Para.

- (a) If The market rate for the substituted item so determined is more than the market rate of the agreement item (to be substituted), the rate payable to the contractor for the substituted item shall be the rate for the agreement item (to be substituted).
- (b) If the market rate for the substituted item so determined is less than the market rate of the agreement item (to be substituted), the rate payable to the contractor for the substituted item shall be the rate for the agreement item (to be substituted) so decreased to the extent of the difference between the market rates of substituted item and the agreement item (to be substituted)

A. For Project and original works:

In the case of substituted items (items that are taken up with partial substitution or lieu of items of work in the contract), the rate for the agreement item (to be substituted) and substituted item shall also be determined in the manner as mentioned in the following Para.

- (a) If The market rate for the substituted item so determined is more than the market rate of the agreement item (to be substituted), the rate payable to the contractor for the substituted item shall be the rate for the agreement item (to be substituted).
- (b) If the market rate for the substituted item so determined is less than the market rate of the agreement item (to be substituted), the rate payable to the contractor for the substituted item shall be the rate for the agreement item (to be substituted) so decreased to the extent of the difference between the market rates of substituted item and the agreement item (to be substituted). For Maintenance including works of up

C....Nil I....Nil O....Nil



gradation, aesthetic, special repair, addition/alteration:

In the case of Substitute Item(s) being the schedule items (Delhi Schedule of Rates items), these shall be paid as per the schedule rate plush cost index (at the time of tender) plus/minus percentage above below quoted contract amount.

Payment of Extra items in case of nonschedule items (Non-DSR items) shall be made as per the prevailing market rate.

Deviation, Deviated Quantities, Pricing

In the case of contract items, substituted items, contract cum substituted items, which exceed the limits laid down in schedule F. the contractor may within fifteen days of receipt of order or occurrence of the excess, claim revision of the rates, supported by proper analysis for the work in excess of the above mentioned limits, provided that if the rates so claimed are in excess of the rates specified in the schedule of quantities, the Engineer-in-Charge shall within one month of receipt of the claims supported by analysis, after giving consideration to the analysis of the rates submitted by the contractor, determine the rates on the basis of the market rates and the contractor shall be paid in accordance with the rates so determined.

A. For Project and original works:

In the case of contract items, substituted items, contract cum substituted items, which exceed the limits laid down in schedule F. the contractor may within fifteen days of receipt of order or occurrence of the excess, claim revision of the rates, supported by proper analysis for the work in excess of the above mentioned limits, provided that if the rates so claimed are in excess of the rates specified in the schedule of quantities, the Engineer-in-Charge shall within one month of receipt of the claims supported by analysis, after giving consideration to the analysis of the rates submitted by the contractor, determine the rates on the basis of the market rates and the contractor shall be paid in accordance with the rates so determined.

B. For Maintenance including works of up gradation, aesthetic, special repair, addition/ alteration: In the case of contract items, which exceed the limit laid down in schedule F, the contractor shall be paid rates specified in the schedule of quantities.

C....Nil I....Nil O....Nil



12.3 The provisions of the preceding 12.3 A. For Project and original works: paragraph shall also apply to the provisions of the preceding The decrease in the rates of items for the paragraph shall also apply to the work excess of the limits laid down in decrease in the rates of items for the Schedule F, and the Engineer-inwork excess of the limits laid down in Charge shall after giving notice to the Schedule F, and the Engineer-in-Charge contractor within one month of shall after giving notice to the contractor occurrence of the excess and after within one month of occurrence of the taking into consideration any reply and after excess taking into received from him within fifteen days consideration any reply received from of the receipt of the notice, revise the him within fifteen days of the receipt of rates for the work in question within the notice, revise the rates for the work one month of the expiry of the said in question within one month of the period of fifteen days having regard to expiry of the said period of fifteen days the market rates. having regard to the market rates. B. For Maintenance including works of up gradation, aesthetic, special repair, addition/ alteration: In the case of decrease in the rates Prevailing in the market of items for the the work excess of the limits laid down in Schedule F, and the Engineer-in-Charge shall after giving notice to the contractor within one month of occurrence of the excess and after taking into consideration any reply received from him within fifteen days of the receipt of the notice, revise the rates for the work in question within one month of the expiry of the said period of fifteen days having regard to the market rates. Schedule F Clause 12 Clause 12 Type of work ___ ***_ No provision. *** To be filled by NIT approving authority either Project and original work or Maintenance works including works of

C....Nil I....Nil O....Nil

D'Man /J.E. A.E.E / A.E. E.E.

upgradation, aesthetic, special repair,

addition/alteration.



INDIAN INSTITUTE OF TECHNOLOGY DELHI HAUZ KHAS, NEW DELHI - 110016

SCHEDULE OF QUANTITY

Name of Work: A.R & M.O Central AC Plant , package units ,Solar generation systems and D.G. Sets at IIT Delhi.

Sub Head: Annual operation and Comprehensive maintenance of Package and Ductable type Cooling System of Vishwakarma Bhawan at IIT Delhi.

Chargeable Head: NPN 10

| Sr. | Item of work | Unit | Qty. | Rate Per Unit | Amount |
|-----|--|-------|------|---------------|---------------|
| No | | | | (inclusive of | (inclusive of |
| • | | | | all Taxes and | all Taxes |
| 1 | Annual operation and routine maintenance of Air-Conditioning System of Auditorium and Evaporative cooling Systems(from I floor to VI floor of B-Wing of vishwakarma Bhawan) for the Following:- (a) 04 nos.x16 Tr. Air-cooled Package type Air conditioners of Auditorium (b) 11 nos.(07X 16.5 Tr + 04 X 11.00 Tr) Water cooled Package type Air conditioners and with associated power and control equipment etc., 05 Nos. cooling towers, 05 nos. pumps & its accessories, all pipe lines (CI&GI) complete with AHU room (c) 02 Nos (01X 8.5 Tr + 01X 5.0 Tr.) Ductable type Air conditioners its accessories for Sixteen hours per day (For Two Shifts) One operator and one helper in each shift ie; 6.00 AM to 2.00 PM and 2:00 PM to 10 PM as required shall be provided 30/31 days in a month (in case of requirement of duty hours increases, contractor shall have to provide more man power & be paid on pro-rata basis of the quoted rates for this items, including replacement of all kind of defective and worn out component with in 15 days of award of work retightening of connections and cleaning of internal component and panel with CRC /CTC or equivalent chemical above maintenance shall be carried out in the presence of AE/JE Note:-One job means, carrying out the above work for a month | P.Job | 12 | GST) | and GST) |
| 2 | De-scaling of the Water cooled condensers and Cooling coil with fins of Water cooled Package type Air conditioners (16.5 Tr, 11.00 Tr) with the chemical (clean flow or equivalent chemical) including roding, brushing and flushing with costic Soda etc. twice in a year. First time within seven days of award of work, next in six months after work. | P.Job | 22 | | |
| 3 | De-scaling of the Air cooled condensers and Cooling coil with fins of (a) 16 Tr. Air-cooled Package type Air conditioners of Auditorium, (01X 8.5 Tr, 01X 5.0 Tr.) Ductable type Air conditioners with the chemical (clean flow or equivalent chemical) including roding, brushing and flushing with costic Soda etc. twice in a year. First time within seven days of award of work, next in six months after work. | P.Job | 28 | | |

C....Nil I....Nil O....Nil



| 4 | Comprehensive maintenance of accessories Comprehensive maintenance includes replacement of all kinds of defectives component /parts and rewinding of motors with suitable Enameled Copper wire of suitable size (ISI Marked) a as and when required. Repairing and cleaning of Cooling Towers with the chemical (clean flow or equivalent) on monthly basis. Scope includes the following Replacement of fills (all) once in a year ie: with in 15 days of award of work b) Repairing of Cooling Tower motors and Fan belt assembly with replacement of Bearing and v-Belts of (if required) ,twice in a year first time within seven days of award of work ,next in six months | P.Job | 10 | |
|---|--|-------|----|--|
| 5 | Comprehensive maintenance of Condenser water Pumps with motor includes replacement of all kinds of defectives component /parts and rewinding of motors with suitable Enameled Copper wire of suitable size (ISI Marked) a as and when required as per specification enclosed and replacement of defectives Water Pressure Gauges , and Thermometer replace if required within 15 days of award of work | P.Job | 5 | |
| 6 | Providing and Topping up the refrigerant R-22 in the Water cooled and Air cooled Package type Air conditioners (16.5/16.0 Tr , 11.00 Tr) with the complete refrigeration line and compressor after Leakage testing and removing from the complete refrigeration line within 15 days of award of work and as and when required Comprehensive maintenance includes replacement of all kinds of defectives component /parts and rewinding of motors with suitable Enameled Copper wire of suitable size (ISI Marked) a as and when required (Except Compressor) | P.Job | 30 | |
| 7 | Providing and Topping up the refrigerant R-22 in the (01X 8.5 Tr, 01X 5.0 Tr.)Ductable type Air conditioners with the complete refrigeration line and compressor after Leakage testing and removing from the complete refrigeration line within 15 days of award of work and as and when required Comprehensive maintenance includes replacement of all kinds of defectives component /parts and rewinding of motors with suitable Enameled Copper wire of suitable size (ISI Marked) a as and when required (Except Compressor) | P.Job | 4 | |
| 8 | Replacement of defective Compressors installed in the Package and Ductable type Air conditioners from the respective manufacturers of the compressors (Blue Star ,Kirloskar ,Tecumsheh ,Carrer ,Voltas) Compressors shall be got replaced from the manufacturer installed in the Air conditioners including Providing and Charging the refrigerant R-22 in the Air/Water cooled Package type Air conditioners and Ductable type Air conditioners with the complete refrigeration line and compressor after Leakage testing and removing from the complete refrigeration line within 15 days of award of work and as and when required a) 5.5 Tr./ 5.5 Tr. Capacity Compressor | Each | 1 | |



| 9 | b)7.5 Tr. Tr. Capacity compressor | Each | 1 | |
|----|--|-------|---|--|
| 10 | c) 8.0/ 8.75 Tr. Capacity compressor | Each | 1 | |
| 11 | Comprehensive maintenance of Electrical panels includes replacement of all kind of defectives component, retightening and cleaning with CTC/CRC or equivalent chemical (i) contractor shall carry out Preventive maintenance of all Electrical and electronic operating panels and starters of all the 04 nos.x16 Tr. Air-cooled Package type Air conditioners 11 Nos. (07X 16.5 Tr + 04 X 11.00 Tr) Water cooled Package type Air conditioners , and 02 Nos(01X 8.5 Tr + 01X 5.0 Tr.) Ductable type Air conditioners with in 15 days of award of work and next in six months after work . (ii) Contractor shall carry out Preventive maintenance of Main Electrical panels and starters of all the 05 nos. Condenser water Pumps and cooling tower motor within 15 days of award of work and next in six months after work . (iii) Contractor shall carry out the comprehensive maintenance of main Electrical panels of all the 15 Nos. Package units and 02 Nos (01X 8.5 Tr + 01X 5.0 Tr.) Ductable type Air conditioners including replacement of all kind of defectives and worn out component within 15 days of award of work , retightening of connections & cleaning of internal component and panel with CTC/CRC or equivalent chemical Above maintenance shall be carried out in the presence of AE/JE. Total Rs. | P.Job | 1 | |
| | 1000110 | | | |

EE(E) AE(E) AC

C....Nil I....Nil O....Nil