



భారతీయ సాంకేతిక విజ్ఞాన సంస్థ హైదరాబాద్
भारतीय प्रौद्योगिकी संस्थान हैदराबाद
Indian Institute of Technology Hyderabad

Notice Inviting Tender (NIT); Technical Bid-Terms of Reference (ToRs)

Name of Work: Comprehensive Annual Maintenance Contract (CAMC) with Day-to-Day Operations and Maintenance (O&M) of HVAC systems including 4497TR (Phase-I) & 7555TR (Phase-II) installed capacity including associated (High Side & Low Side) HVAC Equipment's installed in Phase-I and Phase-II constructed buildings, IIT Hyderabad campus, Kandi, Sangareddy.



Ref; EOI No.: IITH/CMD/ELE/EOI/2026-27/15

Executive Engineer - Electrical
IIT Hyderabad

INDIAN INSTITUTE OF TECHNOLOGY(IIT) HYDERABAD

Notice Inviting Tender (NIT); Technical Bid-Terms of Reference (ToRs)

NIT Ref No. IITH/CMD/ELE/EOI/TOR/2026-27/15

The Indian Institute of Technology(IIT) Hyderabad, an autonomous Institute under the Department of Higher Education, Government of India invites on behalf of President of India an online bids(Technical + Financial) from the Technically Qualified(i.e.,shortlisted) bidders of 1st stage of EoI evaluation for the services/work of **Comprehensive Annual Maintenance Contract (CAMC) with Day-to-Day Operations and Maintenance (O&M) of HVAC systems including 4497 TR (Phase-I) & 7555 TR (Phase-II) installed capacity including associated (High Side & Low Side) HVAC Equipment's installed in Phase-I and Phase-II constructed buildings, IIT Hyderabad campus, Kandi, Sangareddy.**

1.1	NIT Ref. No.:	IITH/CMD/ELE/EOI/TOR/2026-27/15
1.2	Name of work:	Comprehensive Annual Maintenance Contract (CAMC) with Day-to-Day Operations and Maintenance (O&M) of HVAC systems including 4497 TR (Phase-I) & 7555 TR (Phase-II) installed capacity including associated (High Side & Low Side) HVAC Equipment's installed in Phase-I and Phase-II constructed buildings, IIT Hyderabad campus, Kandi, Sangareddy
1.3	Location of work:	Indian Institute of Technology (IIT) Hyderabad campus, Kandi-502284, Sangareddy, Telangana, India.
1.5	Period of Work:	02 Years
1.6	Date of Online Publication/Download of NIT documents (i.e.,Technical bid-ToRs and Financial bid BoQ)	22/10/2026 @ 09:00hrs
1.7	Last Date for Submission of bids	28/10/2026@ 16:00hrs
1.8	Date and time for Opening of Technical bids	29/10/2026@ 16:30hrs
1.9	Date for Opening of Financial bids (Tentative only)	30/10/2026
1.9	Website	https://eprocure.gov.in/eprocure/app

Ref; EOI No.: IITH/CMD/ELE/EOI/2026-27/15

Sd/-
Executive Engineer-Electrical
IIT Hyderabad

SECTION-01

1.0 INSTRUCTIONS TO THE BIDDERS FOR ONLINE BID SUBMISSION

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, preparing 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: <https://eprocure.gov.in/eprocure/app>.

REGISTRATION

1. Bidders are required to enroll on the e-Procurement module of the Central Public Procurement Portal (URL: <https://eprocure.gov.in/eprocure/app>) by clicking on the link “Online bidder Enrollment” on the CPP Portal which 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 addresses 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 III Certificates with signing key usage) issued by any Certifying Authority recognized by CCA India (e.g. Sify / 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 DSC’s 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 TENDER DOCUMENTS

- 1) There are various search options built in the CPP Portal, to facilitate bidders to search active tenders by several parameters. These parameters could include Tender ID, Organization Name, Location, Date, Value, etc. There is also an option of advanced search for tenders, 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 tender published on the CPP Portal.
- 2) Once the bidders have selected the tenders they are interested in, they may download the required documents / tender schedules. These tenders can be moved to the respective ‘My Tenders’ folder. This would enable the CPP Portal to intimate the bidders through SMS / e- mail in case there is any corrigendum issued to the tender document.
- 3) The bidder should make a note of the unique Tender ID assigned to each 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 tender document before submitting their bids.

- 2) Please go through the tender advertisement and the 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 tender document/schedule and generally, they can be in PDF / XLS / RAR / DWF/JPG formats. Bid documents may be scanned with 100 dpi with black-and white option which helps in reducing the size of the scanned document.
- 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 the “My Space” or “Other Important Documents” are 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.

Note: My Documents space is only a repository given to the Bidders to ease the uploading process. If Bidder has uploaded his Documents in My Documents space, this does not automatically ensure these Documents being part of Technical Bid.

SUBMISSION OF BIDS

- 5) Bidder should log into the site well in advance for bid submission.
- 6) Bidder should ensure that they can 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.
- 7) The bidder has to digitally sign and upload the required bid documents one by one as indicated in the tender document.
- 8) The bidder has to select the payment option as “offline” to pay the tender fee/ EMD as applicable and enter details of the instrument.
- 9) The bidder should prepare the EMD (if any) as per the instructions specified in the tender document. The original should be posted/couriered/given in person to the concerned official, latest by the last date and time of bid submission or as specified in the tender documents. The details of the DD/any other accepted instrument, physically sent, should tally with the details available in the scanned copy and the data entered during bid submission time. Otherwise, the uploaded bid will be rejected.
- 10) Bidders are requested to note that they should necessarily submit their financial bids(if any) in the format provided and no other format is acceptable. If the price bid has been given as a standard BoQ format with the tender document, then the same is to be downloaded and to be filled by all the bidders. 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.
- 11) 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.

- 12) 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. Any bid document that is uploaded to the server is subjected to symmetric encryption using a system-generated symmetric key. Further this key is subjected to asymmetric encryption using buyers/bid opener's public keys. Overall, the uploaded tender documents become readable only after the tender opening by the authorized bid openers.
- 13) The uploaded tender documents become readable only after the tender opening by the authorized bid openers.
- 14) Upon the successful and timely submission of bids (i.e., after Clicking "Freeze Bid Submission" in the portal), 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.
- 15) The bid summary has to be printed and kept as an acknowledgment of the submission of the bid. This acknowledgment may be used as an entry pass for any bid opening meetings.

ASSISTANCE TO BIDDERS

- 16) Any queries relating to the tender document and the terms and conditions contained therein should be addressed to the Tender Inviting Authority for a tender or the relevant contact person indicated in the tender.
- 17) 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 details of the helpdesk are 0120-4711508, 0120-6277787, 0120-4001002, 0120- 4001005 and support-eproc@nic.in.

SECTION-02

2.0 OBJECTIVE OF THIS NIT-TERMS OF REFERENCE (ToR) DOCUMENT:

The objective of this NIT-TOR document is to solicit Final proposal (Technical + Financial bids) from the bidders who participated and found Technically Qualified(shortlisted) during the 1st Stage of EoI evaluation against the online EOI ref No. IITH/CMD/ELE/EOI/2026-27/15 published on CPP Portal (eprocure.gov.in) for the award of work of “**Comprehensive Annual Maintenance Contract (CAMC) with Day-to-Day Operations and Maintenance (O&M) of HVAC systems including 4497 TR (Phase-I) & 7555 TR (Phase-II) installed capacity including associated (High Side & Low Side) HVAC Equipment’s installed in Phase-I and Phase-II constructed buildings, IIT Hyderabad campus, Kandi, Sangareddy.**” and who can Comprehensively Operate and Maintain the HVAC Systems at IITH for a minimum period of 02 years in a most Energy Efficient and Uninterrupted manner as per the exclusive needs of IITH.

SPECIAL NOTE; *All terms and conditions mentioned in the initial aforesaid EoI document Ref.No. IITH/CMD/ELE/EOI/2026-27/15 dated 19-08-2026 shall be fully applicable and are considered an inherent part of this Tendering process/Bid evaluation process and for award of work and further part of Contract agreement with the successful bidder.*

Evaluation of the Proposals: The online responses received from the Technically qualified bidders only(during 1st stage of EoI evaluation), who submit their final Technical bid and Financial (Price) bid against the requirements of IIT Hyderabad specified in this ToR document, will be evaluated and the successful bidder will be decided accordingly. The bidders are advised to carefully go through this ToR document and shall submit all the relevant documents asked in the ToRs and also needed in support of it’s Technical and Financial bid through online bidding process.

RIGHT TO TERMINATE THE PROCESS:

- IIT Hyderabad makes no commitments, explicit or implicit, that this process will result in a business transaction with anyone.
- IIT Hyderabad reserves the right to withdraw this TOR/EOI if it determines that such action is in the best interest of the organization without assigning any reason whatsoever.

Authenticity of the Information and Right for Verification:

- IITH reserves the right to verify all statements, information and documents submitted by the potential bidder in response to the NIT-TOR. Any such verification or lack of such verification by the IIT Hyderabad shall not relieve the bidder of its obligations or liabilities hereunder nor will it affect any rights of the IITH thereunder.
- In case it is found during the evaluation of the responses or at any time during the subsequent procurement process or before signing of the contract or after its execution and during the period of project execution resulting out of the contract thereof, that one or more of the pre-qualification conditions have not been met by the bidder, or the bidder has made material misrepresentation or has given any materially incorrect or false information, the bidder shall be disqualified forthwith if not yet awarded the contract either by issue of the letter of intent or entering into a contract.

ADDITIONAL CONDITIONS:

- Timing and sequence of events resulting from this NIT shall be as determined by IITH.
- Responses are subject to rejection if they limit or modify any of the terms and conditions or specifications of this NIT.

- Neither the bidder nor any of bidder's representatives shall have any claims whatsoever against IITH or any of its respective officials, agents, or employees arising out of or relating to this TOR or these procedures (other than those arising under a definitive service agreement with the bidder in accordance with the terms thereof).
- **The bidder must not have any history of defaulting in execution of work orders issued by Government of India or any State Government in the country of India. A self-declaration certificate to this effect should be enclosed.** *(To be furnished under Notarized Affidavit).*
- **The bidder hasn't been blacklisted by any Central/State Government institution and there has been no pending litigation with any government department on account of similar services.** *(To be furnished under Notarized Affidavit).*
- **No Criminal Proceedings in any Court of Law should pending against the bidding Firm Or its Promoters Or its Directors Or its Executives.** *(To be furnished under Notarized Affidavit).*

NOTE; In case of Non-submission of any of the relevant documents specified in this ToRs or in case of non-compliance to any of the terms and conditions mentioned in this ToRs by any of the Bidders, such bids are liable to be rejected at the sole discretion of IITH.

SECTION-03

3.0 General Conditions of Contract

1. This CAMC contract is currently **for Two (02) years** but may be extended for another further 1 to 2 years based on satisfactory Performance during the Original Contract period and based on mutual discussions on Terms & Conditions and agreement of both the parties.
2. During AMC/Servicing/Attending breakdown calls of HVAC Systems, existing spares are required to be replaced with new spares for efficient and effective operation of HVAC Systems. In such instances, the agency shall submit the new spares assessment to the Engineer-In-Charge for review and approval for the replacement of spares.
3. Some restrictions may be imposed by the Institutes security staff etc., on the working and for movement of labour, materials etc. The contractor shall be bound to follow all such restrictions/instructions and nothing extra shall be payable on this account.
4. The contractor shall comply with proper and legal orders and directions of the local or public authority or municipality and abide by their rules and regulations and pay all fees and charge, which he may be liable.
5. The contractor shall take instructions from the Engineer-in-Charge for stacking of materials in any place. No excavated earth or building material shall be stacked on areas where other buildings, roads, services compound walls are to be constructed.
6. As a policy of the Institute, huts for labour are not permitted at the site of work by the contractors. The contractors are required to provide such accommodation outside the premises of the Institute and nothing extra shall be paid on this account.
7. The contractor shall procure all the materials in advance so that there is sufficient time for testing and approving the material and clearance of the same before use in work.
8. No payment shall be made for extra for scaffolding required for external works at all levels.
9. Contractor should clean thoroughly that there should not be any dust/dirt inside the HVAC systems.
10. Contractor should maintain all required spare parts, Tools & Equipment and other related items as required as per contract for smooth CAMC and O&M of HVAC systems.
11. Contractor should attend the problems immediately in case of breakdowns of HVAC systems and any other related electro-mechanical equipment malfunctions.
12. Contractor should ensure that there should not be any modifications in Power & Control supply in the existing system if required, this has to get approved Engineer-in Charge before executing the work & modifications has to be incorporated in the drawing.
13. Contractor should not bypass any safety procedures, accidents caused due to negligence of safety is the sole responsibility of the contractor.
14. Contractor should Display Caution Board while doing maintenance work on Live Parts.

15. The successful bidder will be responsible for the security/insurance of their staff working at site and IIT Hyderabad will not be responsible in any manner in case of any accident / miss-happenings.
16. Reports to be submitted by Contractor
As per contract, the contractor shall submit Fortnight/monthly/Quarterly/Half Yearly Operation & Maintenance reports in a computerized form.
17. **Please note that the CPWD (Central Public Works Department) General Conditions of Contract(GCC) for Maintenance Works 2023 with latest upto date amendements are also applicable to this work as and when needed and applicable, at the discretion of IITH.**

18. UNIFORM

(i) The employees/manpower deployed by the agency shall have neat/clean/washed uniforms with visible identification badge along with ID cards to be carried by the persons at all times during duty hours at IITH. All the O & M staff shall wear safety shoes in compulsory during duty hours at all times along with Safety Helmets as needed on site.

(ii) The contractor shall be responsible for proper maintenance of decorum, punctuality, discipline and work output. The personnel so deployed will be in proper neat & clean uniform. Provision of uniform (02 no's set per employee/technician) along with good quality safety shoes, safety helmets, other Tools etc. as per the site requirement, to be made to deployed staff shall be the responsibility of the contractor. Nothing extra shall be paid on this account.

19. PAYMENT OF WAGES

1. The contractor shall pay to all the Operation & Maintenance (O&M) staff deployed at IITH, the latest applicable minimum rates of wages as prescribed by Ministry of Labour & Employment, Govt. of India for Construction or Maintenance works. During the original contract period (for both 1st year and 2nd year), any revision in minimum wages (as per Govt. of India) shall be payable to the O & M staff by the contractor only, without any additional cost implication to IITH. However, during the extended period of contract (if any), any further increment in minimum wages of the deputed staff (if any) stipulated by the Govt. of India shall be payable to the contractor proportionately by IITH under the relevant clauses/conditions of contract. The wages shall be payable to the O&M staff in accordance with their respective category/domain of work i.e., Highly skilled/skilled/semi-skilled/unskilled or any other allowances applicable as per GoI. The monthly payment /salary to all the O&M staff deployed at IITH shall be made by the contractor by the end of first week i.e., 07th day of every month. The disbursement of salaries to all the O&M staff shall be made in their respective bank accounts only and no cash payment shall be made to the workers/staff. In case of any delay in disbursement of salary to the workers by the contractor beyond 07th day of every month, penalty @ 0.1% per day will be deducted from the contractor's monthly bill payments from IITH.
2. The payment for EPF and ESIC Scheme for workers on behalf of employer shall be deposited by successful bidder/contractor. Also, other perks such as leave wages (Paid leave as per factory act 1948), bonus i.e. (as per bonus act 1965) etc. shall be payable to the workers. No extra amount to be paid by IITH for this apart from the bidder's quoted amount. Also all Gazetted and National holidays as approved by GOI/IITH for such deployed staff shall be given to them. If any worker joins the duty during holiday or working more than normal duty hours, overtime shall be given as per GoI norms (extra wages should be given at twice the ordinary rate) without any additional cost implication to IITH.
3. All Labour Codes as issued by the Govt. of India time to time with upto date amendments shall be fully applicable to this contract. During the visits of the Labour Officers from Labour department, the contractor or his authorized representative must attend such visits and shall produce all the relevant documents as asked by the concerned Labour Authority.

SECTION-04

4.0 Special Conditions of Contract

- 1 The Work shall be carried out as per Central Public Works Department(CPWD) General Specifications for Electrical Works; **Heat ,Ventilation & Air-conditioning(HVAC) –2024** (with upto date amendments), **Part I Internal-2023**(with upto date amendments), **Part II External-2023**(with upto date amendments), **Part IV Substations-2013**(with upto date amendments) wherever needed and applicable, at the discretion of IITH.
- 2 The provisions of **CPWD Maintenance Manual-2023, CPWD Works manual-2026 and CPWD Standard Operating Procedures(SoP)-2026 (with upto date amendments)** are also applicable as and when needed, at the discretion of IITH.
2. The general condition of the plant should be maintained to the entire satisfaction of the Engineer-in-charge. The contractor shall be responsible for the Day-to-day cleaning and housekeeping of the plant.
3. Contractors intending to bid are strongly recommended to visit the site so to ascertain the exact location and scope of work to be done and the method to be adopted by him in carrying out the maintenance.
4. Ensure 24×7 reliable HVAC operation with maximum plant/equipment availability; minimise outages through proactive maintenance and standby/equipment sequencing. Standard checklists, approved by IITH to be used for all the equipment.
5. Provide a Centralised online platform for maintenance schedules, Logs, integrating available BMS/Controllers/Meters for Real-time status, alarms, trends, operating hours, temperatures, flows, and energy parameters.
6. Establish plant-wise energy-performance baseline within initial **90days** and continuously track **kW/TR, kWh/TRh (where measurable), peak kW, TRh, and energy consumption**.
7. Continuously optimise chiller sequencing, CHW/CW pumps, CT Fans, VFDs and operating setpoints according to cooling demand without compromising comfort, reliability or OEM limits.
8. Monitor and improve **CHW ΔT, condenser approach, CT approach, flow and supply/return temperatures**; investigate abnormal/low-ΔT conditions and implement corrective action.
9. Supplement preventive maintenance with condition/predictive maintenance using available vibration, temperature, pressure, power, runtime, starts/stops, alarms and performance trends.
10. Configure trend/deviation-based early warnings for abnormal energy use, efficiency deterioration, temperature/pressure/flow deviations and approaching equipment problems.
11. Digitally record **alarm → acknowledgement → attendance → diagnosis → restoration → closure**. Track **MTBF/MTTR** and perform RCA with corrective/preventive action for critical/repetitive failures.
12. Maintain prescribed water quality and monitor condenser/evaporator fouling, approach temperatures, CT condition and scaling; undertake cleaning/descaling based on schedule and actual condition.
13. Maintain an ECM register covering sequencing, VFD/setpoint optimization, fouling correction, scheduling and other measures, showing **baseline → action → estimated saving → verification**.
14. Maintain equipment-wise electronic history for major chillers, pumps, cooling towers, AHUs etc., covering runtime, PM, breakdowns, alarms, repairs, replacements and performance/efficiency trends.

15. All major PM/breakdown activities shall be electronically recorded with equipment ID, date/time, measurements, action, responsible person and closure status; records shall remain accessible to IITH.
16. Submit plant-wise dashboard covering **energy, kW/TR, peak demand, availability, CHW ΔT , MTBF/MTTR, major alarms, savings and pending corrective actions & quarterly review.**
17. Demonstrate measurable improvement against the agreed baseline and submit annual performance assessment covering all important parameters/KPIs.
18. The contractor shall maintain a register of attendance of staff and produce the same for inspection by CMD officers as when required. If any operational staff is found absent the recovery shall be made.
19. The log book and maintenance register of the plant shall be filled up regularly. The blank log book and maintenance record books shall be arranged by the contractor as required.
20. Watch and ward & safe custody of all the equipment shall be the responsibility of the contractor.
21. Workers engaged by the contractor/ firm cannot claim for permanent Job/ Regularization as this is a Job Oriented Work.
22. Rates quoted by the bidder will be inclusive of all wages, taxes, duties, bonus and leave benefits. The Contractor should submit the proof/ challans of submission of EPF & ESI at the time of payment.
23. EPF & ESI contribution from employer's part will be reimbursed on submission of proof of deposition of EPF & ESI amount submitted with the competent authority.
24. The contractor has to ensure that:
 - a. In terms of Clause 19 of the GCC, a valid labour license is obtained by the contractor before start of work in terms Contract Labour (Regulation & Abolition) Act-1970.
 - b. In terms of Clause 19L of the GCC, ESI & EPF contributions are to be paid by the contractor, for which contractor is to get registered himself with EPFO and ESIC.
 - c. Labour employed by the contractor has obtained smart card of ESI, which is essential for imparting medical facility to labour.
 - d. Labour employed by the contractor has registered themselves with Building and Other Construction Worker Act-1996 to get applicable benefits.
 - e. Registers for workmen employed by the Contractor, Muster Roll, Register of Wages, Wages Slip, Employment Card, Service Certificate, Register of Fines, Register of Deduction for Damage of Loss, Register of overtime and Register of Advance etc., shall be maintained.
25. No T&P shall be issued to the contractor by the IITH.
26. No Extra labour shall be paid on any account unless otherwise there are explicit instructions from the Engineer-in-Charge for any special purpose.
27. All materials make and model shall be got approved from the Engineer-in-charge before use at site.
28. Any damage done to the building during execution of work shall be made good by the contractor.
29. During the servicing the firm has to clean all dust with blower and then after apply the cleaning scope of work agent with forced water spray with the help of water pressure machine.
30. As and when required in between maintenance period, the firm has to re-clean and re-service the equipment, as per the site requirement which will be within scope of work.

31. The contractor has to bring welding set at site to stop the minor leakage in the system, if required for which nothing extra shall be paid on this account.
32. Claim whatsoever occurs due to occupational hazards, accidents to the staff shall not be entertained by the IITH.
33. Electrical & mechanical works shall be carried out in accordance with the relevant CPWD specifications. The plant shall be maintained to the entire satisfaction of the Engineer-In-Charge.
34. The Contractor shall intimate the Engineer-in-Charge or his representative about all the antecedents of workers employed by him in writing.
35. A site order book shall be maintained and will be available with the concerned JE(E)/AE(E)/AEE(E) in Charge at site. All the instruction to carry out the works defects, to be attended by the contractor shall be record in the site order book and the contractor shall note and sign the entire time to time and should take action accordingly. The Site Order book will be weekly/fortnightly/monthly reviewed by the Engineer-in-Charge at it's discretion.
36. In case of any breakdown, the mechanic/contractor shall open the defective equipment i/c compressor & shall intimate the reasons for break down & item requires for rectification for which no extra payment will be made.
37. Materials for minor repairs such as Gaskets, Gland Dori, Grease, Indicating Lamps, Insulation Tapes, Fuse Holders, Switches, Fuses, Thimbles, Loose wires, Neon Lamp, Distilled Water, Petroleum Jelly, Clamps, Dusters/ Cotton Waste, Soap, Broom CTC, Nuts, Bolts shall be provided by the contractor. Nothing extra shall be paid on this account, hence is advised to quote his rates accordingly.
38. Any loss or any damage to machinery/ Equipment due to faulty operation/ mishandling/ negligence of staff shall have to be made good by the contractor at his risk and cost. In the event of failure suitable recovery shall be effected from the contractor's bill for which Engineer-in-charge decision will be final and binding on the contractor.
39. All the O&M staff on duty must carry required necessary PPE and T&P at site.
40. The IITH will not be responsible for any kind of human injury/losses of life during duty Hours.
41. Before the start of contract, the contractor shall submit the following details along with supporting papers of the staff proposed for Sub Head wise work to be engaged by him. After receipt of confirmation of their suitability from Engineer-in-charge or his authorized representative, they shall be deployed on duty.
 - ❖ Name & Postal Address with I.D. proof
 - ❖ Photograph with specimen signature.
 - ❖ Qualification and experience.
42. Debris shall be removed from the site timely and site should be kept neat & clean.
43. Within **30 days of awarding contract**, contractor should submit the proposed maintenance schedule/manual for all the scoped HVAC systems and the same shall be got approved from Engineer-In-Charge.
44. The deployed staff of the contractor has to maintain good behaviour at site, any person found misbehaving shall have to be replaced within 48 hrs. decision of the Engineer-in-charge or his authorized representative shall be final and binding to the contractor.
45. Work is to be executed in a time bound manner otherwise penalty recovery shall be made from contractor bill.
46. Any additional furniture required at the plant for operations and maintenance must be arranged by the contractor for the deployed team at the site. The furniture can be retrieved by the contractor upon successful

completion of the contract tenure, with no additional payment provided for this arrangement.

47. Shift mobile phones to be provided by the contractor segment/zone wise to attend the service/maintenance/breakdown calls from the IITH fraternity and as per the directions of Engineer-In-Charge, with no additional cost implication to IITH, for this arrangement.
48. Failure in meeting the above requirements will attract fines as mentioned below. The amount of such fines will be deducted from the contractor's bills.
49. The Availability & functioning of AC system is very essential and critical. Non-availability may result many tangible & non tangible losses in research work, equipment, tissues etc. Hence all the work routine, servicing, breakdown maintenance has to be carried out in accordance with all standards and statutory norms with minimum time and maximum accuracy to ensure maximum availability.
50. Contractor should depute experienced personnel to carry out maintenance work both low & high side in such a way that the repetition of the problem should be avoided.
 - a. **Absenteeism:** No absenteeism shall be allowed. In case of absence of any staff in the agreed staff pattern, fine will be imposed at one and half times the rate for the day the staff remains absent, computed on the basis of Clause 32.
 - b. **Non-Compliance of work:** In the event of failure of compliance of awarded work in stipulated time fine will be imposed as per double of actual expenditure incurred in attending the same by other agency
 - c. In the event of major breakdown in Chiller/ Condenser/ Cooling tower like anyone unit of HVAC equipment of AC plant, the firm has to rectify the same within a maximum of 7(seven) working days, failing which, an amount of Rs 5,000/- per day shall be recovered from the contractor's bills due for payment in addition to the applicable contract clauses. Any breakdown restoration beyond 07days require prior approval of the Engineer-in-Charge(EIC) for which the contractor shall submit the relevant justifications.
51. The Contractor bills pertains to Comprehensive Annual Maintenance (CAMC) shall be paid on Quarterly basis and bills pertains to Operation & Maintenance (O&M) shall be paid on monthly basis by the Institute.
52. The Contractor should deploy the minimum manpower with qualifications shall be as per **Schedule-F/Clause-32** for performing 24X7 Day-to Day Operation & Maintenance of HVAC Systems at IITH.
53. Engineer-in-Charge will be authorized to deduct amount from the contractor bill or security deposit or initiate any other action as found suitable.
54. **SERVICES TO BE PROVIDED BY THE CONTRACTOR:** The following shall be ensured by the contractor but not limited to-
 - (i) The agency shall be fully responsible for round the clock (24hrsx365days) Operation and Maintenance of the HVAC systems/services/inventories detailed (in the EOI and NIT-ToR document) and installed at IITH Campus.
 - (ii) The agency/contractor shall depute the full manpower required for the Operation & Maintenance of HVAC systems of IITH Campus as per the site requirement. If required, additional manpower may also be deployed by the agency as per their assessment of the work without any extra cost implication to IITH. The Manpower deputed by the agency shall be fully trained in Operation & maintenance of the systems/services installed at IITH Campus.
 - (iii) Any relievers if required to maintain the required manpower at IITH Campus shall be the responsibility of the agency, without any extra cost to IITH.
 - (iv) The Minimum educational qualification of the Manpower to be deployed by the agency shall be as per the requirements mentioned under Clause 32 of this NIT. However higher qualification is also acceptable but without any extra cost to IITH.
 - (v) The agency shall depute minimum nos. of site in-charges/supervisors(as mentioned under clause 32 of this NIT) for effectively handling the deputed manpower, their duty schedules, scheduling of

- operation and routine/preventive maintenance activities of HVAC inventory, scheduling for rectification for day to day complaints, breakdown/fault rectification works etc.
- (vi) The agency shall depute required manpower for 24x7 manned operation & maintenance of HVAC systems at HVAC Plant rooms-1,2,4 & 5 and other critical buildings of IITH.
 - (vii) The agency shall prepare the building wise/area-wise/zone-wise manpower deployment schedule in consultation with the Engineer-In-charge and get it approved in principal from the Engineer-In-charge for deployment at IITH Campus.
 - (viii) The agency shall regularly maintain the Log books of all the HVAC machinery/systems installed in the IITH Campus i/c Main HVAC panel, Chillers, Cooling Towers, Primary Chilled water pumps, Secondary Chilled water pumps, Condenser water pumps, Hot Water Generators, Hot water pumps, Air Handling Units, Fan Coil Units etc. as per the format provided by Engineer-In-charge.
 - (ix) The agency shall be fully responsible to maintain all the HVAC systems/services/inventories installed at IITH campus as per the Maintenance schedule recommended by the respective Original Equipment Manufacturer (OEMs) of different systems and as per the instructions of Engineer-In-charge i/c regular cleaning and day to day maintenance of all the HVAC machineries installed inside IITH campus.
 - (x) The agency shall regularly check all the HVAC systems/services of IITH Campus i/c checking of HVAC panels, Chillers, Pumps, Cooling Towers, AHUs, AHU Starter panels, Variable Frequency Drives (VFDs), Motors, AHU Motor belts, pulleys, Filters, Coils etc. as per the checking schedule provided by the Engineer-In-charge and will notify the defects found (if any) in the Defect register to be maintained by the agency as per the format provided by Engineer-In-charge.
 - (xi) The agency shall also attend the complaints notified by IITH Campus staff in the complaint register/online mode.
 - (xii) In case of minor defects/complaints and in case of emergent situations, the agency shall rectify the defects on immediate basis but within a maximum of 24hrs. to 48hrs. time period. In case of other Major defects/breakdowns, the same shall be rectified by the contractor within a maximum of 72hrs. time period to 07days time period depending upon the severity of defect but within a minimum reasonable time period. Failing which, an amount of Rs 5,000/- per day shall be recovered as Penalty from the contractor's bills due for payment in addition to applicable contract clauses. Any breakdown restoration beyond 07days require prior approval of the Engineer-in-Charge(EIC) for which the contractor shall submit the relevant justifications.
 - (xiii) In case of emergent situations, the agency shall be responsible for the Chilled/Hot water line leakage identification & rectification and related works i/c excavation of hard/soft soil area, backfilling etc.
 - (xiv) In case of HVAC Power panel and AHU starter panels which are covered under CAMC, the contractor shall be fully responsible for repair/replacement of all Variable Frequency Drives (VFDs), Air-Circuit Breakers (ACBs), MCCBs, MCBs, Relays, contactors, terminals, indication lamps, control wiring, start/stop push buttons, Energy meters, VAF meters, display control card of cassette units etc. in case of any fault/breakdown and make the system fully functional.
 - (xv) In case of Chilled water pumps, Hot water pumps, condenser water pumps, pressure make up water pumps which are covered under CAMC, the contractor shall be fully responsible for repair/replacement of all Variable Frequency Drives (VFDs), motors, pumps, electrical terminals etc. in case of any fault/breakdown and make the system fully functional.
 - (xvi) In case of cooling towers (CTs) which are covered under CAMC, the contractor shall be fully responsible for repair/replacement of CT fan motors, PVC fills, Manual/Butterfly valves etc. in case of any fault/breakdown and make the system fully functional.
 - (xvii) In HVAC Plant room, the contractor shall be fully responsible for timely cleaning/servicing of strainers and replacement of gaskets/mesh etc. complete as per the site requirement.
 - (xviii) The contractor shall be fully responsible for repair/replacement of manual/butterfly valves in Chilled water line, Hot water line, condenser water line etc. in case of any fault and make the system fully functional.
 - (xix) The contractor shall be fully responsible for repair/replacement of faulty temperature and pressure gauges wherever required in the Chilled water and Hot water line of complete HVAC system.

- (xx) In case of Hot water generators (if any) which are covered under CAMC, the contractor shall be fully responsible for repair/replacement of any or all of the faulty spare parts in case of any breakdown to make the system fully functional.
- (xxi) In case of AHUs which are covered under CAMC, the contractor shall be fully responsible for repair/replacement of blowers, motors, belts, Pre and Fine filters etc. complete as per the site requirement.
- (xxii) In case of AHUs which are covered under CAMC, the contractor shall also be fully responsible for any repair/leakage rectification/blockage rectification in cooling coil as well as heating coil in case of any fault and make the system fully functional.
- (xxiii) In case of AHUs which are covered under CAMC, the contractor shall be fully responsible for repair/replacement of blowers, motors, belts, Pre and Fine filters etc. complete as per the site requirement.
- (xxiv) In case of FCUs which are covered under CAMC, the contractor shall be fully responsible for any repair/leakage rectification/blockage rectification in cooling coil in case of any fault and make the system fully functional. The contractor shall also repair/replace the filters, thermostat, manual/butterfly valves etc. in case of any fault and shall make the system fully functional.
- (xxv) In case of Variable Air Volume (VAV) Terminal units which are covered under CAMC, the contractor shall be fully responsible for repair/replacement of complete VAV unit along with thermostat in case of any fault and shall make the system fully functional.
- (xxvi) In case of AHUs which are covered under CAMC, the contractor shall be fully responsible for repair/replacement of blowers, motors, belts, Pre and Fine filters, compressors, contactors, relays, PCBs, thermostats etc. in case of any fault and shall make the system fully functional.
- (xxvii) In case of Smoke Extraction fans, Inline fans and Axial Flow fans which are covered under CAMC, the contractor shall be fully responsible for repair/rewinding of fan motors. The contractor shall also be fully responsible for repair of fan starter panels etc. however any other spares if required for making the system functional shall also be arranged by contractor.
- (xxviii) The contractor shall be responsible for timely greasing/Preventive Maintenance of all motors, pumps etc. of HVAC system installed at IITH.
- (xxix) All the tools/tackles/ladders etc. required for carrying out the Annual Operation & maintenance contract shall be arranged by agency on its own.
- (xxx) The contractor shall depute it's manpower for required chemical dosing in Chilled water line and condenser water line circuits of IITH to maintain the water parameters as recommended by the OEM including any chemicals etc. as required.
- (xxxi) The contractor shall also be responsible for the Descaling of Chillers, other HVAC equipments as and when needed during the contract period.
- (xxxii) The agency shall also be fully responsible for the regular training of its deployed Manpower for successful Operation & Maintenance of the HVAC systems of IITH campus.
- (xxxiii) The agency shall also be fully responsible for coordinating with the other Operation & maintenance agencies working at IITH campus to ensure smooth operations of the HVAC system.

55. PART- I GENERAL PREVENTIVE MAINTENANCE SCHEDULE

1. Monthly checking and recording of airflow through the filters and diffusers. Necessary corrective actions to be taken if found any abnormality.
2. Periodic cleaning of filters for HVAC system as mentioned below.

SI No	Type of Filter	Cleaning Frequency
1	Pre-Filter	Every 15days or earlier
2	Micro Filter	Every 15days or earlier
3	Fresh Air Filter	Every 15days or earlier
4	Return filter	Every 15days or earlier
5	Hepa Filter	Quarterly or earlier

56. PART II - CHECKLIST FOR MONTHLY MAINTENANCE

1. Disconnect the power supply to the AHU and place “under maintenance” board for the same.
2. Clean the AHU with lint free cloth.
3. Grease the bearings of the blower and motor if required.
4. Check the motor terminals for tightness, rectify if required
5. Clean the drain tray of cooling coil.
6. Tighten the base bolts of the blower, motor & Pumps etc.
7. Check the V- belt for tightness, rectify if required.
8. Check for leakage, if any, rectify the same.
9. Reconnect the power supply and take trials to ascertain proper working.
10. Run the blower and check for leakages through the doors and duct joints of AHU.
11. Check dampers for smooth operation and check their locking arrangements.
12. Cleaning of oil filter of compressor
13. Cleaning of suction line strainer or compressor / AHU
14. Checking of correctness and calibration of all safety and automatic controls
15. Cleaning of contactors of Chiller plant if required.
16. Record all the observation on Preventive Maintenance Check list.

57. Services on Cassette units in addition to breakdown/fault:

1. Check air flow
2. Clean filters
3. Check and clear condensate drains
4. Check electrical connections and display controls
5. Check general condition of indoor
6. Check condition of coils.
7. Check for mould and mildew

58. PART III – CHECKLIST FOR QUARTERLY (EVERY 03MONTHS) MAINTENANCE

1. Disconnect the power supply by switching off the isolator / MCCB at panel and put under maintenance board.
2. Check the main and control wiring of the panel for loose connections, tighten as required. Clean contacts of starters and selector switch with Corrosion Rust Cleaner (CRC 2-26).
3. Open the blower section of AHU and clean the blower fan.
4. Clean the cooling coil externally with jet water spray.
5. Clean the drain tray of cooling coil.
6. Paint the AHUs rusted parts, if required.
7. Check the doors for proper closing / opening rectify if required.
8. Checking of all pumps, bearing, impeller, coupling and lubricating accordingly with suitable grease / oil as per requirement
9. Checking of all parameters (discharge oil pressure, suction oil pressure & difference oil pressure) of chiller plant as per OEM manual
10. Replacement of Belts of AHUs & balancing of air change velocity (CFM) in various laboratories.
11. Cleaning of air purge valves fitted in the water line
12. Chemical dosing to water used in HVAC system (as per specification of OEM)
13. Checking of bearing clearances
14. Replacement of gland packing of pumps & water line valves.
15. Maintenance of all electrical contractors, starters and switches of local panes (i-e panels related to HVAC & BMS).
16. Checking & tightening of cable / isolator / contactor etc. connectors and if required same are to be replaced.
17. Record all the observations on the Preventive Maintenance Checklist.

59. The bidder/contractor shall ensure that the installed HVAC systems of IITH function at their best (i/c installed BMS system Operations) and shall take all necessary measures in such a way to ensure and demonstrate a clear decrease in the Electricity consumption from the HVAC system operations of IITH month after month after the start of this CAMC contract. TO THIS EXTENT, ALL THE BIDDERS SHALL SUBMIT A CLEAR STRATEGY/COMMITMENT PLAN ALONG WITH IT'S BID SUBMISSION SHOWING CLEARCUT MEASURES THEY WILL TAKE TO REDUCE THE ELECTRICITY BILL/CONSUMPTION ON ACCOUNT OF HVAC SYSTEMS AND ALSO ENSURING UNINTERRUPTED EFFICIENT HVAC OPERATIONS.

60. The day to day operations and general maintenance of existing BMS systems meant for HVAC system operations shall be in the scope of contractor however Comprehensive AMC of such systems shall be entered separately by IITH through it's OEM or authorized service providers.

61. The contractor Performance will be reviewed every Quarterly and the Comprehensive review will be taken on completion of First(01st) year of contract period. The continuation of services for the 02nd year will depend on the satisfactory completion of services by the contractor during the First year. On non-satisfactory performance of contract, it may be terminated under the relevant clauses of the Contract Agreement.

62. HVAC MAINTENANCE VEHICLE:

During the currency of the contract to reduce the response time in maintaining HVAC systems, the Contractor shall, at his own cost, must deploy for the exclusive HVAC maintenance services i/c movement of his manpower/technicians/materials/spares etc. (as and when needed) across the IITH campus buildings, HVAC Plants wherein the HVAC systems, infrastructure is installed, a minimum of 01 (One) no. of suitable HVAC Maintenance Transportation vehicle(*similar to Open Camper type Tata Magic or equivalent vehicle*) in good working condition with driver and fuel exclusively for IITH campus site, within 01month of issue of award letter. The operation and maintenance cost of the vehicle has to borne by the contractor till the completion of the whole contract.

63. SITE OFFICE:

The contractor shall maintain at his own the Site Office for the exclusive usage of his deployed Maintenance staff. The space for such office may be provided by IITH within the existing AC Plant rooms, BMS rooms meant for HVAC operations however the following minimum facilities shall be provided and maintained by contractor till the completion of contract;

Modular Work Station : minimum 2 Nos. in the Office with PCs/Laptops

Visitors Chairs : 04 Nos.

Document Storage Racks : 04Nos.

White Board with Markers : 1 No. in each cabin Pin-Up Display board of size as required

Janitorial and Housekeeping services

Any other Items required for proper delivery of O&M services by the contractor to IITH.

After completion of the contract, the Contractor shall take away this material and the site shall be cleaned free from all debris.

64. MATERIAL STOCK YARD/WAREHOUSE; The contractor shall maintain adequate stock of essential spares on IITH campus site to attend the maintenance needs of HVAC systems. For other materials which cannot be stocked on site, such materials/spares shall be kept in the warehouse of contractor within the minimum reasonable distance from IITH campus.

65. HOUSEKEEPING OF HVAC SYSTEMS, INVENTORIES and HVAC PLANTS, AHU ROOMS etc.; The contractor shall be fully responsible for maintaining the HVAC Plants, Inventories, systems, AHU rooms etc. totally dust free by frequently cleaning such areas by deployment of housekeeping staff at his own cost as and when needed. Any tools/tackles/ladders etc. shall be arranged/provided by the contractor upto this extent.

66. PAYMENT TERMS

- (i) The Contractor bills pertain to Comprehensive Annual Maintenance (CAMC) shall be paid on **Quarterly basis** and bills pertains to Operation & Maintenance (O&M) shall be paid on **Monthly basis** by Institute(IITH) on the rates quoted by him in the financial bid document/awarded rates, whichever is lowe

SECTION-05

ANNEXURE-I

ACCEPTANCE OF NIT-ToR TERMS & CONDITIONS

(To be given on Bidder's/Company Letter Head duly signed, stamped)

Ref No.

Date:

To,
The Executive Engineer-Electrical,
Indian Institute of Technology Hyderabad,
Kandi – 502 284, Telangana, India.

Sub: **Acceptance of NIT-TOR Terms & Conditions.**

Tender Reference No: **IITH/CMD/ELE/EOI/TOR/2026-27/15**

Name of Work: Comprehensive Annual Maintenance Contract (CAMC) with Day-to-Day Operations and Maintenance (O&M) of HVAC systems including 4497 TR (Phase-I) & 7555 TR (Phase-II) installed capacity including associated (High Side & Low Side) HVAC Equipment's installed in Phase-I and Phase-II constructed buildings, IIT Hyderabad campus, Kandi, Sangareddy

Dear Sir,

1. I/ We have downloaded / obtained the NIT/ tender document(s) for the above mentioned 'work' from the web site(s) namely _____ as per your advertisement, given in the above-mentioned website(s).
2. I / We hereby certify that I / we have read the entire terms and conditions of the tender documents (including all documents like annexure(s), schedule(s), etc.), which form part of the contract agreement and I / we shall abide hereby by the terms / conditions / clauses contained therein.
3. The corrigendum(s) issued from time to time by your IITH too have also been taken into consideration, while submitting this acceptance letter.
4. I / We hereby unconditionally accept the tender conditions of above-mentioned tender document(s) / corrigendum(s) in its totality / entirety.
5. I / We certify that all information furnished by the our Firm is true & correct and in the event that the information is found to be incorrect/untrue or found violated, then IIT Hyderabad shall without giving any notice or reason therefore or summarily reject the bid or terminate the contract, without prejudice to any other rights or remedy including the forfeiture of the full said earnest money deposit absolutely.

Yours Faithfully,

(Signature of the Bidder, with Official Seal)

ANNEXURE-II

Proforma of Undertaking for Submission of OEM Authorization

(To be given on Bidder's company letter head duly signed, stamped)

REF.No. _____

Dated _____

**To,
The Executive Engineer-Electrical,
Indian Institute of Technology (IIT) Hyderabad,
Kandi-502284, Sangareddy,
Telangana, India**

Dear Sir,

We, _____, are participating in the NIT-Terms of Reference (TORs) for the work of **Comprehensive Annual Maintenance Contract (CAMC) with Day-to-Day Operations and Maintenance (O&M) of HVAC systems including 4497 TR (Phase-I) & 7555 TR (Phase-II) installed capacity including associated (High Side & Low Side) HVAC Equipment's installed in Phase-I and Phase-II constructed buildings, IIT Hyderabad campus, Kandi, Sangareddy.**

We hereby undertake that, in the event the subject work is awarded to us, we shall obtain and submit the requisite OEM Authorization certificates **from the Approved Original Equipment Manufacturer (OEM) of critical HVAC components i.e., Chillers, HVAC Primary, Secondary, Condensor pumps, Chiller Plant Manager (CPM), VFDs etc.** as per the format provided in Annexure-IV of the EOI document ref no. **IITH/CMD/ELE/EOI/2026-27/15** within the 30days of award of work. We also undertake to sign an MoU/Service agreement with such OEMs/Technology Providers within 30days of award of work, to provide specialized back to back Maintenance services for such critical equipments, as and when needed during the currency of contract as per the respective OEM guidelines to ensure best technical performance of such HVAC systems at IITH with ensuring genuine spare parts availability. A copy of such MoU/service agreement to this effect shall be submitted to IITH.

We further confirm that _____ possesses the required technical expertise, qualified manpower, infrastructure, and extensive experience in operation, maintenance, and comprehensive upkeep of centralized HVAC systems. We assure you that all obligations under the contract shall be fulfilled in accordance with the EOI /TOR requirements and to the satisfaction of IIT Hyderabad.

This undertaking is submitted for your kind consideration and acceptance.

Yours faithfully,

(Name of authorised signatory with signature)

(Name of manufacturer with stamp)

Note: This letter of authority should be on the letterhead of the bidder and should be signed by an authorized person. It should be enclosed by the Bidder with the TOR document.

SECTION-06

PROFORMA OF SCHEDULES: A TO F

SCHEDULE “A”	: Financial (Price) Bid BoQ in Online Mode
SCHEDULE “B” Schedule of material to be issued to the agency	: -Nil-
SCHEDULE “C” Tools and Plants to be hired to the agency.	: -Nil-
SCHEDULE “D” Extra schedule for specific requirements/ documents for the work, if any	: Nil
SCHEDULE “E” Reference to General Conditions of Contract	: For Operation and Maintenance O&M Component: CPWD GCC for Maintenance works 2023 and CPWD Maintenance Manual 2023 as amended/ modified up to the last date of submission of Bid
Name of Work;	: Comprehensive Annual Maintenance Contract (CAMC) and Day-to-Day Operations & Maintenance(O&M) of HVAC system including 7275TR Chillers and other associated High Side & Low Side HVAC Equipment installed in Phase-II Constructed buildings, IIT Hyderabad, Kandi Campus.
Performance Guarantee(PG)	: 5.0% of Accepted Tender value
Security Deposit(SD)	: 2.50% of Accepted Tender value

SCHEDULE “F” (GENERAL RULES & DIRECTIONS)

- a) Officer inviting Tender : **Executive Engineer (Electrical),**
Construction and Maintenance Division (CMD),
IIT Hyderabad.
- b) Mode of Technology to be adopted : *As per EoI and NIT-ToR terms and specifications*
- c) Maximum % of quantity of items of works to be executed of : *(i) Electrical -Mechanical and associated works.....100%*
(ii) Civil and associated works.....0%

Definitions:

- (i) Engineer-in-charge : **Executive Engineer (Electrical), IITH or successor thereof.**
- (ii) Accepting Authority : **Director, IIT Hyderabad or successor thereof.**
- (iii) Percentage on cost of materials and Labour to cover all overheads and profits : 15% (Fifteen Percentage)
- (iv) Standard Schedule of Rates : CPWD, Delhi schedule of rates (DSR) 2022
Electrical, with up to date correction slips.
- Department : Construction and Maintenance Division, IIT Hyderabad
- Standard Contract Form : CPWD/IITH General conditions of contract for maintenance works

Clause 1:

Time allowed for submission of Performance Guarantee, programme chart (Time and Progress) and applicable labour licenses, registration with GST, EPFO, ESIC and BOCW Welfare Board or proof of applying thereof from the date of issue of letter of acceptance, as applicable for this project. : **07 days**

Maximum allowable extension with late fee (non-refundable) @ 0.1% per day of Performance Guarantee amount beyond the period provided in (i) above : **7 days**

Clause 2:

Authority for fixing compensation under clause 2 : Superintending Engineer, Construction and Maintenance Division, IIT Hyderabad or successor thereof.

Clause 5:

Number of days from the date of issue of letter of acceptance (LoA) for reckoning date of start : **07 days** from the issue of Letter of Acceptance (LoA) or handing over of site, whichever is later.

5.1.1 (a) Schedule of Handing over of site: : **07 days** from Letter of Acceptance (LoA)

5.1.1.(b) Schedule of issue of Designs: : Not Applicable

Clause 5.7:

Recording of hindrances : Applicable

Milestones : Not Applicable

Time allowed for execution of this work : 24 Months (i.e., 02years)

Authority to decide:			
	(i) Extension of time	:	Dean (Planning), IIT Hyderabad or successor thereof.
	(ii) Rescheduling of mile stones	:	Dean (Planning), IIT Hyderabad or successor thereof.
	(iii) Shifting of date of start in Case of delay in handing over of site	:	Dean (Planning), IIT Hyderabad or successor thereof.
Clause 6:		:	Applicable
Clause 7:			
Gross work to be done together with net payment /adjustment of advances for material collected, if any, since the last such payment for being eligible to interim payment.		:	Quarterly payment.

Clause 7A:	:	Yes, Applicable No Running Account Bill shall be paid for the work till the applicable labour licenses, registration with GST, EPFO, ESIC and BOCW Welfare Board, whatever applicable as submitted by the Bidder to the Engineer-in Charge.
Clause 8A:	:	
Authority to decide compensation on account if contractor fails to submit completion plans	:	Dean (Planning), IIT Hyderabad
This shall not apply for maintenance or upgradation contracts not involving any services For other works, the limit shall be as below:	:	
Clause 10A	:	Applicable as per GCC
List of testing equipment to be provided by the agency at site lab	:	As per applicable CPWD Specifications and NIT Particular Specifications or as Instructed by the Engineer In Charge (EiC)
Clause 10 B (i)	:	Applicable as per GCC
Clause 10CC	:	Not Applicable
Clause 11	:	Applicable as per the GCC
Specifications to be followed for execution of work	:	1) CPWD General Specifications for Heating, ventilation & Air conditioning (HVAC) works 2017 and amendment 2) CPWD General Specification for Electrical work Part-1(Internal)-2023, Electrical Works Part-II (External) – 2023, Part IV substations with upto date amendments 3) BIS Specification as applicable 4) Manufacturer Standards
Note:		
	(i) All above specifications shall be applicable along with all correction slips up to the last date of submission/uploading of Bid. (ii) In case of discrepancy in mentioned items / description among any of the following two or more documents, the following order of preference shall be followed. If any item required for completing the work in any of the following documents but not in the order of preference below, shall be applicable and nothing extra shall be paid on this account. However, percentages mentioned in “Schedule of Building wise Sub-Heads” shall have precedence among all the following documents for payment purpose. a) Description under Scope of work & Nomenclature of BOQ. b) Architectural Drawings and Schedule of finishes.	

	<ul style="list-style-type: none"> c) Schedule of Quantities. d) Technical Specifications, Particular Specification and Special Condition, if any e) CPWD Specifications, Electrical & Mechanical and Civil with up to date corrections as on last date of submission of Bid. f) GCC for Maintenance works. g) Indian Standard Specifications of B.I.S. h) National Building Code 2016 i) Manufacturers specifications. j) Sound Engineering practices. k) Decision of Engineer-in-charge. <p>Note: A reference made to any Indian Standard Specifications in these documents, shall imply to the latest version of that standard, including such revisions/ amendments as issued by the Bureau of India Standards up to last date of submission of tenders. The Contractor shall keep at his own cost all such publications of relevant Indian Standard applicable to the work at site, with correction slips up to last date of submission of bids.</p>	
Clause 12	:	Applicable as per GCC
Clause 12.1	:	Applicable as per GCC
Clause 12.2	:	Applicable as per GCC
Clause 12.3 & Clause 12.4	:	Applicable as per GCC
Clause 14	:	Applicable as per GCC
Clause 16		
Competent authority for deciding reduced rates	:	Dean (Planning), IIT Hyderabad up to 5% of tendered amount, beyond which, Director, IITH
Clause 18 List of Mandatory Machinery, tools & plants	:	As mentioned in the NIT-ToR document and as required for the work .
Clause -19,19A,19B,19C,19D,19E,19F, 19G,19H,19I,19J,19K,19L	:	Applicable as per GCC and as per the orders(with amendments) issued by Chief Labour Commissioner, GoI
Authority to decide penalty for each default under 19C, 19D, 19G & 19K	:	Executive Engineer (Electrical)
Clause 25: Settlement of disputes by Conciliation and Arbitration:		
Conciliator	:	Dean (Planning)

Authority to appoint arbitrator	:	Director, IIT Hyderabad
Seat of Arbitration	:	Hyderabad
Venue of Arbitration	:	IIT Hyderabad
Type of Arbitration Tribunal	:	Sole Arbitrator
<i>Note: Provisions of Arbitration and Conciliation Act 1996 with latest amendments in force shall be applicable.</i>		
Clause 31	:	Applicable as per GCC
Clause 32	:	Applicable as per GCC and as detailed below;

Clause 32:

A. Minimum Requirement of Technical Representative(s) and Recovery Rate; The contractor shall deploy the below minimum manpower during the currency of contract-

S. No.	Minimum Qualification of Technical Representative	Discipline	Designation (Technical Representative)	Minimum Experience (years)	Number	Rate at which recovery shall be made from the contractor in the event of not fulfilling provision of Clause 32 (INR) / Month / Each	
						Figures	Words
1.	Engineering Graduate OR Diploma Engineer With relevant Experience	Mechanical Engg./ Electrical Engg./ Electrical & Electronics Engg.	Plant Manager	Graduate (7yrs.) / Diploma (10yrs.)	1	90,000/-	Rupees Ninety Thousand Only
2.	Engineering Graduate OR Diploma Engineer With relevant Experience	Electrical Engg./ Electrical & Electronics Engg./ Computer Science Engg./ Electronics & Communication Engg.	BMS Engineer	Graduate (7yrs.) / Diploma (10yrs.)	1	70,000/-	Rupees Seventy Thousand Only
3.	Engineering Graduate OR Diploma Engineer or ITI with relevant Experience	ITI in Refrigeration & Air-conditioning Trade/Electrician or equivalent trade/ Diploma/Degree in Mechanical /Electrical Engineering	Supervisor	Graduate (5yrs.) / Diploma (8yrs.)/ ITI(10 yrs.)	4	Highly Skilled category	As per applicable Central Govt. minimum wages with upto date amendments.

4.	Engineering Graduate OR Diploma Engineer or ITI with relevant Experience	ITI in Electronics/Electrician/Computers or equivalent trade/ Diploma/Degree in Electrical Engineering/Computer Science/Electrical & Electronics Engg.	BMS Technician	Graduate (5yrs.) / Diploma (8yrs.)/ ITI(10 yrs.)	3	Highly Skilled category	As per applicable Central Govt. minimum wages with upto date amendments.
5.	Diploma (OR) ITI with relevant experience	ITI in Refrigeration & Air-conditioning /Electrician or equivalent Trade/Diploma in Mechanical /Electrical Engineering	Operator cum Technician	Diploma (3 Yrs)/ ITI (5 Yrs)	30	Skilled category	As per applicable Central Govt. minimum wages with upto date amendments.
6.	Diploma or ITI with relevant experience	ITI in Refrigeration & Air-conditioning /Electrician or equivalent Trade/Diploma in Mechanical /Electrical Engineering	Asst. Operator cum Asst. Technician	Diploma (0-1 Yrs)/ ITI (0-3Yrs)	25	Semi-Skilled category	As per applicable Central Govt. minimum wages with upto date amendments.
7.	SSC		Helper/ Khallasi	(0-2yrs.) Relevant Experience	10	Unskilled category	As per applicable Central Govt. minimum wages with upto date amendments.
During Radiant Cooling System (RCS) Operation period (4 months/year)							
8.	Diploma (OR) ITI with relevant experience	ITI in Refrigeration & Air-conditioning /Electrician or equivalent Trade/Diploma in Mechanical /Electrical Engineering	Operator cum Technician	Diploma (3 Yrs)/ ITI (5 Yrs)	10	Skilled category	As per applicable Central Govt. minimum wages with upto date amendments.
9.	Diploma or ITI with relevant experience	ITI in Refrigeration & Air-conditioning /Electrician or equivalent Trade/Diploma in Mechanical /Electrical Engineering	Asst. Operator cum Asst. Technician	Diploma (0-1 Yrs)/ ITI (0-3Yrs)	10	Semi-Skilled category	As per applicable Central Govt. minimum wages with upto date amendments.

Note:

1. The requirement shown above is the minimum requirement. Deployment of personnel as per actual need shall be made by the Contractor as directed by Engineer- in- Charge.
2. Assistant Engineers retired from Government services who are holding Diploma will be treated at par with Graduate Engineers. Diploma holder with minimum 10-years relevant experience with a reputed construction company can be treated at par with Graduate Engineers for the purpose of such deployment subject to that such diploma holder should not exceed 50% of requirement of degree engineers.
3. The bidder shall submit a certificate of employment of the technical representative(s) (in the form of copy of Form – 16 or CPF deduction issued to the Engineers employed by him) along with every account bill / final bill and shall produce evidence of regular physical availability of such engineers on the above project whenever required by the Engineer – in – charge.

Clause 38: Not Applicable**SAFETY MEASURES**

The issue of construction and Maintenance safety & standards has gained utmost importance in recent times. Contractors must follow highest safety standards and “ZERO” tolerance towards any violation of safety norms at the construction and maintenance site. All workers of contractor and associate agencies, invariably and at all the times, must follow all safety norms, adopt best safe work practices as per requirement of job and use all required safety gadgets in their working throughout the project duration.

Note-1: The special conditions detailed above are in addition to general/ other/ additional conditions as specified elsewhere in tender document.

Note-2: Nothing extra shall be paid on the account of these special conditions.

The Engineer-in Charge can stop the work and seek removal of any workers from site in case of non- adoption of safety measures.