

OPEN TENDER – DOMESTIC

Tender Ref. No: IITH/CC/SATYA-P/2020/T008-R

Date: 11/12/2020

Indian Institute of Technology Hyderabad invites online bids (e-tender) in two bids systems, from Eligible Contractors (As per the edibility criteria as defined in this tender document) for the following work

Name of Work	Estimate Cost of Tender (Rs).	EMD (Rs)
Supply, Installation, Testing and Commissioning of 250 KVA DGSet and Design, Supply, installation, Testing and Commissioning of Synchronization Panel and Associated Power Cabling system for Data Center	Rs.40,00,000/-	NA

The Tender Document can be downloaded from <https://mhrd.euniwizarde.com> OR Central Public Procurement (CPP) Portal <https://eprocure.gov.in/epublish/app> OR Institute website- <https://iith.ac.in/tenders>

The bid is to be submitted online only through the E-procurement portal of <https://mhrd.euniwizarde.com> up to the last date and time of submission of tender.

Schedule of Dates

Sr.No	Particulars	Date	Time
1	Date of Online Publication/Download of Tender	11/12/2020	1700 hrs
2	Last Date for Submission of Bids	28/12/2020	1700 hrs
3	Date of Opening of Technical Bids	29/12/2020	1100 hrs

No manual bids will be accepted. All quotation (both Technical and Financial) should be submitted online through E-procurement portal of <https://mhrd.euniwizarde.com>

Any queries relating to the process of online bid submission or queries relating to e-tender Portal in general may be directed to the Helpdesk Support - Phone No. 011-49606060. Mail id: - helpdeskeuniwizarde@gmail.com

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INSTRUCTIONS FOR ONLINE BID SUBMISSION

The Tender Document can be downloaded from <https://mhrd.euniwizarde.com> OR Central Public Procurement (CPP) Portal <https://eprocure.gov.in/epublish/app> OR Institute website- <https://iith.ac.in/tenders>.

The bidders are required to submit soft copies of their bids electronically on the <https://mhrd.euniwizarde.com> using valid Digital Signature Certificates. The instructions given below are meant to assist the bidders in registering on the Portal, prepare their bids in accordance with the requirements and submitting their bids online.

More information useful for submitting online bids may be obtained at: <https://mhrd.euniwizarde.com>

GUIDELINES FOR REGISTRATION:

1. Bidders are required to enrol on the e-Procurement Portal with clicking on the link “Online Bidder Enrolment ” on the e-tender Portal by paying the Registration fee of Rs.2000/- +Applicable GST.
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 with the bidders.
4. Upon enrolment, the bidders will be required to register their valid Digital Signature Certificate (Only Class III Certificates with signing + encryption key usage) issued by any Certifying Authority recognized by CCA India (e.g. Sify / TCS / nCode / eMudhra etc.), with their profile. Or bidders can contact help desk for getting the DSC.
5. Only 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.
7. The scanned copies of all original documents should be uploaded in pdf format on portal <https://mhrd.euniwizarde.com>
8. After completion of registration payment, bidders need to send their acknowledgement copy on help desk mail id helpdeskeuniwizarde@gmail.com for activation of their account.

SEARCHING FOR TENDER DOCUMENTS

1. There are various search options built in the e-tender Portal, to facilitate bidders to search active tenders by several parameters.
2. Once the bidders have selected the tenders they are interested in, you can pay the form fee and processing fee (NOT REFUNDABLE) by net-banking / Debit / Credit card then you may download the required documents / tender schedules, Bid documents etc. Once you pay both fee tenders will be moved to the respective 'requested' Tab. This would enable the e- tender Portal to intimate the bidders through e-mail in case there is any corrigendum issued to the tender document.

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.
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 formats. Bid Original documents may be scanned with 100 dpi with Colour option which helps in reducing 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, GST, Annual reports, auditor certificates etc.) has been provided to the bidders. Bidders can use "My Documents" available to them to upload such documents.
5. These documents may be directly submitted from the "My Documents" 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

1. Bidder should log into the website well in advance for the submission of the bid so that it gets uploaded well 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 tender document as a token of acceptance of the terms and conditions laid down by IIT Hyderabad.
3. Bidder has to select the payment option as "e-payment" to pay the tender fee / EMD as applicable and enter details of the instrument.

4. In case of Bank Guarantee (BG) bidder should prepare the BG as per the instructions specified in the tender document. The BG in original should be posted/couriered/given in person to the concerned official of IIT Hyd before the Online Opening of Technical Bid. In case of non-receipt of BG in original by the said time, the uploaded bid will be summarily rejected.
5. Bidders are requested to note that they should necessarily submit their financial bids 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 Colored (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.
6. 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.
7. The uploaded tender documents become readable only after the tender opening by the authorized bid openers.
8. Upon the successful and timely submission of bid click "Complete" (i.e. after Clicking "Submit" in the portal <https://mhrd.euniwizarde.com>), the portal will give a successful Tender submission acknowledgement & a bid summary will be displayed with the unique id and date & time of submission of the bid with all other relevant details.
9. The tender summary has to be printed and kept as an acknowledgement of the submission of the tender. This acknowledgement may be used as an entry pass for any bid opening meetings.

For any clarification in using <https://mhrd.euniwizarde.com>

1. 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.
2. Any queries relating to the process of online bid submission or queries relating to e-tender Portal in general may be directed to the Helpdesk Support.

Please feel free to contact euniwizard helpdesk (as given below) for any query related to etendering -
Phone No. 011-49606060. Mail id: - helpdeskeuniwizarde@gmail.com/ Mr.Vijay -
08448288989/Mr.Gagan-8448288987

CHAPTER-1 INVITATION FOR TENDER OFFERS

Indian Institute of Technology Hyderabad invites online bids (e-tender) in two bids systems, from Eligible Contractors (As per the edibility criteria as defined in this tender document) for the following work

Name of Work : Supply, Installation, Testing and Commissioning of 250 KVA DG Set and Design, Supply, installation, Testing and Commissioning of Synchronization Panel and Associated Power Cabling system for Data Center

1. The Bidders are requested to give detailed tender in two Bids i.e.

- Part - I: Technical Bid.
- Part - II: Commercial Bid.

2. Schedule of Dates

Sr.No	Particulars	Date	Time
1	Date of Online Publication/Download of Tender	11/12/2020	1700 hrs
2	Last Date for Submission of Bids	28/12/2020	1700 hrs
3	Date of Opening of Technical Bids	29/12/2020	1100 hrs

3. Availability Of Tender:

The Tender Document can be downloaded from <https://mhrd.euniwizarde.com>. OR Central Public Procurement (CPP) Portal <https://eprocure.gov.in/epublish/app> OR Institute website- <https://iith.ac.in/tenders>

4. Envelope 1- Technical Bid:

4.1. The online envelope clearly marked as "Technical Bid - Envelope No. 1" shall contain the all scanned copies of originals documents in PDF Format.

- Bid Securing Declaration as per Annexure 'A'
- Manufacturer authorization as per Annexure –'B'.
- Previous Experience as per Annexure –'C'.
- Bidder Information Form as per Annexure –'D'.
- Declaration Regarding Clean Track/No Legal Action as per Annexure –'E'.
- Acceptance Of Tender Terms as per Annexure – 'F'
- Relation Certificate – as per Annexure – 'G'

h) DPIIT Registration – as per Annexure – ‘H’

i) Declaration for Local Content- as per Annexure ‘I’

j) Solvency certificates (not older than twelve months) issued by Scheduled/Nationalized bank with which BIDDER holds the Bank account.

k) Copy of GST/ PAN No. allotted by the concerned authorities.

l) Technical literature/ leaflets and complete specifications of quoted model(s) along with commercial terms and conditions.

m) Undertaking that the successful BIDDER agrees to give a security deposit amounting to 2.5% of the purchase order value by way of Demand Draft / Bank Guarantee in favour of The Director, IIT Hyd.

n) Details of Execution of Similar Works/Supplies along with photocopies of previous Work orders, completion certificates and details of place of supply along with contact details.

o) Check List

4.2. Earnest Money Deposit (EMD)

The Bidders are required to sign a Bid Securing Declaration as per Annexure ‘A’ accepting that if they withdraw or modify their bids during the period of validity, or if they are awarded the contract and they fail to sign the contract or submit a Performance Security, they will be suspended for the period of 2 years.

The firm registered with NSIC/MSME must give proof of registration along with their quotation failing which the bid will not be considered.

Exemption from submission of Bid Securing Declaration against valid and relevant NSIC /MSME Certification is permitted, however it shall be subject to scrutiny by the IITH and if during scrutiny, it is found that the NSIC Certificate is invalid and/or irrelevant, then that bid is liable to be rejected as “not-accompanying EMD”. Therefore, Bidders claiming exemption from EMD/Bid Securing Declaration against NSIC certificate, should ensure the same carefully, while submission of their bids.

Note: If in the view of bidder, any exemption / relaxation is applicable to them from any of the eligibility requirements, under any Rules / Guidelines/ Directives of Government of India, bidder may submit their claim for the applicable exemption /relaxation, quoting the valid Rule/Guidelines/ Directives with a copy of such notification. In this case the bidder must submit necessary and sufficient documents along with the technical bid, in support of their claim. The relevant and valid certificates in support of claim of exemption must be submitted along with the Technical Bid.

Bids submitted without Bid Security Declaration or relevant Certificates for exemption will stand rejected.

i) The BIDDER who submits the tender on behalf of their principals should produce documentary evidence in support of their authority to quote or submit Performa invoice of their principals for this tender.

ii) The successful BIDDER, on award of contract / order, must send the contract / order acceptance in writing, within 15 days of award of contract.

iii) Bids submitted without Bid Securing Declaration / relevant MSME/NSIC Certificates will be rejected & no correspondence in this regard shall be entertained.

4.3. Technical Specifications:

It must be ensured that the offers must be strictly as per our specifications. At the same time it must be kept in mind that merely copying our specifications in the quotation shall not make the parties eligible for consideration of the quotation. A quotation has to be supported with the printed technical leaflet/literature of the quoted model of the item by the quoting party/manufacturer and the specifications mentioned in the quotation must be reflected /supported by the printed technical leaflet/literature. Therefore the model quoted invariably be highlighted in the leaflet/literature enclosed with the quotation. Non-compliance of the above shall be treated as incomplete/ambiguous and the offer can be ignored without giving an opportunity for clarification/negotiation etc. to the quoting party.

5. Envelope 2: “Commercial Bid” shall contain:

i.) Cost of all the items should be mentioned clearly and individually in the Commercial Offer (Part-II) only.

ii) The BIDDERS are requested to quote for Educational Institutional Price for Equipment and software, since IITH is an educational institution of national importance and is entitled for the concessional price.

iii) The prices should be shown against each item for the purpose of Insurance claims / replacements if any.

iv) List of deliverables / Bill of materials and services.

Note: Prime contractor is allowed to engage sub vendors with regard to installation, commissioning, training, warranty maintenance and after sales service. Prime contractor is sole responsible for entire work as mentioned in the tender.

6. IIT Hyd may issue corrigendum to tender documents before due date of Submission of bid. The bidder is required to read the tender documents in conjunction with the corrigendum, if any, issued by IIT Hyd.

7. Bid Opening And Evaluation Process:

- a. Technical Bids will be opened as per the Date Schedule & Time.
- b. Financial Bids/Commercial Bids of the eligible bidders will be opened on a later date. The date and time for opening of Financial Bids /Commercial will be announced later.
- c. Bids would be summarily rejected, if tender is submitted other than through online or original EMD (BG) is not submitted within stipulated date / time. IIT Hyd shall not be responsible for any postal delay.

8. Technical Committee

- (i) On the due date the Technical bids will be opened and referred to a duly constituted technical committee. The committee will go through the technical aspects of the tender and recommend short listed firms. The recommendation of the technical committee is the final and binding on all the parties.
- (ii) The technical evaluation will be an assessment of the Technical Bid. IIT Hyd representatives will proceed through a detailed evaluation of the Technical Bids as defined in Chapter 5 (Schedule of requirements, specifications and allied technical details), in order to determine whether they are substantially responsive to the requirements set forth in the tender. In order to reach such a determination, IIT Hyd will examine the information supplied by the BIDDERS, and shall evaluate the same as per the specifications mentioned in this tender.
- (iii) The technical committee may formulate evaluation criteria in addition to the specifications and requirements indicated in the tender, in the interest of IIT Hyd and these criteria/recommendation will also form as a part of short-listing of the firms.
- (iv) The Technical Committee will examine all the Technical aspects of the bids received. Further, the Technical Committee may seek additional information from the existing users at IIT Hyd or from other Institutes and also call for Technical presentations from the BIDDERS if it is required so.
- (v) The information received and the bids already submitted together will be examined with reference to the tendered specifications and evaluation is made by the Technical Committee.
- (vi) After the technical evaluation is completed and approved, IIT Hyd shall inform to the BIDDERS whose bids have been rejected technically with the reasons for rejection.

(vii) The successful BIDDERS will be informed regarding the date and time of Commercial bid opening.

(viii) In the event of seeking any clarification from various BIDDERS by IIT Hyd , the BIDDERS are required to furnish only technical clarifications that are asked for. No amendment to commercial bid will be entertained at that stage. Further during this process if any BIDDER indicates the price during the clarification such bids also will not be considered for further evaluation.

9. Commercial Bid Evaluation:

Based on results of the Technical evaluation IIT Hyd evaluates the Commercial Bid of those Bidders who qualify in the Technical evaluation.

a) IIT Hyd shall be free to correct arithmetical errors on the following basis:

(i) If there is a discrepancy between the unit price and the line item total that is obtained by multiplying the unit price by the quantity, the unit price shall prevail and the line item total shall be corrected, unless in the opinion of the Purchaser there is an obvious misplacement of the decimal point in the unit price, in which case the line item total as quoted shall govern and the unit price shall be corrected.

(ii) If there is an error in a total corresponding to the addition or subtraction of subtotals, the subtotals shall prevail and the total shall be corrected; and

(iii) If there is a discrepancy between words & figures, the amount in words shall prevail, unless the amount expressed in words is related to an arithmetic error, in which case the amount in figures shall prevail subject to (i) and (ii) above.

b) The bids shall be evaluated on the basis of final landing cost as per format given in Price Schedule.

c) The Vague terms like “packing, forwarding, transportation..... etc. extra” without mentioning the specific amount/percentage of these charges will not be accepted. Such offers shall be treated as incomplete and rejected.

d) After arriving at final pricing of individual offers of all the short listed firms, the lowest firm will be awarded with Contract/Purchase Order.

10. The Director, IIT Hyd reserves the right to accept the offer in full or in parts or reject summarily or partly.

(END OF CHAPTER 1)

CHAPTER-2: INSTRUCTIONS TO BIDDERS

1. Locations for the Supply, Installation, Commissioning, Operations, Warranty Services & AMC Services

The entire Project as described in Schedule of Requirements must be supplied, installed, commissioned & supported at Indian Institute of Technology Hyderabad, Kandi, Sangareddy-502285

2. Order Placements & Payment

The orders will be placed and payments shall be released by IIT HYDERABAD

3. Eligibility Criteria

3.1 The bidder must have successfully executed at their client sites at least 3 numbers of “ Supply, Installation, Testing & Commissioning of DG Set” in India in the last 7 years. Completion Certificates issued by clients clearly mentioning the required credentials shall be submitted as proof of experience. Work order/ Purchase order/ copy of agreement shall not be considered as experience.

Three similar completed works costing not less than the amount equal to 40% of the estimated cost

Or

Two similar completed works costing not less than the amount equal to 50% of the estimated cost

Or

One similar completed works costing not less than the amount equal to 80% of the estimated cost

Note : Similar Work wherever mentioned in this tender document means - “ Supply, Installation, testing and commissioning of DG set equivalent or above of 100 KVA rating with AMF Panel”

3.2 It will be incumbent upon each bidder to fully acquaint himself with the local conditions and other relevant factors at the proposed site which would have any effect on the performance of the contract and / or the cost. The Bidder is encouraged to make a site visit to the proposed facility to apprise themselves and obtain all information that may be necessary for preparing the bid and entering a contract. The bidders should give prior intimation 24 hours prior to their visit by email on – office@comp.iith.ac.in / ar.purchase@iith.ac.in. No Site Visit allowed 48 hours before closing of Tender.

3.3 The Bidder should have an in-house service / support team in Hyderabad and must resolve the issue/complaints within 12 hrs. The bidder shall submit an organogram and details of the technical personnel to be available for the current project.

3.4 Average Annual financial turnover during the last 3 years, ending 31st March of the previous financial year, should be at least Rs.20,00,000/-

3.5 Bidders must choose a brand from the list of approved makes given at Chapter 5 – Clause No. 5.3

3.6 Desirable to have the bidder to be ISO 9001 certified company.

4. Project Timeline

The time allowed for completion of the work shall be 04 (Four) Months. Commencement date shall be reckoned from the 2nd day from the date of submission of Security Deposit/ performance bank guarantee.

5. Performance Bank Guarantee (PBG)

The Successful bidder/Contractor whose tender is accepted, will be required to furnish performance bank guarantee (PBG) of **3%** (Three percent) of the tendered amount within the period of 15 days. This guarantee shall be in the form of cash (in case guarantee amount is less than Rs. 10,000/-) or Deposit at call receipt 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 Guarantee Bonds of any Scheduled Bank drawn in favour of IIT HYDERABAD payable at Hyderabad or in the form of Bank Guarantee in the name of IIT HYDERABAD

6. Security Deposit:

The successful bidder / contractor whose tender is accepted will also be required to furnish by way of Security Deposit for the fulfilment of his contract, an amount equal to **2.5%** of the tendered value of the work. The Security deposit will be collected by deductions from the running bills as well as final bill of the contractor at the rates mentioned above. The Security amount will also be accepted in cash or in the shape of Government Securities. Fixed Deposit Receipt of a Scheduled Bank or will also be accepted.

Bank Guarantee wherever mentioned in this document may be read as “Bank Guarantee from any Scheduled Bank” only.

7. Amalgamation/Acquisition etc.:

In the event the Manufacturer/Supplier proposes for amalgamation, acquisition or sale of its business to any firm during the contract period, the BUYER/Successor of the Principal Company are liable for execution of the contract and also fulfillment of contractual obligations as per this Tender Document & Work/Purchase Order issued, while submitting your bid, you may confirm this condition.

8. Bid Validity Period:

- a. The prices must be valid at least for a period of **180 days** from the date of opening of the Tender. No changes in prices will be acceptable in any condition after opening of tender till the validity of the offer or execution of the order whichever is later
- b. IIT Hyd may ask for the BIDDER's consent to extend the period of validity. Such request and the response shall be made in writing only. The BIDDER is free not to accept such request without forfeiting the EMD. A BIDDER agreeing to the request for extension will not be permitted to modify his bid.
- c. Bid evaluation will be based on the bid prices without taking into consideration the above corrections

9. AWARD OF CONTRACT:

- a. IIT Hyd, shall award the contract to the technically qualified eligible BIDDER whose bid has been determined as the lowest evaluated commercial bid.
- b. If more than one BIDDER happens to quote the same lowest price, IIT Hyd reserves the right to award the contract to more than one BIDDER or any BIDDER.

10. IIT Hyd reserves the right to vary quantities at the time of Award:

- a. IIT Hyd reserves the right at the time of Contract award to increase or decrease the quantity of goods and services originally specified in the tender document without any change in unit price or other terms and conditions. Further, at the discretion of IIT Hyd, The Contractor shall carry out the variations as required by the Institute. Such variations shall be payable at the same quoted rates. For any such variation item, if there is no rate in the price schedule, rates shall be derived on the basis of the prevailing local market rates/ the actual procurement rates of the contractor. For analysing the rates, standard methods of rate analysis as given in the CPWD Analysis for similar items shall be followed. Profit of 15% including 5% overheads shall be allowed while deriving the new rates. Rates approved by the Institute shall be final and binding.

- b. Firms which have already supplied similar equipment to IIT Hyd and have not completed required installation/commissioning/after sales service/warranty replacements etc. such firms offer will not be considered for further evaluation and no enquiries thereafter will be entertained.

11. Fraud and Corruption:

IIT Hyd requires that bidders, suppliers, contractors and consultants, if any, observe the highest standard of ethics during the procurement and execution of such contracts. In pursuit of this policy,

(a) The terms set forth below are defined as follows:

(i) **“Corrupt practice”** means the offering, giving, receiving, or soliciting, directly or indirectly, of anything of value to influence the action of a public official in the procurement process or in contract execution;

(ii) **“Fraudulent practice”** means a misrepresentation or omission of facts in order to influence a procurement process or the execution of a contract;

(iii) **“Collusive practice”** means a scheme or arrangement between two or more bidders, designed to establish bid prices at artificial, non-competitive levels; and

(iv) **Coercive practice”** means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the procurement process or affect the execution of a contract

(b) IIT Hyd will reject a proposal for award if it determines that Bidder recommended for award has, directly or through an agent, engaged in corrupt, fraudulent collusive or coercive practices in competing for the Contract in question

12 . Interpretation of the clauses in the Tender Document / Contract Document

In case of any ambiguity / dispute in the interpretation of any of the clauses in this Tender Document, Director, IIT Hyd’s interpretation of the clauses shall be final and binding on all parties.

(END OF CHAPTER 2)

CHAPTER - 3 : CONDITIONS OF CONTRACT

1. Prices –

Bid prices should be filled in the appropriate format as mentioned in Price Schedule. Chapter 6

1.1 The prices quoted shall remain firm and no price escalation will be permitted. The prices quoted should be inclusive of all the statutory taxes, levies cess etc., prevailing till the last date of submission of the bids. The bidder should exercise utmost care to quote the correct percentage of applicable GST on each item. Any revision in statutory tax /duty structure as on date of supply/ invoice, shall be considered, as applicable.

1.2 Bidder must quote in INR only.

1.3 The prices quoted must be inclusive of packing & forwarding, freight, insurance, loading, unloading charges /entry tax/road permit charges and allied charges till destination including testing and commissioning wherever specified.

1.4 The prices must be quoted for all the items as per format given in Chapter 6

2. Completeness Responsibility

The bidders may please note that this is a contract on ‘Turn-key’ basis. Notwithstanding the scope of work, engineering, supply and services stated in bid document, any equipment or material, engineering or technical services which are not specifically mentioned under the scope of supply of the bidder and which are not expressly excluded there from but which – in view of the bidder - are necessary for the required performance of the solution in accordance with the RFP specifications are treated to be included in the bid and has to be implicitly performed by bidder. In no case, the bidder will be permitted to increase the prices quoted.

3. Inspection:

- a) The inspection of the complete project will be done by our technical expert /Scientist in the presence of firm’s representative.
- b) In case of receipt of the material in short supply or damaged condition the supplier will have to arrange the supplies/ replacement of goods free of cost pending the settlement of the insurance case wherever applicable on FOR at the IIT Hyd.

4. Training: Wherever needed, Scientist/Technical persons of the Institute should be trained by the Contractor at the project site free of cost.. The contractor/supplier should bear all the expenses for such training including 'to & fro' fares and lodging & boarding charges

5. Warranty

5.1 Warranty/Guarantee: The warranty or guarantee period for the machinery/equipment shall be 36 months from the date of successful commissioning. Any extended warranty is offered the same has to be mentioned separately.

5.2 The defects, if any, during the guarantee/warranty period are to be rectified free of charge by arranging free replacement wherever necessary. This includes cost, insurance, freight, custom duty, local taxes if any should be borne by the Contractor . No cost will be borne by IIT Hyd.

5.3 The Bidder shall assure the supply of spare parts after warranty is over for maintenance of the equipment supplied if and when required for a period of 05 years from the date of supply of equipment on payment on approved price list basis

5.4 The equipment supplied must be supported by a Service Centre in Hyderabad manned by the technical support engineers.. Also it should be possible to contact the Principal's vendor support Centre on a toll free number/web/mail. The support through this Centre must be available during all working days and hours.

5.5 The manufacturer/OEM should facilitate the bidder/Contractor /Agent on regular basis with technology / product updates & extend support for the warranty as well.

5.6 Commencement Of Warranty Period: The warranty period of an item shall commence from the date of successful installation, commissioning and demonstration of the Project at IIT Hyd. The warranty period and validity of Performance Guarantee shall be extended for the period of delay in satisfactory installation and delay in warranty services.

5.7 IIT HYDERABAD reserves the right to invoke the Performance Bank Guarantee submitted by bidder, in case of the following:

5.7.1 The system fails to achieve the performance as stipulated in this document or

5.7.2 The bidder/contractor fails to provide the warranty and other services in scheduled time frame, as stipulated in this document or

5.7.3 The bidder/contractor delays to provide the warranty services as stipulated in this document

6. Defect Liability Period (DLP): The DLP shall be 12 months from the date of Handing over of the equipment after successful commissioning. If the contractor or his working people or servants shall break, deface, injure or destroy any part of equipment in which they may be working, or if any damage shall happen to the work while in progress, from any cause whatever or if any defect, shrinkage or other faults appear in the work within twelve months after a certificate final or otherwise of its completion shall have been given by the Institute as aforesaid arising out of defect or improper materials or workmanship the contractor shall upon receipt of a notice in writing on that behalf make the same good at his own expense or in default the Institute cause the same to be made good by other workmen and deduct the expense from any sums that may be due or at any time thereafter may become due to the contractor, or from his security deposit or the proceeds of sale thereof or of a sufficient portion thereof. The security deposit of the contractor shall not be refunded before the expiry of twelve months after the issue of the certificate final or otherwise, of completion of work, or till the final bill has been prepared and passed whichever is later.

7. Reasonability of Prices: The prices quoted must be the prices applicable for a premiere Educational and Research Institute of national importance. The bidder may give details of identical or similar equipment, if any, supplied to other IITs/ IISERs/ CSIR lab/ CFTI's during last three years along with the final price paid and Performance certificate from them

8. Annual Maintenance Contract: The bidder must mention in the quotation, the rate/amount of annual maintenance charges, if we opt for maintenance contract after expiry of the warranty period. This is mandatory to mention, wherever applicable. No sub-contracting will be allowed for installation or maintaining system/ equipment / instrument during or after warranty period.

9. Indemnity: The vendor shall indemnify, protect and save IIT Hyd against all claims, losses, costs, damages, expenses, action suits and other proceeding, resulting from infringement of any law pertaining to patent, trademarks, copyrights etc. or such other statutory infringements in respect of all the equipment's supplied by the bidder/OEM.

10. Time for completion : - The time allowed for completion of the work shall be 04 (Four) Months. Commencement date shall be reckoned from the 2nd day from the date of submission of Security Deposit.

11. Compensation for Delay : If the contractor fails to maintain the required progress in terms of clause 13 or to complete the work and clear the site on or before the contract or justified extended date of completion as per clause 13 (excluding any extension under Clause 13.5) he shall, without prejudice to any other right or remedy available under the law to the Government on account of such breach, pay as compensation the amount calculated at the rates stipulated below as the Director, IIT Hyderabad may decide on the amount of accepted Tendered Value of the work for every completed day/ month (as determined) that the progress remains below that specified in Clause 13 or that the work remains incomplete.

(i) Compensation for delay of work with maximum rate @ 1% (one percent) per week of delay to be computed on per day basis based on quantum of damage suffered due to stated delay on the part of Contractor.

Provided always that the total amount of compensation for delay to be paid under this condition shall not exceed 10 % (ten percent) of the accepted Tendered Value of work as mentioned. for which a separate period of completion is originally given.

In case no compensation has been decided by the authority during the progress of work, this shall be no waiver of right to levy compensation by the said authority if the work remains incomplete on final justified extended date of completion. If the Institute decides to give further extension of time allowing performance of work beyond the justified extended date, the contractor shall be liable to pay compensation for such extended period.

Provided that compensation during the progress of work before the justified extended date of completion for delay under this clause shall be for non-achievement of sectional completion or part handing over of work on stipulated/justified extended date for such part work or if delay affects any other works/services.

In case action under this has not been finalized and the work has been determined under clause the Clause for Termination, , the right of action under this clause shall remain post determination of contract but levy of compensation shall be for days the progress is behind the schedule on date of determination, as assessed by the authority after due consideration of justified extension. The compensation for delay, if not decided before the determination of contract, shall be decided after of determination of contract.

12. Time and Extension of Delay

The time allowed for execution of the Works as specified in the Contract or the extended time in accordance with these conditions shall be the essence of the Contract. The execution of the work shall commence from such time period as mentioned elsewhere in the contract or from the date of handing over of the site whichever is later. If the Contractor commits default in commencing the execution of the work as aforesaid, the security deposit /performance guarantee shall be forfeited by the Institute and shall be absolutely at the disposal of the Government without prejudice to any other right or remedy available in law.

12.1 As soon as possible but within 7 (seven) working days of award of work and in consideration of

(a) Schedule of handing over of site as specified

(i) The Contractor shall submit a Time and Progress Chart. The Institute may within 7 (seven) working days thereafter, if required modify, and communicate the program approved to the contractor failing which the program submitted by the contractor shall be deemed to be approved by the Institute. The work programme shall include all details of balance drawings and decisions required to complete the contract with specific dates by which these details are required by contractor

without causing any delay in execution of the work. The Chart shall be prepared in direct relation to the time stated in the Contract documents for completion of items of the works. It shall indicate the forecast of the dates of commencement and completion of various trades of sections of the work and may be amended as necessary by agreement between the Institute and the Contractor within the limitations of time imposed in the Contract documents

(ii) In case of non submission of construction programme by the contractor, the program approved by the Institute shall be deemed to be final.

(iii) The approval by the Institute of such programme shall not relieve the contractor of any of the obligations under the contract.

12.2 If the work(s) be delayed by:-

(i) force majeure, or

(ii) abnormally bad weather, or

(iii) serious loss or damage by fire, or

(iv) civil commotion, local commotion of workmen, strike or lockout, affecting any of the trades employed on the work, or

(v) delay on the part of other contractors or tradesmen engaged by the Institute in executing work not forming part of the Contract, or

(vi) any other cause like above which, in the reasoned opinion of the Institute is beyond the Contractor's control.

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

The contractor shall have no claim of damages for extension of time granted or rescheduling of milestone/s for events listed in sub clause 13.2.

12.3 In case the work is hindered by the Department or for any reason / event, for which the Department is responsible, the authority shall, if justified, give a fair and reasonable extension of time and reschedule the mile stones for completion of work Such extension of time or rescheduling of milestone/s shall be without prejudice to any other right or remedy of the parties in contract or in law; provided further that for concurrent delays under this sub clause and sub clause 13.2 to the extent the delay is covered under sub clause 13.2 the contractor shall be entitled to only extension of time and no damages.

12.4 Request for rescheduling of Mile stones or extension of time, to be eligible for consideration, shall be made by the Contractor in writing within fourteen days of the happening of the event causing

delay on the prescribed forms i.e. Form of application by the contractor for seeking rescheduling of milestones or Form of application by the contractor for seeking extension of time respectively to the authority. The Contractor shall indicate in such a request the period by which rescheduling of milestone/s or extension of time is desired. With every request for rescheduling of milestones, or if at any time the actual progress of work falls behind the approved programme by more than 10% of the stipulated period of completion of contract, the contractor shall produce a revised programme which shall include all details of pending drawings and decisions required to complete the contract and also the target dates by which these details should be available without causing any delay in execution of the work.

12.4.1 In any such case the Director, IIT Hyderabad may give a fair and reasonable extension of time for completion of work or reschedule the milestones.

12.5 In case the work is delayed by any reasons, in the opinion of the Institute, by the contractor for reasons beyond the events mentioned in clause 12.2 or clause 12.3 or clause 12.4 and beyond the justified extended date; without prejudice to right to take action under Clause 13, the Institute may grant extension of time required for completion of work without rescheduling of milestones. The contractor shall be liable for levy of compensation for delay for such extension of time.

13. Force Majeure : IIT Hyd may consider grant of extension of time , as specified in this document, if and to the extent that the delay, in performance or other failure to perform its obligations under the Contract, is the result of a Force Majeure.

Force Majeure is defined as an event of effect that cannot reasonably be anticipated such as acts of God (like earthquakes, floods, storms etc.) acts of states, the direct and indirect consequences of wars (declared or undeclared) hostilities, national emergencies, civil commotion and strikes at successful Bidder's premises.

14. Settlement of Disputes & Arbitration:

Except where otherwise provided in the contract, all questions and disputes relating to the meaning of the specifications, design, drawings and instructions here-in before mentioned and as to the quality of workmanship or materials used on the work or as to any other question, claim, right, matter or thing whatsoever in any way arising out of or relating to the contract, designs, drawings, specifications, estimates, instructions, orders or these conditions or otherwise concerning the works or the execution or failure to execute the same whether arising during the progress of the work or after the cancellation, termination, completion or abandonment thereof shall be dealt with as mentioned hereinafter:

a. If the contractor considers any work demanded of him to be outside the requirements of the contract, or disputes any drawings, record or decision given in writing by the Institute or if the Institute considers any act or decision of the contractor on any matter in connection with or arising out of the contract or carrying out of the work, to be unacceptable and is disputed, such party shall promptly within 15 days of the arising of the disputes request the Director, who shall refer the

disputes to Dispute Redressal Committee (DRC) within 15 days along with a list of disputes with amounts claimed if any in respect of each such dispute. The Dispute Redressal Committee (DRC) give its decision within a period of 60 days extendable by 30 days by consent of both the parties from the receipt of reference from Director.

Provided that no party shall be represented before the Dispute Redressal Committee by an advocate/legal counsel etc.

The DRC will submit its decision to the Director for acceptance. Institute in a time limit of 30 days from receipt of DRC decision will convey acceptance or otherwise on the said decision. If the Dispute Redressal Committee (DRC) fails to give its decision within the aforesaid period or time limit or any party is dissatisfied with the decision of Dispute Redressal Committee (DRC) then either party may within a period of 30 days from the receipt of the decision of Dispute Redressal Committee (DRC) or on expiry of aforesaid the time limits available to DRC, may give notice to the Director, IIT Hyderabad for appointment of arbitrator.

It is a term of contract that each party invoking arbitration must exhaust the aforesaid mechanism of settlement of claims/disputes prior to invoking arbitration.

The Director shall in such case appoint the sole arbitrator may be within 30 days of receipt of such a request and refer such disputes to arbitration.

Dispute or difference shall be referred for adjudication through arbitration by a Tribunal having sole arbitrator. The requirements of the Arbitration and Conciliation Act, 1996 (26 of 1996) and any further statutory modification or re-enactment thereof and the rules made there under and for the time being in force shall be applicable.

It is a term of this contract that the party invoking arbitration shall give a list of disputes with amounts claimed, if any, in respect of each such dispute along with the notice for appointment of arbitrator and giving reference to the decision of the Director on the finding / recommendation of DRC.

Parties, before or at the time of appointment of Arbitral Tribunal may agree in writing for fast track arbitration as per the Arbitration and Conciliation Act, 1996 (26 of 1996) as amended in 2015.

Subject to provision in the Arbitration and Conciliation Act, 1996 (26 of 1996) as amended in 2015 whereby the counter claims if any can be directly filed before the arbitrator without any requirement of reference by the appointing authority. The arbitrator shall adjudicate on only such disputes as are referred to him by the appointing authority and give separate award against each dispute and claim referred to him and in all cases where the total amount of the claims by any party exceeds Rs. 1,00,000/-, the arbitrator shall give reasons for the award.

The place of arbitration shall be Hyderabad.

The venue of the arbitration shall be such place as may be fixed by the Arbitral Tribunal in consultation with both the parties. Failing any such agreement, then the Arbitral Tribunal shall decide the venue.

15. Action in case Work not done as per Specifications:

All works under or in course of execution or executed in pursuance of the contract, shall at all times be open and accessible to the inspection and supervision of the Institute's Officers in charge of the work, and the contractor shall, at all times, during the usual working hours and at all other times at which reasonable notice of the visit of such officers has been given to the contractor, either himself be present to receive orders and instructions or have a responsible agent duly accredited in writing, present for that purpose. Orders given to the Contractor's agent shall be considered to have the same force as if they had been given to the contractor himself.

If it shall appear to the Institute, that any work has been executed with unsound, imperfect, or unskilful workmanship, or with materials or articles provided by him for the execution of the work which are unsound or of a quality inferior to that contracted or otherwise not in accordance with the contract, the contractor shall, on demand in writing which shall be made within twelve months of the completion of the work from the Institute specifying the work, materials or articles complained of notwithstanding that the same may have been passed, certified and paid for forthwith rectify, or remove and reconstruct the work so specified in whole or in part, as the case may require or as the case may be, remove the materials or articles so specified and provide other proper and suitable materials or articles at his own charge and cost. In the event of the failing to do so within a period specified by the Institute in his demand aforesaid, then the contractor shall be liable to pay compensation at the same rate as under clause 12 (Compensation for Delay) of the contract (for non-completion of the work in time) for this default.

In such case the Institute may not accept the item of work at the rates applicable under the contract but may accept such items at reduced rates as the authority may consider reasonable during the preparation of on account bills or final bill if the item is so acceptable without detriment to the safety and utility of the item and the structure or he may reject the work outright without any payment and/or get it and other connected and incidental items rectified, or removed and re-executed at the risk and cost of the contractor. Decision of the Institute to be conveyed in writing in respect of the same will be final and binding on the contractor.

16. Contractor Liable for Damages, defects during defect liability period

If the contractor or his working people or servants shall break, deface, injure or destroy any part of building in which they may be working, or any building, road, road kerb, fence, enclosure, water pipe, cables, drains, electric or telephone post or wires, trees, grass or grassland, or cultivated ground contiguous to the premises on which the work or any part is being executed, or if any damage shall happen to the work while in progress, from any cause whatever or if any defect, shrinkage or other

faults appear in the work within twelve months after a certificate final or otherwise of its completion shall have been given by the Institute as aforesaid arising out of defect or improper materials or workmanship the contractor shall upon receipt of a notice in writing on that behalf make the same good at his own expense or in default the Institute cause the same to be made good by other workmen and deduct the expense from any sums that may be due or at any time thereafter may become due to the contractor, or from his security deposit or the proceeds of sale thereof or of a sufficient portion thereof. The security deposit of the contractor shall not be refunded before the expiry of twelve months after the issue of the certificate final or otherwise, of completion of work, or till the final bill has been prepared and passed whichever is later.

In case of Maintenance and Operation works of E&M services, the security deposit deducted from contractors shall be refunded within one month from the date of final payment or within one month from the date of completion of the maintenance contract whichever is earlier.

17. When Contract can be Determined

Subject to other provisions contained in this clause, the Institute may, without prejudice to its any other rights or remedy against the contractor in respect of any delay, inferior workmanship, any claims for damages and/or any other provisions of this contract or otherwise, and whether the date of completion has or has not elapsed, by notice in writing absolutely determine the contract in any of the following cases:

- (i) If the contractor having been given by the Institute a notice in writing to rectify, reconstruct or replace any defective work or that the work is being performed in an inefficient or otherwise improper or un-workman like manner shall omit to comply with the requirement of such notice for a period of seven days thereafter.
- (ii) If the contractor has, without reasonable cause, suspended the progress of the work or has failed to proceed with the work with due diligence and continues to do so after a notice in writing of seven days from the Institute.
- (iii) If the contractor fails to complete the work or section of work with individual date of completion on or before the stipulated or justified extended date, on or before such date of completion; and the Institute without any prejudice to any other right or remedy under any other provision in the contract has given further reasonable time in a notice given in writing in that behalf as either mutually agreed or in absence of such mutual agreement by his own assessment making such time essence of contract and in the opinion of Institute the contractor will be unable to complete the same or does not complete the same within the period specified.
- (iv) If the contractor persistently neglects to carry out his obligations under the contract and/or

commits default in complying with any of the terms and conditions of the contract and does not remedy it or take effective steps to remedy it within 7 days after a notice in writing is given to him in that behalf by the Institute.

- (v) If the contractor shall offer or give or agree to give to any person in Government service or to any other person on his behalf any gift or consideration of any kind as an inducement or reward for doing or forbearing to do or for having done or forborne to do any act in relation to the obtaining or execution of this or any other contract for Government.
- (vi) If the contractor shall enter into a contract with Government in connection with which commission has been paid or agreed to be paid by him or to his knowledge, unless the particulars of any such commission and the terms of payment thereof have been previously disclosed in writing to the Institute.
- (vii) If the contractor had secured the contract with Government as a result of wrong tendering or other non-bonafide methods of competitive tendering or commits breach of Integrity Agreement.
- (viii) If the contractor being an individual, or if a firm, any partner thereof shall at any time be adjudged insolvent or have a receiving order or order for administration of his estate made against him or shall take any proceedings for liquidation or composition (other than a voluntary liquidation for the purpose of amalgamation or reconstruction) under any Insolvency Act for the time being in force or make any conveyance or assignment of his effects or composition or arrangement for the benefit of his creditors or purport so to do, or if any application be made under any Insolvency Act for the time being in force for the sequestration of his estate or if a trust deed be executed by him for benefit of his creditors.
- (ix) If the contractor being a company shall pass a resolution or the court shall make an order that the company shall be wound up or if a receiver or a manager on behalf of a creditor shall be appointed or if circumstances shall arise which entitle the court or the creditor to appoint a receiver or a manager or which entitle the court to make a winding up order.
- (x) If the contractor shall suffer an execution being levied on his goods and allow it to be continued for a period of 21 days.
- (xi) If the contractor assigns (excluding part(s) of work assigned to other agency(s) by the contractor as per terms of contract), transfers, sublets (engagement of labour on a piece-work basis or of labour with materials not to be incorporated in the work, shall not be deemed to be subletting) or otherwise parts with or attempts to assign, transfer, sublet or otherwise parts with the entire works or any portion thereof with- out the prior written approval of the Institute.

When the contractor has made himself liable for action under any of the cases aforesaid, the Institute shall have powers

- (a) To determine the contract as aforesaid so far as performance of work by the Contractor is concerned (of which determination notice in writing to the contractor under the hand of the Institute shall be conclusive evidence). Upon such determination, the Security Deposit already recovered, security deposit payable and Performance Guarantee under the contract shall be liable to be forfeited and shall be absolutely at the disposal of the Government.
- (b) After giving notice to the contractor to measure up the work of the contractor and to take such whole, or the balance or part thereof, as shall be un-executed out of his hands and to give it to another contractor to complete the work. The contractor, whose contract is determined as above, shall not be allowed to participate in the tendering process for the balance work including any new items needed to complete the work.

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

18. Labour Laws to be complied with

The contractor shall, fully comply with all the labour laws and rules of the central and local governments.

The Contractor shall obtain a valid license under the Contract Labour (R&A) Act, 1970, and the Contract Labour (Regulation and Abolition) Central Rules, 1971, within 21 days of the Commencement date, and continue to have a valid license until the completion of the work.

The Contractor shall also abide by the provisions of the Child Labour (Prohibition and Regulation) Act, 1986.

The Contractor shall also comply with the provisions of the Building and Other Construction Workers (Regulation of Employment & Conditions of Service) Act, 1996 and the Building and Other Construction Workers Welfare Cess Act, 1996, the Workmen's Compensation Act, 1923.

The Contractor shall comply with the provisions of the Payment of Wages Act, 1936, the Minimum Wages Act, 1948, Employees Liability, The Industrial Disputes Act, 1947, the Maternity Benefits Act, 1961, the Payment of Bonus Act, 1965, The Inter-State Migrant Workmen (Regulation & Conditions

of Service) Act, 1979, the Employees Provident Funds and Miscellaneous Provisions Act, 1952, the Employees State Insurance Act, 1948 and or the modifications thereof or any other laws relating thereto and the rules made there under from time to time.

The Contractor shall, notwithstanding the provisions of any contract to the contrary, cause to be paid fair wage to labour indirectly engaged on the work, including any labour engaged by his sub-contractors in connection with the said work, as if the labour had been immediately employed by him.

As and when required by the Institute, the Contractor shall provide documentary evidences of such compliances.

If and when, the Institute receives any notice from any Agency regarding the Contractor's default in complying with laws and requirements governing the wages, etc., the Institute may take appropriate action, and costs, if any, that may be incurred by the Institute shall be recovered from the Contractor.

19. Water & Power : The contractor shall make his own arrangements for the water and power required for discharging his obligations under the scope of this tender. In case the Institute supplies water and or power, the contractor shall be liable to pay the charges on actual consumption basis at the same prevailing rates that the local authorities charge the Institute.

20. Labour Camp : The contractor shall not be permitted to set up the labour camp inside the Institute's campus.

21. Compliance with rules of Institute's security: The contractor and his personnel shall comply with the rules of the Institute with regards to safety and security. The contractor is required to take prior approval from the Chief Security Officer of the Institute for bringing in to / taking out from the campus, tools & plants, equipment etc., Contractor's personnel shall bear identity cards and shall produce on demand by the security Personnel.

22. Risk and Ownership

All risks, responsibilities and liabilities in respect of goods delivered at site shall remain with selected contractor till they are successfully installed and commissioned at site and taken over by end users. Part deliveries shall not be treated as deliveries. Only full deliveries of all items ordered will be considered as delivery. The ownership of the items delivered at site, shall be of IIT HYDERABAD on successful installation of items.

23. Assignment

Selected bidder/ Party shall not assign, delegate or otherwise deal with any of its rights or obligation to other parties under this Contract, without prior approval of IIT HYDERABAD .

24. Disclaimer

The purpose of this RFP is to provide the bidder(s) with information to assist the formulation of their proposals. This RFP does not claim to contain all the information each bidder may require. Each bidder should conduct his own investigations and analysis and should check the accuracy, reliability and completeness of the information in this RFP and where necessary obtain independent advice. IIT HYDERABAD makes no representation or warranty and shall incur no liability under any law, statute, rules or regulations as to the accuracy, reliability or completeness of this RFP. The bidders are encouraged to physically visit the site and understand the physical site conditions before submitting their bids.

25. Public Procurement (Preference to Make in India), Order 2017:

a) IIT Hyd shall compare all substantially responsive bids to determine the lowest valued bid. This Institute is following and abide with the Public Procurement (Preference to Make in India), Order 2017, DIPP, MoCI Order No. P-45021/2/2017-B.E.II dated 15th June 2017 and its subsequent amendments. Accordingly preference will be given to the Make in India products while evaluating the bids, however, it is the sole responsibility of the bidder(s) to specify the product quoted by them is of Make in India product along with respective documentary evidence as stipulated in the aforesaid order in the technical bid itself.

b) As per the above order and its subsequent amendments “Local Content” means the amount of value added in India which shall be value of the item procured (excluding net domestic indirect taxes) minus the value of the imported content in the item (including all the custom duties) as a proportion of the total value, in percent. Accordingly the suppliers will be classified in following categories.

- i) Class I local Supplier – has local content equal to more than 50%
- ii) Class II local Supplier – has local content more than 20% but less than 50%

c) **Verification of Local Content** : The Class I Local Supplier /Class II Local Supplier at the time of bidding shall be required to indicate the percentage of local content and provide self-certification as per Annexure ‘I’ that the items offered meet the local content requirement. The details of the location(s) at which the local value addition is made also needs to be specified.

In case of procurement in excess of Rs.10 crores , the suppliers shall be required to provide the certificate from the Statutory auditor or cost auditor of the company giving the percentage of local content.

The bidders can be debarred for a period up to two years as , per Rule 151(iii) of GFR 2017, in case of false declaration.

26. Requirement of registration: Vide Ministry of Finance OM No. 6/18/2019-PPD dated 23rd July 2020.

i. Any bidder from a country sharing a land border with India will be eligible to bid in this tender only if the bidder is registered with the Department for Promotion of Industry and Internal Trade (DPIIT).

ii. "Bidder" (including the term 'tenderer', 'consultant' or 'service provider' in certain contexts) means any person or firm or company, including any member of a consortium or joint venture (that is an association of several persons, or firms or companies), every artificial juridical person not falling in any of the descriptions of bidders stated hereinbefore, including any agency branch or office controlled by such person, participating in a procurement process.

iii. "Bidder from a country which shares a land border with India" for the purpose of this Order means:

- a) An entity incorporated, established or registered in such a country; or
- b) A subsidiary of an entity incorporated, established or registered in such a country; or
- c) An entity substantially controlled through entities incorporated, established or registered in such a country; or
- d) An entity whose beneficial owner is situated in such a country; or
- e) An Indian (or other) agent of such an entity; or
- f) A natural person who is a citizen of such a country; or
- g) A consortium or joint venture where any member of the consortium or joint venture falls under any of the above

For details about registration procedures please visit the above mentioned OM. Mandatory documentary evidence regarding the bidder's registration with DPIIT is to be submitted along with the tender, failing which the tender shall be liable for rejection. Bidders are also requested to submit the Model Certificates **as per Annexure 'H'** for this tender as mentioned in the Ministry of Finance OM No. 6/18/2019-PPD dated 23rd July 2020.

27. Jurisdiction: The disputes, legal matters, court matters, if any, shall be subject to Hyderabad Jurisdiction only.

28. Interpretation of the clauses in the Tender Document / Contract Document : In case of any ambiguity/ dispute in the interpretation of any of the clauses in this Tender Document, the interpretation of the clauses by Director, IIT HYDERABAD shall be final and binding on all parties.

(END OF CHAPTER 3)

CHAPTER-4 SCHEDULE OF PAYMENTS:

Schedule of Payments:

Sl. No.	Milestone	Breakup of % of accepted Contract amount of Part 'A'
PART-A		
1	SITC of 250 KVA DG Set along with Acoustic Enclosure	
	a) On supply of DG set to the site	45%
	b) On installation of DG set after completion of foundations and ancillary civil works, earthing etc.,	5%
	c) On testing and commissioning of the DG set	5%
2	Design, SITC of AMF cum Synchronization Panel along with Distribution system	
	a) On supply of AMF cum Synchronization Panel to the site	18%
	b) On commissioning of AMF cum Synchronization Panel	2%
3	On Supply of all cables to the site	8%
	On complete laying and termination of the cables	2%
4	SITC of Earthing System (other than earthing for DG set)	3%
5	Commissioning of the whole system including all components	10%
6	Handing over the System along with drawings, manuals and supported documents	2%
PART-B		
1	AMC Amount will be paid quarterly basis @ 25% of the accepted amount for AMC for respective year (Post completion of Maintenance)	

(END OF CHAPTER 4)

CHAPTER 5

DETAILED SCHEDULE OF WORK, TECHNICAL SPECIFICATIONS AND APPROVED MAKES

This Section covers the general and technical requirements of Data Centres and deliverables/ responsibilities of the successful bidder.

5.1 Detailed Scope of Work:

1	Supply, Installation, Testing and Commissioning of 250 KVA DGSet and Design, Supply, installation, Testing and Commissioning of Synchronization Panel and Associated Power Cabling system for Data Center in Academic Block - A. The detailed description of work description, approximate quantity and units as follows			
		Detailed description of Item	Qty	Unit
	A	Supply, loading, transportation, unloading at site, storage st site, shifting from storage place to site of following size of XLPE Insulated PVC Sheathed, armoured, aluminium Conductor power cable of 1.1 KV grade conforming to IS amended upto date and as per specifications		
	A.1	3.5 Core 150 Sq. mm	160	Meter
	A.2	3.5 Core 185 Sq. mm	100	Meter
	B	Supply, loading, transportation, unloading at site, storage st site, shifting from storage place to site of following size of FRLS PVC insulated, Single Core, multi stranded Copper Conductor cable of 1.1 KV grade conforming to IS amended upto date and as per specifications		
	B.1	25 sq mm	400	Meter
	C	Supply, loading, transportation, unloading at site, storage st site, shifting from storage place to site of following size of FRLS PVC insulated, multi Core, multi stranded Copper Conductor armour cable of 1.1 KV grade conforming to IS amended upto date and as per specifications		
	C.1	10 Core 1.5 sq mm	400	Meter
	D	Laying of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size direct in ground including excavation, sand cushioning, protective covering and refilling the trench etc as required.		
	D.1	Upto 35 sq. mm	10	Meter
	D.2	Above 95 sq. mm and upto 185 sq. mm	10	Meter

E	Laying of one number additional PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following sizedirect in ground in the same trench in one tier horizontal formation including excavation, sand cushioning, protective covering and refilling the trench etc as required.		
E.1	Upto 35 sq. mm	10	Meter
E.2	Above 95 sq. mm and upto 185 sq. mm	10	Meter
F	Laying of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size in the existing RCC/ HUME/ METAL pipe as required.		
F.1	Upto 35 sq. mm	370	Meter
F.2	Above 95 sq. mm and upto 185 sq. mm	140	Meter
G	Laying and fixing of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size on wall surface as required.		
G.1	Upto 35 sq. mm (clamped with 1mm thick saddle)	5	Meter
H	Above 95 sq. mm and upto 185 sq. mm (clamped with 25/40x3mm MS flat clamp)	10	Meter
H.1	Laying and fixing of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size on cable tray as required.		
I	Upto 35 sq. mm (clamped with 1mm thick saddle)	5	Meter
I.1	Above 95 sq. mm and upto 185 sq. mm (clamped with 25/40x3mm MS flat clamp)	100	Meter
J	Providing, laying and fixing following dia RCC pipe NP2 class (light duty) in ground complete with RCC collars, jointing with cement mortar 1:2 (1 cement : 2 fine sand) including trenching (75 cm deep) and refilling etc as required		
J.1	300 mm dia		Meter
K	Earthing with copper earth plate 600 mm X 600 mm X 3 mm thick including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe of 2.7 metre long etc. with charcoal/ coke and salt as required.	2	Set
L	Earthing with G.I. earth plate 600 mm X 600 mm X 6 mm thick including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe of 2.7 metre long etc. with charcoal/ coke and salt as required.	2	Set

M	Supplying and laying 25 mm X 5 mm copper strip at 0.50 metre below ground as strip earth electrode, including connection/ terminating with nut, bolt, spring, washer etc. as required. (Jointing shall be done by overlapping and with 2 sets of brass nut bolt & spring washer spaced at 50mm)	10	Meter
N	Supplying and laying 25 mm X 5 mm G.I strip at 0.50 metre below ground as strip earth electrode, including connection/ terminating with G.I. nut, bolt, spring, washer etc. as required. (Jointing shall be done by overlapping and with 2 sets of G.I. nut bolt & spring washer spaced at 50mm)	10	Meter
O	Providing and fixing 25 mm X 5 mm copper strip in 40 mm dia G.I. pipe from earth electrode including connection with brass nut, bolt, spring, washer excavation and re-filling etc. as required.	5	Meter
P	Providing and fixing 25 mm X 5 mm G.I. strip in 40 mm dia G.I. pipe from earth electrode including connection with G.I. nut, bolt, spring, washer excavation and re-filling etc. as required.	5	Meter
Q	Providing and fixing 25 mm X 5 mm copper strip on surface or in recess for connections etc. as required.	5	Meter
R	Providing and fixing 25 mm X 5 mm G.I. strip on surface or in recess for connections etc. as required.	20	Meter
S	Supply, installation, testing and commissioning of radiator cooled 250 KVA ,415 V, 50 Hz- 3 phase prime (actual) rating diesel generating set along with AVM Pads including cable termination box with all associated equipment / work as per specifications. Alternator shall have class F insulation 415 Volts and rated for 200 KW output at 0.8 pl. at site. Engine shall not be derated upto 50 deg.0 ambient and suitable for bearing the starting current after changeover.	1	Set
	GENERAL: a) Prime Power Rating : 250 KVA b) OutPut Voltage : 415V c) Output Frequency : 50 Hz d) Power Factor : 0.8 e) No. of Phases : 3		

	<p><u>ii) DIESEL ENGINE:</u> Diesel Engine water cooled, electric start of suitable BHP at 1500 RPM suitable for 250KVA alternator output at 40 Degree C confirming to BS 5514, BS 649, IS 10000, capable of 10% over loading for one hour after 12 hours of continuous operation. a) No.of Cylinders : 6 b) Aspiration : Turbo Charged-Air to Air-Cooled c) Governor / Class : Electronic/ A1 d) Fan airflow across radiator : As required e) Exhaust Temperature : 450 degree C f) Battery capacity/Rating : 180AH, 2x12V g) Fuel Tank : 500 litre</p> <p><u>iii) ALTERNATOR:</u> Synchronous alternator rated 250 KVA at 415 Volts at 1500 RPM, 3 Phase 50 HZ, AC Supply with 0.8 lagging power factor at 40 Degree C. The alternator brushless, continuous duty, self-excited and self regulated thorough AVR confirming to IS:4722/ BS 2613 with Class H insulation. a) Voltage Regulation : +/-0.5% b) Insulation Class : H c) Standard enclosure : IP23</p> <p><u>iv)ENGINE MOUNTED INSTRUMENT PANEL:</u> Engine mounted instrument panel have a documented programmable network API/Protocol over TCP/IP network port for monitoring and controlling from our custom open-source based data center infrastructure management (DCIM) system. Fuel parameters (flow, level, pilferage), Energy (KWH), Power (KW), operational hours of work, remote power on/off/status facilities must be retrievable/controllable programmatically. Necessary lifetime license for mentioned features must be supplied</p> <p><u>v) BASE FRAME & ACCOUSTIC ENCLOSURE:</u> Both the engine and alternator shall be mounted on suitable base frame made of suitable MS Channel along with vibration isolation arrangement housed in a accoustic and weather proof enclosure with arrangement for fresh air intake for cooling of the engine & alternator, extraction, discharging air into atmosphere as per specifications.</p>		
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		<p>vi) Fuel Tank: Daily service fuel tank of 600 Litres capacity fabricated out of 3 mm thick M.S. Sheet complete with all standard accessories and fuel piping between fuel tank and diesel engine with MS class "C" pipes of suitable dia. Complete with valves, level indications as per the specifications.</p>		
		<p>vii) FOUNDATION: Suitable size of reinforced cement concrete foundation bed as per manufacturer recommendations</p>		
	T	<p>DG AMF Cum Synchronizing & Distribution Panel fabricated of dust, damp and vermin proof cubicle free stand mountable on Floor, indoor type factory built sheet steel enclosed modular bolted construction extendable, suitable for operation on 415 \pm10% volts, 50 Hz AC 3 phase 4 wire supply system fabricated in compartmentalized design and covered with CRCA sheet steel of 2mm thick for frame work and 2mm thick for doors/ covers, 3mm thick for gland plates i/c cleaning & finishing complete with 9 tank process for powder coating in approved shade, having extensible type 4P Aluminium bus bars of high conductivity, SMC busbar supports, with short circuit withstand capacity of 50KA for 1 sec., bottom base channel of section not less than ISMC 75mm, fabrication shall be done in transportable sections, entire panel shall have a common copper earth bus bar to switch gears with required size of Alum. bus bars and interconnection with solid copper conductor wires/ aluminium strips, neutral links.</p> <p>1) Incomers: i) Incomer - 1 - 160A 4P 25KA MCCB - 01 no. (From existing 1X100KVA DGSet) ii) Incomer - 2 - 160A 4P 25KA MCCB - 01 no. (From existing 1X100KVA DGSet) iii) Incomer - 3 - 320 A 4P 25KA MCCB - 01 no. (From new 1X250KVA DGSet) iv) Incomer - 4 - 320 A 4P 25KA MCCB - 01 no. (From future 1X250KVA DGSet) v) Incomer - 5 - 630A 4P 35KA MCCB - 01 no. (For Main Power (Normal))</p> <p>2) Outgoings: i) 250A 4P 25KA MCCB - 01 no. ii) 100A 4P 25KA MCCB - 01 no. iii) 100A 4P 25KA MCCB - 01 no. iv) 63A 4P 25KA MCCB - 01 no. v) 63A 4P 25KA MCCB - 01 no.</p>	1	Set

		<p>vi) 63A 4P 25KA MCCB - 01 no. vii) 63A 4P 25KA MCCB - 01 no. viii) 250A 4P 25KA MCCB - 01 no. xi) 100A 4P 25KA MCCB - 01 no. x) 63A 4P 25KA MCCB - 01 no. 3) All MCCBs are Microprocessor based release 4) Metering and indication for each incomer: a) Digital flush type class-0.5 accuracy multifunction meter PM-8000 or equivalent with RS485 showing V, A, F, PF, KVAR, KW, KWH etc. with 3 Nos. current transformers of 800/5A ratio, 15 VA Class 0.5 metering on each incomer and outgoing. b) LED indicating lamps for RYB, Breaker ON/ OFF/ TRIP/ "Spring Charged", DC control supply healthy, DG set ON, load on DG set, etc. backed up with control MCB's. c) AUTO/ MANUAL SYNCHRONISING, AUTO LOAD TRANSFER, AUTO LOAD SHARING, AUTO LOAD d) 1 No. Double frequency meter (415V/110V) (144 sq.mm.) reed type. e) 1 No. Synchroscope, 110 V (144 sq.mm.) Analog. f) 2 nos. 110 V AC dark lamps. g) 1 No. synchronizing switch h) 1 No. set selector switch. i) 1 No. Manual/Auto switch. j) Push buttons for Test, Accept, Reset, Fault Reset, Engine Start, Engine stop, MCCB close, MCCB Trip Emergency stop. k) PLC Hardware, i/o Modules, Analyzers etc as required having interlocking provision as per drawings & specifications. l) Auxiliary relays as required and as per specifications. m) 1 No. check synchronizing relay, 110 V AC 50 Hz. n) 230V AC/24V DC, 10A, stabilized power supply with voltage trimmer and maintenance free battery. o) 16Window annunciator panel (for each D.G. Set) for indications/alarms for Set fails to start, Engine overheat, Excitation failure, High temperature, Low Lube oil pressure, Over speed, Low fuel oil level, Cooling water flow failure, Breaker Trip, Generator fault, DC control supply failure, Voltage out of limits annunciation windows as required p) Additional control equipment for the existing 2X100 KVA DGset at DGSet to make it compatible for synchronization. (Vendor shall make site visit on his own to asses the requirements for synchronization)</p>		
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		<p>NOTE:- Synchronization panel should be complete in all respect including control wiring, communication cables, power supplies, auxiliary relays etc. required for successful running of the system.</p>		
PART-A				
2	<p>Annual maintenance including all checks and visits as recommended by the respective manufacturer of following capacity DG sets complete with supply and replacement of defective parts during breakdowns, consumables etc during periodic servicing, conducting periodical services and preventive maintenance as per the manufacturer's recommendation excluding consumables minor consumables like battery water,grease,nut bolts etc during routine AMC checks. Breakdown calls are unlimited.</p>			

	1st Year
	2nd Year
	3rd Year
	4th Year
	5th Year

5.2 Technical Specifications:

5.2.1 Detailed specification for Diesel Generator set:

The DG Sets would normally be controlled from DG AMF Cum Synchronizing & Distribution Panel. The necessary control devices/contacts for these external connections shall be wired out to the DG control panel terminal blocks.

5.2.1.1 Diesel Engine:

The diesel should be vertical cylinder type having 6 cylinders totally enclosed, compression ignition, water cooled (radiator cooled), turbo charged cooled suitable for Power generation application to drive the 250KVA alternator at 1500 rpm under NTP condition confirming to BS 649, complete with all interconnecting piping and the following standard accessories.

- a) Dynamically Balanced fly wheel.
- b) Necessary flexible coupling and guard for alternator and engine (applicable only for double bearing alternator).
- c) Air cleaner (dry/oil bath type) as per manufacturer standard.
- d) Radiator – heavy duty type
- e) Cooling fan
- f) Water circulating pump
- g) Corrosion resistor
- h) PT fuel pump
- i) An electronic governor to maintain engine speed at all conditions of load. (EGC)
- j) Fuel filter
- k) Fuel shut down solenoid (24Vdc, stop solenoid)
- l) Lubricating oil filter
- m) Oil cooler
- n) By pass filter
- o) Dry exhaust manifold with suitable exhaust residential grade silencer to reduce the noise level.

- p) Suitable self-starter for 12 V/24 V DC.
- q) Battery charging alternator unit and voltage regulator, suitable for starting batteries, battery racks with interconnecting leads and terminals.
- r) Engine instrument panel with following:
- i) Start/stop key switch.
 - ii) Lube oil pressure indication.
 - iii) Water temperature indication.
 - iv) RPM indication.
 - v) Engine Hours indications.
 - vi) Engine Hours indications.
 - vii) Low lube Oil trip indication
 - viii) High water temperature indication.
 - ix) Over speed indication.
- x) S) The engine should have following:
- xi) Emergency Shutdown Push Button

5.2.1.2 Requirement for the diesel engine:

The diesel engine shall be vertical cylinder, single acting, and mechanical injection type and furnished with all the required equipment as per standard practice. The engine should develop rated horse power to drive alternator.

The required auxiliaries, guarantee of fuel consumption for rated output, provision or parallel operation, governor performance and torsional vibration shall be in accordance with BS: 649. The engine shall conform to IS: 10000/ISO 3046/BS; 649/BS 5514 amended up to date.

5.2.1.3 Engine governing system:

Electronic governor of class A1, as per ISO 3046/BS 5514 with actuator shall be provided as per standard design of manufacturer. Governor shall be a self-contained unit capable of monitoring speed. An over speed trip mechanism shall be provided to automatically shut off the fuel supply in case of set speed reading about 110% of rated speed.

5.2.1.4 Frequency Variation:

The engine speed shall be so maintained that frequency variation at constant load including no load shall remain within a band of 1% of rated frequency.

5.2.1.5 Fuel system:

Fuel (Diesel) system to the engine shall be supplied from a fuel tank. The supplier should provide a fuel tank that can run the DG Set for at least 12 Hrs. The supplier should provide mechanical fuel level indicator with 'Low' and 'High' markings.

5.2.1.6 Lube oil system:

The automatic pressure lubrication shall be provided by an engine driven pump. This system should be complete with an oil cooler and 100% capacity mesh filters.

5.2.1.7 Engine starting system:

Starting of the diesel engine shall be of electric starting. This shall comprise of necessary set of heavy duty Lead acid batteries 12V/24V DC (as per manufacturer standard), and suitable starter motors and axial type gear to match with the toothed ring on the fly wheel. A timer in the AMF/Synchronization panel to protect the starter motor from excessively long cranking runs shall be suitably integrated with the protection system and shall be included within the scope of the work. Battery capacity shall be suitable for meeting the needs of starting system (as three attempt starting), as well as the requirements of control panel, indications and auxiliaries such as priming pump as applicable etc. The scope shall cover all cabling, terminals, including initial charging etc. The system shall be capable of starting the DG set within 30-45 seconds.

5.2.1.8 Batteries:

The batteries shall be sized taking in to account the starting load requirement of the D-G set. 2Nos. of 12V, Lead acid batteries, of suitable capacity to start the engine by 24V DC electrical starting Motor without struggling, and with suitable capacity of battery cable. The batteries must be capable to try 3 unsuccessful starts continuously. The batteries have to be placed on a suitable well painted steel stand.

5.2.1.9 Battery charger:

The battery charger shall be suitable to charge required numbers of batteries at 12V/24 Volts complete with, transformer, rectifier, charge rate selector switch, indicating ammeter & voltmeter etc. Connections between the battery charger & batteries shall be provided with suitable copper leads with lugs etc.

5.2.1.10 Piping work:

All pipe lines, fittings and accessories requirement inside the enclosure and outside for exhaust piping shall be provided by the contractor. This shall include necessary flexible pieces in the exhaust, fuel, lube oil and water lines as are necessary in view of the vibration isolation requirement in the installation. Piping of adequate size shall be used for lube oil of the material as per manufacturer standard. However, only M.S. pipes for the exhaust and fuel oil lines shall be used. The pipe work shall be inclusive of all fittings and accessories required such as bends, reducers, elbows, flanges, flexible connection, necessary hardware etc. The installation shall cover clamps, supports, hangers etc. as are necessary for completing the work.

5.2.1.11 Common bed plate:

Engine and alternator shall be coupled as per manufacturer standard design and both units shall be mounted on a common bed plate together with all auxiliaries to ensure perfect alignment of engine and alternator with minimum vibration. The bed plate shall be suitable for installation on suitable anti-vibration mounting system.

5.2.1.12 Air intake system:

Air intake system should have requisite air filters and complete interconnecting piping, supports etc.

5.2.1.13 Exhaust system:

Engine exhaust system shall consist of exhaust gas driven turbo charger with lagged piping, interconnecting cylinder head outlets with the turbo charger inlet. Exhaust gas from the turbo charger shall be let out through exhaust gas silencer. The exhaust gas silencer, necessary pipes etc., shall be provided by the contractor. Exhaust piping shall be suitably cladded with aluminium sheets, mineral wool etc. The silencer should be of residential type. Flexible connection (expansion joints) shall be provided in the exhaust piping to avoid transmission of vibration from engine to the structure (acoustic and weather proof enclosure etc.). Also the exhaust line with suitable bends, collars, flanges, angle supports and other accessories should be provided. Provide necessary arrangements to avoid entry of rain water, falling dust etc. at the top of the exhaust pipe. The exhaust piping system should be designed and laid upto a **height of 3 Meters above the acoustic enclosure or as directed by the IITH authorities** to suit the site and environmental condition as per the controller pollution board, standards.

5.2.1.14 Exhaust Piping:

All M.S. Pipes for exhaust lines shall be conforming to relevant IS. The runs forming part of factory assembly on the engine flexible connections upto exhaust silencer shall be exclusive of exhaust piping item. The work includes necessary cladding of exhaust pipe work using 50mm thick glass wool/mineral wool/rock wool, density not less than 46 kg/m² and Aluminium cladding (0.80mm thick) for the complete portion. The exhaust pipe work includes necessary supports, foundation etc. to avoid any load & stress on turbo charger/ exhaust piping.

- a) Exhaust system should create minimum back pressure.
- b) Number of bends should be kept minimum and smooth bends should be used to minimize back pressure.
- c) Exhaust flexible shall have it's free length when it is installed. For bigger engines, two flexible bellows can be used.
- d) 'Class B" MS pipes and long bend/elbows should be used.
- f) The exhaust outlet should be in the direction of prevailing winds and should not allow exhaust gases to enter air inlet/windows etc.
- g) When tail end is horizontal, 45 Degree downward cut should be given at the pipe to avoid rain water entry into exhaust piping.
- h) When tail end is vertical, there should be rain trap to avoid rain water entry. If rain cap is used, the distance between exhaust pipe and rain cap should be higher than diameter of pipe. Horizontal run of exhaust piping should slope downwards away from engine to the condensate trap. Silencer should be installed with drain plug at bottom.

5.2.1.15 Cooling System:

- a) System should be designed for ambient temperature of 50 Deg. C.
- b) Coolant should be used mixed with additive (in suitable proportion) as per recommendation of OEM/Manufacturer for various engine models.
- c) Radiator fan flow should be free from any obstruction.

5.2.2 Alternator:

The Alternator shall be screen protected, drip proof, continuously rated to give an output of 250kVA at 0.8 pf at 415V, 50Hz, 1500rpm, 3 - phase, 4wire. The alternator should be provided with automatic voltage regulator with voltage regulation of $\pm 0.5\%$ and is designed, tested for confirming to IS 4772/1992 or IEC 34.

Requirement of alternator:

- a) KVA rating: 250
- b) Terminal voltage: 415V
- c) Power factor: 0.8 (lag)
- d) No. of phases: 3
- e) No. of wires: 4
- f) Voltage regulation: $\pm 0.5\%$
- g) Frequency: 50Hz
- h) Enclosure: SPDP
- i) Degree of protection: IP-23
- j) Ventilation: Self ventilated air cooled
- k) Ambient Temperature: 50° C Maximum
- l) Insulation Class: H
- m) Temperature Rise: Within class H limits at rated load
- n) Voltage Regulation: $\pm 1\%$
- o) Voltage variation: $\pm 5\%$
- p) Overload duration/capacity: 10% for one hour in every 12 hours of continuous use.
- q) Frequency variation: As defined by the Engine Governor ($\pm 1\%$)
- r) Excitation: Self /separately excited (Self excitation)
- s) Type of AVR: Electronic
- t) Type of Bearing and Lubrication arrangement: Anti-friction bearing Grease
- u) Standard: IS-4722 & IEC: 34 as amended upto date.

5.2.3 DG AMF Cum Synchronizing & Distribution Panel:

The DG Sets would normally be controlled from DG AMF Cum Synchronizing & Distribution Panel. The necessary control devices/contacts for these external connections shall be wired out to the DG control panel terminal blocks.

Panel will be fabricated out of 2 mm CRCA MS sheet and powder coated after seven tank treatment process with IP 54 and Gland plate will be fabricated out of 3 mm CRCA MS sheet.

5.2.3.1) 1X250 KVA DG Set shall be controlled independently and synchronized with the existing 2X100KVA DG Sets.

5.2.3.2) Supply, installation required equipment and necessary arrangements for the integration of 2X100 KVA DG Set on Panel side and Engine side is the responsibility of the contractor.

5.2.3.3) Diesel Generator shall be capable of being stopped manually from remote as well as local.

However, interlock shall be provided in the DG local control panel to prevent shutting down operations as long as circuit breaker is closed.

5.2.3.4) Auto Operation:

When mains power is available, the healthiness of this power will be monitored Through a mains voltage monitor. If voltages on the 3 phases are within limits, the monitor will send a closing signal to the mains breaker and mains power will be connected to the load.

If the voltage drops or fails on any phase or on all phases, the monitor will sense this drop through a timer, and if this drop or failure persists for more than a pre-adjusted period of time (say 30 to 45 seconds) a signal is sent to the engine starting circuit while at the same time opening the mains supply breaker and disconnecting load from mains as voltage is below acceptable limits.

The engine starting control monitor will send a signal to the D.C. battery supply for starting the engine through the starting solenoid. When the engine is healthy, it starts up in a few seconds and the generator develops voltage. The generator voltage monitor, monitors the voltage and when the voltage is developed, this give a signal to the generator breaker which closes and connects the diesel generator to the load. Simultaneously, it sends a signal to de-energize the engine starting circuit and the starter motor is disengaged. The engine protection circuits for high water temperature and low lubricating oil pressure are also energized.

5.2.3.5) Resumption of Supply:

If voltage from mains is resumed, the main voltage monitor will sense this voltage for healthiness, i.e. for maintained correct voltage for a period of time (adjustable up to three minutes) and then send a signal to stop the engine and to change over the breakers from generator to mains and normal supply is resumed to the load. The solenoid operation and closing and tripping of breakers should be done through control voltage 24 V.D.C.

5.2.3.6) Failure to Start:

A three attempt starting facility using two impulse timers and a summation timer for engine shall be provided and if voltage fails to develop within 30 seconds from receiving the first start impulse, the set shall lockout automatically and a visual and audible alarm shall be given in the control panel. The remote panel shall receive "DG Trouble Alarm".

5.2.3.7) The panel shall have the following provisions for the control of each DG Set:

1. MCCB's as per BOQ of DG AMF Cum Synchronizing & Distribution Panel.
2. Master engine control which for OFF/AUTO/MANUAL/TEST with a facility for starting and stopping of the set.
3. The supplier of DG set shall be required to establish all manual/remote connections/communications with proposed AMF cum synchronization panel.
4. Contractor ensure that existing 2X100KVA DGsets required to establish all manual/remote connections/communications with proposed AMF cum synchronization panel.
5. Selectable Multifunction meter.
6. Engine control monitor.
7. Alternator voltage monitor.
8. D.C. Control relays, timers.
9. Engine protection system for low oil lubricating pressure and high water temperature.
10. Engine hours run counter.
11. Control fuses.
12. Lifting Hooks.
13. Gland Plates.
14. Power/Control Contactors.
15. Earthing Studs.
16. Under Voltage Relays
17. Over Voltage Relays
18. Pilot indicating lamps/shall be provided for the following:
 - i) Charger - ON/OFF
 - ii) Set shutdown due to engine high water temp
 - iii) Set shutdown due to low oil pressure
 - iv) Set shut down due to low fuel
 - v) Over speed trip

5.2.4 Cable laying, Earthing & associated works:

Technical specification for Cable laying, Earthing and associated works are as per the below standards:

- 1) CPWD General Specifications for Electricals works Part I Internal – 2013
- 2) CPWD General Specifications for Electrical works Part VII D.G.Sets – 2013

5.3 List of Approved Makes:

LIST OF MAKES		
Sl. No.	Name of the Equipment/Item	Makes
1	LT Cables(ISI Approved)	RPG/Universal/Polycab/Finolex/KEI/RRKabel
2	Control Cable(ISI Approved)	RPG/Universal/Polycab/Finolex/Gemscab
3	Cable Lugs	Comet/ Cosmos/ Dowell's (Biller India) / Jainson

4	Cable Glands(Double compression)	Comet /Cosmos/ Dowell's /Jainson
5	MCCBs	Schneider / Siemens/ L&T/ ABB/Legrand
6	L.T.Panel Boards	CPRI Approved System Integrators
7	Auxiliary Contactors/Timer/ Starters	L&T/ Siemens/ABB / Schneider/GE Power
8	Protective Relays (Numeric Type)	Areva/ABB/Siemens/ L&T/Schneider/ Alstom
9	KWH Meters (Digital Type) /Ammeter / Voltmeter	Conserv /Secure/L&T/ Automatic Electric/ Trinity/ Neptune /HpL
10	Indication Lamps/Push Button	L&T/BCH/GE/Siemens/C&S
11	Cable Trays and accessories	Asian Ancillary Corporation/ Globe/Indiana/Profab Engineer/ Slottc/BSPL
12	CT(Cast Resin Epoxy Coated) /PT	AE/ Gilbert & Maxwell /Precise/ Pragati/ Kappal
13	Diesel Engine	Cummins/ Caterpillar/ MTU/Kirloskar / Volvo / Ley Power
14	Alternator	Kirloskar/Stamford/Crompton/ Leroy Somer / Ley Power
15	Anti Vibration Mountings	Gerb / Resistoflex / Kanwar / Dunlop
16	Pressure/ TemPerature Gauges	H Guru/Feibig
17	M.S. Pipes	Tata / Jindal Hisar / Prakash/ Surya
18	DG Set Sunchronization Controller	Cummins/Woodwards or equivalent

(END OF CHAPTER 5)

CHAPTER-6 PRICE SCHEDULE FORMAT

<u>TENDER-1</u>						
Name of the work: Supply, Installation, Testing and Commissioning of 250 KVA DG Set and Design, Supply, installation, Testing and commissioning of Synchronization Panel and Associated Power Cabling system for Data Center in Academic Block - A along with 3 years Comprehensive Annual Maintenance Contract						
Sl. No	Description of Item	Qty	Unit	Rate		Amount
				In fig	In words	
PART-A (Work)						
1	Supply, Installation, Testing and Commissioning of 250 KVA DG Set and Design, Supply, installation, Testing and commissioning of Synchronization Panel and Associated Power Cabling system for Data Center in Academic Block - A.	1	Job			
PART-B (Maintenance)						
2	Annual maintenance including all checks and visits as recommended by the respective manufacturer of following capacity DG sets complete with supply and replacement of defective parts during breakdowns, consumables etc during periodic servicing, conducting periodical services and preventive maintenance as per the manufacturer's					

	recommendation excluding consumables which will be payable by the Institute on actuals, but including minor consumables like battery water, grease, nut bolts etc., during routine AMC checks. Breakdown calls are unlimited.			
	1st Year			
	2nd Year			
	3rd Year			
	Total			

Grand Total of Part A & B (in fig) : Rs

(in words) :

(END OF CHAPTER 6)

ANNEXURE – A

Bid Securing Declaration Form

Date: _____

Tender No. _____

To (insert complete name and address of the purchaser)

I/We. The undersigned, declare that:

I/We understand that, according to your conditions, bids must be supported by a Bid Securing Declaration.

I/We accept that I/We may be disqualified from bidding for any contract with you for a period of two year from the date of notification if I am /We are in a breach of any obligation under the bid conditions, because I/We

a) have withdrawn/modified/amended, impairs or derogates from the tender, my/our Bid during the period of bid validity specified in the form of Bid; or

b) having been notified of the acceptance of our Bid by the purchaser during the period of bid validity (i) fail or reuse to execute the contract, if required, or (ii) fail or refuse to furnish the Performance Security, in accordance with the Instructions to Bidders.

I/We understand this Bid Securing Declaration shall cease to be valid if I am/we are not the successful Bidder, upon the earlier of (i) the receipt of your notification of the name of the successful Bidder; or (ii) thirty days after the expiration of the validity of my/our Bid.

Signed: _____ (insert signature of person whose name and capacity are shown)
in the capacity of _____ (insert legal capacity of person signing the Bid Securing Declaration)

Name: _____ (insert complete name of person signing the Bid Securing Declaration)

Duly authorized to sign the bid for an on behalf of (insert complete name of Bidder)

Dated on _____ day of _____ (insert date of signing)

Corporate Seal (where appropriate)

(Note: In case of a Joint Venture, the Bid Securing Declaration must be in the name of all partners to the Joint Venture that submits the bid)

ANNEXURE - B

MANUFACTURER'S AUTHORIZATION FORM

[The Bidder shall require the Manufacturer to fill in this Form in accordance with the instructions indicated. This letter of authorization should be on the letterhead of the Manufacturer and should be signed by a person with the proper authority to sign documents that are binding on the Manufacturer]

Date: [Insert date (as Day, month and year) of Bid submission]

Tender No.: [Insert number from Invitation for Bids]

To: [Insert complete name and address of Purchaser]

WHEREAS

We [insert complete name of Manufacturer], who are official manufacturers of [Insert type of goods manufactured] having factories at [insert full address of Manufacturer's factories], do hereby authorize [insert complete name of Bidder] to submit a bid the purpose of which is to provide the following goods, manufactured by us [insert name and or brief description of the goods], and to subsequently negotiate and sign the contract.

We hereby extend our full guarantee and warranty in accordance with the Terms and Conditions of Contract with respect to the Goods offered by the above firm.

Signed: [insert signature(s) of authorized representative(s) of the Manufacturer]

Name: [insert complete name(s) of authorized representative(s) of the Manufacturer]

Title: [insert title]

Duly authorized to sign this Authorization on behalf of: [insert complete name of Bidder]

Dated on _____ day of _____ [insert date of signing]

ANNEXURE – C

PREVIOUS WORK ORDER LIST FORMAT

Order placed by <i>{Full address of Purchaser}</i>	Order No. and Date	Description and quantity of ordered equipment	Value of order	Date of completion of delivery as per contract	Date of actual completion of delivery	Remarks indicating reasons for late delivery, if any and justification for price difference of their supply order & those quoted to us.	Has the equipment been installed satisfactorily? <i>(Attach a certificate from the Purchaser/ Consigner)</i>	Contact Person along with Telephone no., Fax no. and e-mail address.

Signature and Seal of the Manufacturer/ bidder

Place:

Date:

ANNEXURE – D

BIDDER INFORMATION FORM

Company Name : _____

Registration Number : _____

Registered Address : _____

Name of Partners /Director: _____

City : _____

Postal Code : _____

Company's Establishment Year : _____

Company's Nature of Business : _____

Company's Legal Status (tick on appropriate option)

- 1) Limited Company
- 2) Undertaking
- 3) Joint Venture
- 4) Partnership
- 5) Others (In case of Others please specify)

Company Category

- 1) Micro Unit as per MSME
- 2) Small Unit as per MSME
- 3) Medium Unit as per MSME
- 4) Ancillary Unit
- 5) SSI
- 6) Others (In case of Others please specify)

CONTACT DETAILS

Contact Name : _____

Email Id : _____

Designation : _____

Phone No : (_____) _____

Mobile No : _____

BANK DETAILS

Name of Beneficiary : _____

A/c. No. CC/CD/SB/OD: _____

Name of Bank : _____

IFSC NO. (Bank) : _____

Branch Address and Branch Code: _____

Other Details

Vendor's PAN No. _____

Vendor's GST _____

ANNEXURE – E

DECLARATION REGARDING CLEAN TRACK/NO LEGAL ACTION

(to be provided on letter head of the firm)

I hereby certify that the above firm namely _____ is neither blacklisted by any Central/State Government/Public Undertaking/Institute nor any criminal case registered / pending against the firm or its owner / partners anywhere in India.

I also certify that the above information is true and correct in any every respect and in any case at a later date it is found that any details provided above are incorrect, any contract given to the above firm may be summarily terminated and the firm blacklisted.

Date:

Authorized Signatory

Name:

Place:

Designation:

Contact No.:

ANNEXURE – F

ACCEPTANCE OF TENDER TERMS
(To be given on Company Letter Head)

Date: DD/MM/YYYY

To,

The Director
Indian Institute of Technology Hyderabad
Kandi – 502 285.Telangana, India

Sub: Acceptance of Terms & Conditions of Tender.

Tender Reference No: _____

Name of Tender / Work: -

Dear Sir,

1. I / We have downloaded / obtained the tender document(s) for the above mentioned 'Tender' 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 department/ organisation 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 your department/ organisation 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 – G

NO RELATIONSHIP CERTIFICATE

(On Company Letterhead)

1. I/We hereby certify that I/We* am/are* related/not related(*) to any officer of IIT Hyderabad.
(If Related provide the details of the employee)
2. I/We* am/are* aware that, if the facts subsequently proved to be false, my/our* contract will be rescinded with forfeiture of E.M.D and security deposit and I/We* shall be liable to make good the loss or damage resulting from such cancellation.
3. I/We also note that, non-submission of this certificate will render my / our tender liable for rejection.

Date:

Authorized Signatory

Name:

Place:

Designation:

Contact No.:

ANNEXURE –H

CERTIFICATE
ON COMPANY LETTERHEAD

CERTIFICATE BY BIDDER- DPIIT REGISTRATION

“ I have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India; I certify that this bidder is not from such a country or, / if from such a country, has been registered with the Competent Authority (copy of the Registration Certificate enclosed) . I hereby certify that his bidder fulfils all requirements in this regard and is eligible to be considered.

Signature with Date and Stamp
Of the Bidder

ANNEXURE – I

Declaration for Local Content

(To be given on Company Letter Head - For tender value below Rs.10 Crores)

(To be given by Statutory Auditor/Cost Auditor/Cost Accountant/CA for tender value above Rs.10 Crores)

Date: _____

To,
The Director,
Indian Institute of Technology Hyderabad,
Kandi, Sangareddy 502285

Sub: Declaration of Local content

Tender Reference No: _____

Name of Tender / Work: - _____

1. Country of Origin of Goods being offered: _____

2. We hereby declare that items offered has _____% local content.

“Local Content” means the amount of value added in India which shall, be the total value of the item being offered minus the value of the imported content in the item (including all customs duties) as a proportion of the total value, in percent.

*“*False declaration will be in breach of Code of Integrity under Rule 175(1)(i)(h) of the General Financial Rules for which a bidder or its successors can be debarred for up to two years as per Rule 151 (iii) of the General Financial Rules along with such other actions as may be permissible under law.”*

Yours Faithfully,

(Signature of the Bidder, with Official Seal)

Checklist for BIDDERS

BIDDERS to indicate whether the following are enclosed/mentioned by striking out the non-relevant option

Envelope-1(Technical-Bid)				
(Following documents to be provided as single PDF file)				
Sl. No.	Documents	Content	File Types	Document Attached
1	Technical Bid	Proof of EMD Submitted on E-Wizard Portal as per Annexure A	.PDF	(Yes /No)
2		Manufacturer’s Authorization Form as per Annexure-‘B’	.PDF	(Yes /No)
3		Previous supply order format as per Annexure-‘C’	.PDF	(Yes /No)
4		Bidder Information form as per Annexure-‘D’	.PDF	(Yes /No)
5		Declaration Regarding Clean Track/No Legal Action as per Annexure-‘E’	.PDF	(Yes /No)
6		Acceptance Of Tender Terms as per Annexure- ‘F’	.PDF	(Yes /No)
7		Relation Certificate as per Annexure- ‘G’	.PDF	(Yes /No)
8		DPIIT Registration Declaration - Annexure ‘H’	.PDF	(Yes /No)
		Declaration for Local Content- Annexure ‘I’		
9		A copy of the Un-priced Commercial bid	. PDF	(Yes /No)
10		List of deliverables as per Chapter- 5, along with the Technical Brochures and Commercial Terms and Conditions	.PDF	(Yes /No)
11		All documents as per Chapter 1 Point No - 4.1.	.PDF	(Yes /No)
12	All Documents as per Chapter 2 Point No 3 – Eligibility Criteria.	.PDF	(Yes /No)	
Envelope-2(Financial-Bid)				
Sl. No.	Documents	Content	File Types	Document Attached
1	Financial Bid	Price bid should be submitted in .xls Format as per Chapter 6	.xls	(Yes /No)