



Indian Institute of Technology Bhilai (IIT Bhilai)  
GEC Campus, Old Dhamtari Road, Sejbahar, Raipur, Chhattisgarh, India – 492015  
[www.iitbhilai.ac.in](http://www.iitbhilai.ac.in)

**NOTICE INVITING TENDER**  
**FOR**  
**“SUPPLY AND INSTALLATION OF EQUIPMENT FOR MICROGRID & RENEWABLE INTEGRATION**  
**STUDIES & RESEARCH”**

Indian Institute of Technology Bhilai (IIT Bhilai), an autonomous body under the Ministry of Human Resource Development, Govt of India invites e-bid for **“Supply and Installation of Equipment for Microgrid & Renewable Integration Studies & Research”**. Tender Documents may be downloaded from Central Public Procurement Portal ([URL:http://eprocure.gov.in/eprocure/app](http://eprocure.gov.in/eprocure/app)). Bidders are advised to submit duly filled bids as per the following schedule:

Invitation for Bids (IFB) No & date	<b>IITBh/Goods/EECS/2020-21/071 Dated: 28/09/2020</b>
Place of Supply etc.	Indian Institute of Technology Bhilai GEC Campus, Old Dhamtari Road, Sejbahar, Raipur-492015, Chhattisgarh
Pre-bid Meeting date	October 8, 2020, 1200 Hrs Any query (including technical) related to pre-bid meeting, mail should be reached on or before 08/10/2020 11:00 AM
Bid Submission Start date	October 15, 2020, 1100 Hrs
Last Date of Submission of Bids	October 26, 2020, 1500 Hrs
Date of Opening of Technical Bids	October 27, 2020, 1515 Hrs
Tender Fee & EMD	Tender Fee - Rs. 1,500/- & EMD - Rs. 1,22,000/- to be payable through SBI i-collect Link <a href="https://www.onlinesbi.com/sbicollect/icollecthome.htm?corpID=646425">https://www.onlinesbi.com/sbicollect/icollecthome.htm?corpID=646425</a> Step1. Click Check Box to proceed for payment. Step2. Select S and P Tender Fee and EMD. Step3. Fill all Details and Submit (This online payment receipt may be provided in the on line Technical e-bid)
Place of Opening of Technical Bids	Online - E-procurement Portal
Contact information (Tender Inviting Authority)	Special Administrative Officer Indian Institute of Technology Bhilai, GEC Campus, Old Dhamtari Road, Sejbahar, Raipur 492015, Chhattisgarh Phone: +91-771-2973622, Email: <a href="mailto:sp@iitbhilai.ac.in">sp@iitbhilai.ac.in</a> For technical enquiries: Email: <a href="mailto:pagnihotri@iitbhilai.ac.in">pagnihotri@iitbhilai.ac.in</a> / <a href="mailto:naveenkr@iitbhilai.ac.in">naveenkr@iitbhilai.ac.in</a>

## **Supply and Installation of Equipment for Microgrid & Renewable Integration Studies & Research**

### **CALL INSTRUCTIONS FOR ONLINE BID SUBMISSION**

The bidders are required to submit their bids electronically on the CPP Portal using valid Digital Signature Certificates. Certain instructions are given below to guide the bidders for registration on the CPP Portal, prepare their bids in accordance with the requirements and submitting their bids online on the CPP Portal.

#### **Registration Process**

- 1) If a bidder is not registered at the eProcurement portal, such bidder should enrol/register on the e-Procurement module of the portal <http://eprocure.gov.in/eprocure/app> by clicking on the link "Click here to Enrol". Enrolment on the CPP Portal is free of charge.
- 2) The bidders to choose a unique username and assign a password for their accounts. Bidders are advised to register their valid email address and mobile numbers as part of the registration process. These would be used for any communication from the CPP Portal.
- 3) Bidders to register upon enrolment their valid Digital Signature Certificate (Class II or Class III Certificates with signing key usage) issued by any Certifying Authority recognized by CCA India with their profile.
- 4) Only one valid DSC should be registered by a bidder. Please note that the bidders are responsible to ensure that they do not lend their DSCs to others which may lead to misuse. *Foreign bidders are advised to refer "DSC details for Foreign Bidders" for Digital Signature requirements on the portal.*
- 5) Bidder then logs in to the site through the secured log-in by entering their user ID / password and the password of the DSC / eToken.

#### **Tender Documents Search**

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

#### **Bid Preparation**

- 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) Please note the number of covers in which the bid documents have to be submitted, the number of documents - including the names and content of each of the document that need to be submitted. Any deviations from these may lead to rejection of the bid.

## **Supply and Installation of Equipment for Microgrid & Renewable Integration Studies & Research**

- 4) Bidder, in advance, should get ready the bid documents to be submitted as indicated in the tender document / schedule and generally, they can be in PDF / XLS / RAR / DWF formats. Bid documents may be scanned with **100 dpi with black and white option**.
- 5) To avoid the time and effort required in uploading the same set of standard documents which are required to be submitted as a part of every bid, a provision of uploading such standard documents (e.g. PAN card copy, annual reports, auditor certificates etc.) has been provided to the bidders. Bidders can use “My Space” area available to them to upload such documents. These documents may be directly submitted from the “My Space” area while submitting a bid, and need not be uploaded again and again. This will lead to a reduction in the time required for the bid submission process.

### **Bid Submission**

- 1) Bidder to log into the site well in advance for bid submission so that he/she uploads the bid in time i.e. on or before the bid submission time. Bidder will be responsible for any delay due to other issues.
- 2) The bidder to digitally sign and upload the required bid documents one by one as indicated in the tender document.
- 3) Bidder to select the payment option as “Off-line” to pay the tender fee/ EMD wherever applicable and enter details of the instrument in SBI i-collect.
- 4) A standard BoQ format has been also uploaded along with the tender document to be filled by all the bidders. Bidders to note that they should necessarily submit their financial bids in the prescribed format and no other format is acceptable.
- 5) The server time (which is displayed on the bidders’ dashboard) will be considered as the standard time for referencing the deadlines for submission of the bids by the bidders, opening of bids etc. The bidders should follow this time during bid submission.
- 6) All the documents being submitted by the bidders would be encrypted using PKI encryption techniques to ensure the secrecy of the data, which cannot be viewed by unauthorized persons until the time of bid opening.
- 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 bids, the portal will give a successful bid submission message & a bid summary will be displayed with the bid no. and the date & time of submission of the bid with all other relevant details.
- 9) Kindly add scanned PDF of all relevant documents in a single PDF file of compliance sheet.

### **Assistance to Bidders**

- 1) Any queries relating to the 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 CPP Portal in general may be directed to the 24x7 CPP Portal Helpdesk. The contact number for the helpdesk is **0120-4200462, 0120-4001002, 0120-4001005**.

### **General Instructions to the Bidders**

- The tenders will be received online through the portal <https://eprocure.gov.in/eprocure/app>. In the Technical Bids, the bidders are required to upload all the documents in .pdf format.
- Possession of Valid Class II/III Digital Signature Certificate (DSC) in the form of smart card/

## Supply and Installation of Equipment for Microgrid & Renewable Integration Studies & Research

e-Token in the company's name is a prerequisite for registration and participating in the bid submission activities through <https://eprocure.gov.in/eprocure/app>. Digital Signature Certificates can be obtained from the authorized certifying agencies, details of which are available in the web site <https://eprocure.gov.in/eprocure/app> under the link 'Information about DSC'.

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

### **LIST OF DOCUMENTS TO BE UPLOADED IN E-PROCUREMENT PORTAL**

- 1) Bidder should take into account notifications, corrigendum published, if any 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. Any deviations from these may lead to rejection of the bid.
- 3) The two-bid system will be followed for this tender. In this system, online offer should be submitted under **TWO-BID System** in two separate e-packets i.e. **"Technical eBid" and "Commercial eBid"**.

### **Online Envelope No. 1: "Technical Bid" shall contain (Pdf format only)**

- 1) Scanned copy of Payment Advice (with DU number) for **Tender Fee of Rs. 1,500/- (Rupees Fifteen hundred only)** and **EMD of Rs. 1,22,000/- (Rupees One Lakh Twenty Two Thousand only)**

#### **Payment Instructions:**

Tender fee and EMD should be paid through SBI i-collect Link given below:

<https://www.onlinesbi.com/sbicollect/icollecthome.htm?corpID=646425>

Step1. Click Check Box to proceed for payment.

Step2. Select S and P Tender Fee and EMD.

Step3. Fill all Details and Submit

(This online payment receipt may be provided in the online Technical e-bid).

#### **MSME Exemption:**

- > **If an MSME is authorised by MSME/NSIC/DIC to manufacture the item/equipment in a specific category as per the tender requirement, those MSMEs are exempted from payment of EMD, subject to the submission of valid MSME/NSIC/DIC certificate.**
  - > **If a bidder fails to upload a valid MSME certificate/ EMD payment advice, their bid maybe summarily rejected.**
- 2) A scanned copy of Authorization letter with proper seal and signature of the authorised person (with name, designation, email id & contact no.), as per the format attached at Annexure – C.
  - 3) A scanned copy of Certificate of Incorporation, Partnership Deed/ Memorandum and Articles of Association/ any other equivalent document showing date and place of incorporation, as applicable.
  - 4) A scanned copy of the commercial bid without prices (prices blocked) and copy of commercial terms & conditions (in details) as included in the commercial bid. IIT Bhilai reserves the right to reject the bid in case of discrepancy observed in the unpriced

## **Supply and Installation of Equipment for Microgrid & Renewable Integration Studies & Research**

commercial bid and the actual commercial bid.

- 5) A scanned copy of audited balance sheet or the certificate from a Chartered Accountant for the financial year 2019-20, 2018-19 and 2017-18 indicating the annual sales turnover of the bidder. Bidder firm should not have suffered any financial loss for more than one year during the last three years, ending on 'The Relevant Date'.
- 6) The detailed technical specification, make, model, part number & compliance of each item offered supported by the printed catalogue/ leaflet published by the Principal Manufacturer.
- 7) Undertaking to the effect that a Performance Guarantee of 10% of the order value will be submitted in case IIT Bhilai decides to place the Purchase Order.
- 8) Undertaking to the effect that the terms and conditions, clauses etc. stipulated in this tender are acceptable.
- 9) Other documents necessary in support of eligibility criteria (as per Section-II - Instructions to Bidders-ITB), product catalogues, brochures etc.

*IIT Bhilai reserves the right to reject the bid if any of the above listed document/s is not submitted.*

### **Online Envelope 2: "Commercial Bid" shall contain**

- 1) The Commercial Bid should be filled properly in the .xls uploaded in eProcurement portal
- 2) In case the bidder requires any clarifications/ information, they may write to [sp@iitbhilai.ac.in](mailto:sp@iitbhilai.ac.in).
- 3) Commercial bids of the technically qualified bidders only will be opened in the eProcurement portal.
- 4) Commercial bids must be offered in the format attached.
- 5) The applicable exact rates of Taxes will be added as per the format attached.
- 6) In case of any mistake or error in calculations or any discrepancy in price quoted in words and figures, the LOWEST amount will be considered for comparison. If this lowest price is not acceptable to the bidder, their bid will be rejected. In this case, IIT Bhilai reserves the right to forfeit their EMD.
- 7) IIT Bhilai reserves the right to place part orders.

**Supply and Installation of Equipment for Microgrid & Renewable Integration Studies &  
Research**

**SECTION-I: INSTRUCTIONS TO BIDDERS (ITB)**

**1. Locations for the Supply and Installation & Warranty Services**

The entire products as described in Schedule of Requirements at **Section - V** must be supplied, installed & supported at Indian Institute of Technology, Bhilai.

2. All the items covered in the Schedule of Requirements at Section – V must be supplied within **12-15 weeks** from the date of placement of work/ purchase order. Supplier should complete the installation within two Weeks from the date of supply.

**3. Amendment to Bidding Documents**

3.1 At any time prior to the deadline for submission of bids, IIT Bhilai may, for any reason, whether on its own initiative or in response to the clarification request by a prospective bidder, modify the bid document.

3.2 The amendments to the tender documents, if any, will be notified by release of Corrigendum Notice on the institute website against this tender. The amendments/ modifications will be binding on the bidders.

3.3 IIT Bhilai at its discretion may extend the deadline for the submission of bids if it thinks necessary to do so or if the bid document undergoes changes during the bidding period, in order to give prospective bidders time to take into consideration the amendments while preparing their bids.

**4. Preparation of Bids**

Bidder should avoid, as far as possible, corrections, overwriting, erasures or postscripts in the bid documents. In case however, any corrections, overwriting, erasures or postscripts have to be made in the bids, they should be supported by dated signatures of the same authorized person signing the bid documents. However, bidder shall not be entitled to amend/ add/ delete/ correct the clauses mentioned in the entire tender document.

**5. Forfeiture of EMD**

5.1 In case of the bidder whose offer is accepted, the EMD will be returned on submission of Security Deposit. However, if the return of EMD is delayed for any reason, no interest/ penalty shall be payable to the bidder.

5.2 The successful bidder, on award of contract/ order, must send the contract/ order acceptance in writing, within 15 days of award of contract/ order, failing which the EMD will be forfeited and the order will be cancelled.

5.3 If the bidder withdraws the bid during the period of bid validity specified in the tender.

**6. Period of validity of bids**

6.1 Bids shall be valid for minimum 180 days from the date of submission. A bid valid for a shorter period shall stand rejected.

6.2 IIT Bhilai 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 requests without forfeiting the EMD/ BG. A bidder agreeing to the request for extension will not be permitted to modify his bid.

**7. Deadline for Submission of Bids – online only**

7.1 The Bid documents shall be neatly arranged. They should not contain any terms and conditions, printed or otherwise, which are not applicable to the Bid. *The conditional bid will be summarily rejected.*

7.2 Bids must be received by IIT Bhilai before the due date and time at the address specified

## **Supply and Installation of Equipment for Microgrid & Renewable Integration Studies & Research**

in the tender document.

7.3 IIT Bhilai may extend this deadline for submission of bids by amending the bid documents and the same shall be suitably notified on its website.

7.4 IIT Bhilai shall not be responsible and liable for **the delay in receiving the bid** for whatsoever reason.

### **8. Bid Opening & Evaluation of Bids**

8.1 The technical bids will be evaluated in two steps.

a. The bids of eligibility bidders only will be evaluable based on eligibility criteria mentioned in Section III of the tender documents.

b. The technical bids of only the shortlisted eligible bidders shall be evaluated based on technical specifications stipulated at Section – V

8.2 The bidders whose technical bid is found to meet both the requirements as specified above will qualify for opening of the commercial bid.

8.3 The duly constituted Tender Evaluation Committee (TEC) shall evaluate the bids. The TEC shall be empowered to take appropriate decisions on minor deviations, if any.

8.4 The bidder's name, bid prices, discounts and such other details considered as appropriate by IIT Bhilai, will be announced at the time of opening of the commercial bids.

### **9. Comparison of Bids**

9.1 Only the short-listed bids from the technical evaluation shall be considered for commercial comparison.

9.2 The bids shall be evaluated on the basis of the total prices including all taxes and duties as per the details mentioned in section I (10.2) and section VI (8).

9.3 In the comparison of bids, preference will be given to Class – I Local Suppliers as per the provisions of the Order no. P-45021/2/2017-PP (BE-II) on Public Procurement (Preference to Make in India), 2017 dated 04.06.2020 issued by Department for Promotion of Industry and Internal Trade. Provisions of the order can be referred from the link given below:

<https://dipp.gov.in/sites/default/files/PPP%20MII%20Order%20dated%204th%20June%202020.pdf>

9.4 The comparison between the indigenous and the foreign offers shall be made on FOR destination basis and CIF/CIP basis respectively. However, the CIF/CIP prices quoted by any foreign bidder shall be loaded further with 15% of the CIF/CIP value towards customs duty, IGST and other statutory levies, customs clearance, inland transportation, currency fluctuation etc.

9.5 For the purpose of comparison of prices on an equal basis, the prices quoted in foreign currency (if any) by bidders shall be converted to equivalent Indian Rupees. The exchange rate as on the date of opening of commercial bids shall be considered for the purpose of comparison.

### **10. Purchase Order**

10.1 IIT Bhilai shall issue purchase order to the eligible bidder whose technical bid has been accepted and determined as the lowest evaluated commercial bid based on the Grand Total calculated of all items as mentioned in section VI(8) + taxes of the Commercial Bids. However, IIT Bhilai reserves the right and has sole discretion to reject the lowest evaluated bid.

## **Supply and Installation of Equipment for Microgrid & Renewable Integration Studies & Research**

10.2 If more than one bidder happens to quote the same lowest price, IIT Bhilai reserves the right to decide the criteria and further process for awarding the contract, decision of IIT Bhilai shall be final for awarding the contract.

### **11. End User Certificate (if applicable)**

IIT Bhilai can provide end user certificate in advance in order to save on time/ delivery period. However, this does not mean that the order shall be placed on the same bidder. The bidder may submit the format of end user certificate at the earliest, preferably along with the technical bid.

### **12. Purchaser's Right to amend / cancel**

12.1 IIT Bhilai reserves the right to amend the eligibility criteria, commercial terms & conditions, Scope of Supply, technical specifications etc.

12.2 IIT Bhilai reserves the right to cancel the entire tender without assigning any reasons thereof.

12.3 IIT Bhilai reserves the right to place part orders.

### **13. Corrupt or Fraudulent Practices**

13.1 It is expected that the bidders who wish to bid for this project have the highest standards of ethics.

13.2 IIT Bhilai will reject bid if it determines that the bidder recommended for award has engaged in corrupt or fraudulent practices while competing for this contract.

13.3 IIT Bhilai may declare a vendor ineligible, either indefinitely or for a stated duration, to be awarded a contract if it at any time determines that the vendor has engaged in corrupt and fraudulent practices during the award / execution of contract.

### **14. 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 Bhilai shall be final and binding on all parties.

**\*\*\*(END OF SECTION I)\*\*\***



**Supply and Installation of Equipment for Microgrid & Renewable Integration Studies &  
Research**

**SECTION-II: ADDITIONAL INSTRUCTIONS TO BIDDERS (AITBs)**

- (a) Delivery: The items be supplied within 12-15 weeks from the date of receipt of the Purchase Order.
- (b) Authorization certificate from all the original equipment manufacturers stating their support for the vendor during the equipment warranty period. Warranty of each component should be mentioned separately, if applicable.
- (c) **The Competent Authority reserves the right to reject any or all bids, amend/withdraw any terms and conditions in the Tender document or to cancel the Tender at any stage without assigning any reason.**

**\*\*\* (END OF SECTION II) \*\*\***

## Supply and Installation of Equipment for Microgrid & Renewable Integration Studies & Research

### **SECTION-III: ELIGIBILITY AND QUALIFICATION CRITERIA**

1. The bidder must be either OEM or authorized dealer of the original manufacturer of the proposed equipment in India. In case of an authorized dealer, the technical quote should contain a valid original certificate provided by the original manufacturer in the name of IIT Bhilai.
2. The bidder must have supplied any of the items mentioned from S.no. 1 to S.no. 7 (as per the technical specifications mentioned in the present tender) to at least two or more R&D institutes in India like IIT or CSIR labs before for similar application. Documentary evidence for the same to be submitted along with tender documents. The bidder should also give the contact address of the users along with email addresses and phone numbers where the similar system has already been installed.
3. In addition to the above eligibility criteria, bidders should fulfil the minimum local content eligibility criteria as per the provisions of the Order no. P-45021/2/2017-PP (BE-II) on Public Procurement (Preference to Make in India), 2017 dated 04.06.2020 issued by Department for Promotion of Industry and Internal Trade.
4. For the purpose of claiming purchase preference, the bidders should have the minimum local content of at least 50% and margin of preference shall be 20%. Bidders should submit a self-certification (as per annexure -G) that the item meets the minimum local content and shall give details of such local value addition.

If in the view of bidder, any exemption/ relaxation is applicable to them from any of the eligibility requirements, under any Rules/ process/ Guidelines/ Directives of Government of India, bidder may submit their claim for the applicable exemption/ relaxation, quoting the valid Rule/ process/ Guidelines/ Directives. In this case the bidder must submit necessary and sufficient documents along with the technical bid, in support of his claim. The applicability of exemptions and /or validity of documents submitted by the bidders will be evaluated by the bid evaluation committee during technical evaluation of bids.

**Note:** *The bidders should provide sufficient documentary evidence to support the eligibility Criteria. IIT Bhilai reserves the right to reject any bid not fulfilling the eligibility criteria.*

**\*\*\*(END OF SECTION III)\*\*\***

# Supply and Installation of Equipment for Microgrid & Renewable Integration Studies & Research

## SECTION-IV: GENERAL CONDITIONS OF CONTRACT (GCC)

### 1. Prices

- 1.1 Prices should be quoted preferably in FOR and should be inclusive of all taxes and duties.
- 1.2 The statutory taxes and duties applicable at the time of supply of material shall be applicable and will be reimbursed on submission of requisite documents/ proofs as the relevant Government Notification.
- 1.3 IIT Bhilai is eligible for concessional rate of GST i.e. @ 5% under the Notification No. 45/2017, Central Tax (Rate), State Tax (Rate) and/or 47/2017, Integrated Tax (Rate), dated 14.11.2017 subject to applicability of the cited clause of GST on items based on directives of DSIR and is also eligible for concessional rate of custom duty. The Customs Duty Exemption certificate (CDE) will be issued in the name of supplier abroad and only if the order is placed in foreign currency. **Both GST exemption and CDEC certificates will not be issued for the same purchase order.**
- 1.4 In case due to any error/ oversight, the GST/Customs Duty quoted by the bidder is less than the actual rate as per tariff, the bidder will not be permitted to rectify the error/oversight. The orders/ contract will be placed for the total amount including the (lower) rate/s quoted by the bidder, with reduced basic amount to the extent of difference in tax/duty amount, so that the total amount (basic + actual rate as per tariff), remains same(quoted basic + quoted rate). The difference amount payable, if any, between the quoted rate and actual rate as per tariff (without exemption) shall be borne by the bidder. The exemption certificate, if applicable, will be issued for the reduced basic amount only.

### 2. Software Licenses

The software licenses, if any, shall be required in the name of the user. The licenses shall contain paper licenses and at least one set of media (CDs) – wherever applicable. All software licenses quoted should be of perpetual.

### 3. Performance Bank Guarantee (PBG)

The successful bidder has to submit performance security for an amount of 10% of the order value in the form of BG from any nationalized bank within 14 (Fourteen) days from the date of award of contract and should be valid for 60 days beyond the date of completion of all contractual obligation including warranty obligation. And it will be returned after 60 days beyond the warranty period.

### 4. Completeness Responsibility

Notwithstanding the scope of work, engineering, supply and services stated in bid document, any equipment or material, engineering or technical services which might not be even 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 performance of the equipment in accordance with the specifications are treated to be included in the bid and has to be performed by bidder. The items which are over & above the scope of supply specified in the Schedule of Requirements may be marked as “Optional Items”.

### 5. Warranty

All the equipment's and components supplied must have 1 (one) year warranty covering all

## **Supply and Installation of Equipment for Microgrid & Renewable Integration Studies & Research**

parts & labour starting from the date after the successful installation, during the warranty period, Bidder will have to undertake comprehensive maintenance of the entire hardware components, software, equipment, support and accessories supplied by the Bidder at the place of installation of the equipment. The Supplier warrants that all the Goods are new, unused, and of the most recent or current models, and that they incorporate all recent improvements in design and materials, unless provided otherwise in the Contract. The supplier further warrants that all Goods supplied under this contract shall have no defect arising from design, materials or workmanship (except when the design and/or material is required by the Purchaser's specifications) or from any act or omission of the supplier. The warranty should be comprehensive on site, repair/replacement basis free of cost. The defects, if any, during the guarantee/warranty period are to be rectified free of charge by arranging free replacement wherever necessary. Goods requiring warranty replacements must be replaced on a free of cost basis. Collecting of faulty Hardware from onsite and provisioning the replacement of Hardware under warranty at onsite shall be the responsibility of the supplier. IIT Bhilai reserves the right to invoke the Performance Bank Guarantee submitted by bidder, in case a) Supplied equipment & Software components fail to achieve the performance as stipulated in this document and / or b) The bidder fails to provide the warranty and other services in scheduled time frame, as stipulated in this document, penalty clauses mentioned under point 9 of this tender shall be applicable.

### **6. Training:**

Suppliers need to provide Free of Charge onsite training on applications and maintenance should be provided to at least five persons for a minimum of two days by the certified company engineers. IIT Bhilai will not bear any training or living expenditure in this regard. The Supplier should arrange for regular visits to the IIT Bhilai campus by its technical team and assist in the maintenance of the item/equipment within warranty period.

### **7. Payments**

- 7.1. For INR Payment by NEFT – 100% against delivery, Installation, commissioning, acceptance by IIT Bhilai and submission of Performance bank Guarantee within 30 Days.
- 7.2. For foreign currency payments: 90% of the payment will be made through irrevocable Letter of Credit (LC) at site. 10% on successful installation, commissioning and acceptance by IITBh through NEFT, any loss due to fluctuation in foreign exchange rates will be at beneficiary account. The LC operating charges inside India will be to IITBh account and those outside India will be to beneficiary account. The LC confirmation charges & LC amendment charges, if requested/ required, will be to beneficiary account.
- 7.3. Payments towards AMC shall be paid at the end of each quarter/ year.

### **8. Ship to**

The Director,  
Indian Institute of Technology Bhilai,  
GEC Campus, Sejbahar  
Raipur – 492 015 Chhattisgarh, INDIA

### **9. Liquidated Damage**

IIT Bhilai reserves the right to levy penalty @ of 0.5 % of order value per week of delay in supply and /or installation, beyond the schedule as mentioned in this tender document

## **Supply and Installation of Equipment for Microgrid & Renewable Integration Studies & Research**

subject to maximum of 10% of the order value. IIT BHILAI reserves the right to cancel the order in case the delay is more than 06 weeks. The delay in delivery and/or installation not attributed to supplier viz. delay in site preparation, delay in submission of required documents etc. and the conditions arising out of Force Majeure will not be considered for the purpose of calculating penalties.

### **10. Force Majeure**

IIT Bhilai may consider relaxing the penalty and delivery requirements, 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 / state agencies, the direct and indirect consequences of wars (declared or undeclared), hostilities, national emergencies, civil commotion and strikes at successful Bidder's premises or any other act beyond control of the bidder.

### **11. Arbitration**

All disputes/claims of any kind arising out of supply, commissioning, acceptance, warranty maintenance etc. under this Contract, shall be referred by either party (IIT Bhilai or the bidder) after issuance of 30 days' notice in writing to the other party clearly mentioning the nature of dispute to the Sole Arbitrator appointed by IIT Bhilai. The venue for arbitration shall be specified in the purchase order/agreement. The arbitration proceedings shall be conducted in English and as per the provisions of Indian Arbitration and Conciliation Act, 1996. The decision of the Arbitrator shall be final and binding on both the parties.

### **12. Jurisdiction**

The disputes, legal matters, court matters, if any shall be subject to Raipur jurisdiction only.

### **13. Indemnity**

Selected bidder shall save, indemnify and hold harmless IIT Bhilai from any third-party Govt. Claims, losses penalties, if any, arising in connection with this Contract.

### **14. Assignment**

Selected bidder/ Party shall not assign, delegate or otherwise deal with any of its rights or obligations under this Contract without prior written permission of IIT Bhilai.

### **15. Severability**

If any provision of this Contract is determined to be invalid or unenforceable, it will be deemed to be modified to the minimum extent necessary to be valid and enforceable. If it cannot be so modified, it will be deleted and the deletion will not affect the validity or enforceability of any other provision.

### **16. Relocation**

The bidder has to stand guarantee for the relocation of the equipment once the permanent campus of IIT Bhilai gets ready for shifting. This is the bidder's responsibility to dismantle the set up in the temporary campus and reinstall it to our Kutelabhata Campus which is approx. 45 km away. The dismounting, packing, insurance, transport, material handling system support, unpacking, re-installation, and commissioning of the system with test running and its

**Supply and Installation of Equipment for Microgrid & Renewable Integration Studies & Research**

conformity must be carried out by the bidder. Necessary charges for the same may be shown separately in their quotation. IIT Bhilai is likely to be shifted to its permanent campus within 03 years.

**17. Unloading**

The bidder should ensure to unload all the materials (equipment and other related accessories etc) to the installation site at IIT Bhilai (third floor of the academic building). Unloading of the goods at IIT Bhilai is the responsibility of the bidder. No manpower will be provided by IIT Bhilai.

**\*\*\*(END OF SECTION IV)\*\*\***

**Supply and Installation of Equipment for Microgrid & Renewable Integration Studies & Research**

**SECTION – V: SCHEDULE OF REQUIREMENTS**

S.No.	Particulars of the item required	Qty Required
1	Capability Enhancement of the Existing Real time Simulator Model No OP 4510 available at EE Dept IIT Bhilai in form of addition of Analog Input Channels and Analog Output	1 No
2	HIL CONTROLLER INTERFACE WITH SENSOR MODULES (8 CURRENT & 8 VOLTAGE SENSORS)	1 No
3	GRID SIMULATOR	1 No
4	DFIG BASED WIND EMULATOR	1 No
5	3KVA INVERTER FOR BATTERY BANK	1 No
6	PV EMULATOR	1 No
7	GRID TIED INVERTER FOR PV EMULATOR	1 No

**Technical Specifications for Equipment for Microgrid & Renewable Integration Studies & Research**

**SPECIFICATIONS OF PRODUCTS FOR MICROGRID & RENEWABLE INTEGRATION STUDIES & RESEARCH**

**1.** Capability Enhancement of the Existing Real time Simulator Model No OP 4510 available at EE Dept IIT Bhilai: Capability Enhancement should be in form of addition of Analog Input Channels and Analog Output Channels as per the following details to the existing Opal-RT Real Time Simulator. These New Analog I/O channels need to be interfaced with the existing Real Time Simulator in our department hence these should be compatible & Controllable by it.

Analog Input Channels	<ul style="list-style-type: none"> <li>· 32-input channels</li> <li>· Resolution 16-bit ADC</li> <li>· 2.5 <math>\mu</math>s conversion time</li> <li>· <math>\pm</math>20 V</li> <li>· All channels simultaneously captured/sampled</li> <li>· Reconfigurable Voltage Range</li> <li>· Short Circuit Protected</li> <li>· FPGA Based Control</li> </ul>
Analog Output Channels	<ul style="list-style-type: none"> <li>· 16-output channels</li> <li>· Resolution 16-bit ADC</li> <li>· 1 <math>\mu</math>s conversion time</li> <li>· <math>\pm</math>16 V</li> <li>· 10mA</li> <li>· All channels simultaneously captured/sampled</li> <li>· Short circuit protected</li> <li>· Reconfigurable Voltage Range</li> <li>· FPGA Based Control</li> </ul>

**2. HIL CONTROLLER INTERFACE WITH SENSOR MODULES (8 CURRENT & 8 VOLTAGE SENSORS)**

- Number of Current Channels- 8
- Number of Voltage Channels- 8

## Supply and Installation of Equipment for Microgrid & Renewable Integration Studies & Research

- I/O Connector, DB37, 4mm Isolated banana jacks
- Current Sensor: Input range: 15A  
Signal Output Range:  $\pm 10V$   
Isolation: Galvanic  
Bandwidth: DC to 100Khz
- Voltage Sensor: Input range: Up to 600 V  
Signal Output:  $\pm 10V$   
Bandwidth: DC to 100Khz
- Capable of interfacing at least 8 high current and 8 high voltage signals with the real time simulator.
- Each current channel must be capable of taking at least 15 A.
- Each voltage channel must be able to handle at least 250 V.

### 3. GRID SIMULATOR

- It should be useful for Renewable Energy Integration Studies (Grid Connected) & PHIL Applications)
- It should be Bi-directional & have Four Quadrant Operations.
- It needs to be interfaced with the existing Real Time Simulator in our department hence it should be compatible, Controllable & Triggered by it.
- Input Voltage : 3-phase, 415V, 50Hz
- Input Voltage Tolerance : +10%, -15%
- Input Frequency : 50Hz
- Input Frequency Tolerance :  $\pm 3\%$
- I/P Current Max : 17.5A
- I/P Power Factor : 0.95 & higher at Rated conditions
- Output Voltage : 3-phase, 4 wire, isolated 415V
- Output Apparent Power : 11.25KVA
- Output power : 9 kW
- Max Output Current : 15.6A
- Output Frequency : 50HZ,  $\pm 2$ Hz
- Switching Frequency : 2 to 8 kHz
- Ambient Temperature : 10-45°C (It is designed to work at 50 Deg)
- Humidity : 95% RH or less (no condensation)
- Device : IGBT
- Grid Side Inverter Control : DSP based Field oriented control
- Grid side Test points : 3 voltages & currents
- Output side Test Points : 3 voltages & currents
- Protection : Input Under voltage  
Input Over voltage  
Input over current  
Input short circuit  
Output under voltage  
Output over voltage  
Output over current  
Output short circuit  
Over temperature

### 4. DFIG BASED WIND EMULATOR

- DFIG based slip ring induction generator
- DSP control for 6.0 kVA system
- Sensor less vector control based RSI



## **Supply and Installation of Equipment for Microgrid & Renewable Integration Studies & Research**

- Vector control based FEC
- IGBT based VSI
- 2 modes of operation: GRID connected/Stand alone
- Sub-synchronous & Super synchronous operation
- Automation through state of the art PLC
- Graphical HMI to monitor the status & to enter system parameters
- DAC outputs to monitor & study the controller , Eg: D axis current, Q axis current etc
- Isolated test points to observe the Converter/Inverter status Eg: voltage, current, PWM gate signals etc
- Suitable for external controller interface
- 2 modes of prime mover control: Variable speed/Wind turbine simulator
- Protection
  - Dynamic short circuit protection.
  - Under voltage monitoring.
  - DC bus overvoltage protection
  - Overcurrent protection
  - Heat sink over temperature protection.

### **5. 3KVA INVERTER FOR BATTERY BANK**

- Inverter rating: 3kva
- Voltage : 3 phase 415v, 50 hz
- Isolation : yes through transformer
- Battery: 24v or 48 V. Total Kwhr of battery: min 5kwhr.
- Controller: DSP or microcontroller
- Power device: IGBTor MOSFET
- Front panel : keypad, lcd display
- Operation from RTS ,External Controller & factory supplied controller
- Protection: overvoltage , under voltage, over current, short circuit
- BMS: inbuilt battery management system

### **6. PV EMULATOR**

- Continuous Power rating: 5.0 KW
- Input specifications: 3-phase, 415V, 50HZ.
- Output specifications :( 0-300 max) V, (0-17max) A
- Switching frequency: (5 - 10) kHz
- Inverter current Ripple : <5% of full scale at full load
- Operating temperature: -10 to 50 oC
- Operating feature: Bidirectional Power flow
- Programmable VI profiles
- Operation from RTS, External Controller and factory supplied controller
- Emulated power terminals to be completely isolated from the grid.
- HMI
- Protections:
  - Dynamic short circuit
  - DC bus overvoltage,
  - AC side over current
  - Heat sink over temperature
- Appropriate Switchgear

## Supply and Installation of Equipment for Microgrid & Renewable Integration Studies & Research

### 7. GRID TIED INVERTER FOR PV EMULATOR

- Continuous Power rating: 5.0 KW
- Input specifications: (0-300 max) V, (0-17max) A
- Output specifications: 3-phase, 415V, 50HZ
- Switching frequency: (5 - 10) kHz
- Inverter current Ripple : <5% of full scale at full load
- Operating temperature: -10 to 50 °C
- Operating feature: Bidirectional Power flow
- Operation from RTS, External Controller & factory supplied controller
- Output power terminals to be completely isolated from the grid.
- Appropriate Switchgear
- It needs to be interfaced with the existing Real Time Simulator in our department hence it should be compatible, Controllable & Triggered by it.
- Protections:
  - Dynamic short circuit
  - DC bus overvoltage
  - AC side over current
  - Heat sink over temperature

NOTE: Department of Electrical Engineering and Computer Science at IIT Bhilai has **OP4510** real time simulator from Opal RT. Therefore, all the items from S.No. 1-7 listed above should be compatible, controllable, triggered, and interface by **OP4510** at the same time.

**Note: Bidder must submit a technical compliance sheet (with bidder specification, deviation & justification) and all the relevant documents to ensure that the technical specifications are compiled & all the conditions are fulfilled.**

**Note: For Technical Queries contact: [pagnihotri@iitbhilai.ac.in](mailto:pagnihotri@iitbhilai.ac.in) / [naveenkr@iitbhilai.ac.in](mailto:naveenkr@iitbhilai.ac.in)**

Authorized Signatory:  
(Signature of the Bidder, with Official Seal)

\*\*\* (END OF SECTION V) \*\*\*

**Supply and Installation of Equipment for Microgrid & Renewable Integration Studies &  
Research**

**SECTION – VI PRICE BID**

PRICE BID -Schedule of price bid in the form of BOQ format:

1. Financial Proposal/Commercial bid format is provided as BoQ along with this tender document at <https://eprocure.gov.in/eprocure/app>
2. Bidders are advised to download this BoQ.xls as it is and quote their offer/rates in the permitted column and upload the same in the commercial bid.
3. Bidder shall not tamper/modify downloaded price bid template in any manner. In case if the same is found to be tampered/modified in any manner, tender will be completely rejected and EMD shall be forfeited.
4. Bidder shall quote the actual GST rate applicable for the items/Setup.
5. **Any element of cost, taxes, duties levies etc. not specifically indicated in the BOQ, shall not be paid by the purchaser. If GST amount is not quoted in the BOQ (Financial Bid), the total cost will be treated as inclusive of GST. No further communication will be entertained later or else the EMD will be forfeited.**
6. The tender shall remain valid for acceptance for 180 days, from the date of tender opening.

**OTHER CONDITIONS FOR PRICE BIDS**

1. No unilateral revision in price will be admissible.
2. INCOTERMS (in case of imported item) should be clearly mentioned on the bid
3. Rates should be quoted in the accounting units (A/U) mentioned in this tender. Rates must be quoted clearly on a free delivery basis at IIT Bhilai and total value is also indicated in words.
4. Any optional indicated in techno-commercial bids must be priced separately.
5. In case spares/accessories are applicable, their list and price should be clearly indicated separately.
6. The price must be stated for each item separately. The percentage of reduction, in the unit price should also be quoted, should an order to that extent be placed with you.
7. The comparison between the indigenous and the foreign offers shall be made on FOR destination basis and CIF/CIP basis respectively. However, the CIF/CIP prices quoted by any foreign bidder shall be loaded further with 15% of the CIF/CIP value towards customs duty, IGST and other statutory levies, custom clearance, inland transportation, currency fluctuation etc.
8. The bids shall be evaluated on the basis of price quoted for Sl. No. 1 i.e. Supply of Equipment for Microgrid & Renewable Integration Studies & Research mentioned in the Commercial bid. Price quoted for the items from Sl. No. 2 and 3 will not be considered for deciding the L1 Price.
9. Any information related to essential accessories or optional accessories should be mentioned in the remarks column.

Signature of the Tenderer

Seal:

\*\*\* (END OF SECTION VI) \*\*\*

**Supply and Installation of Equipment for Microgrid & Renewable Integration Studies &  
Research**

**SECTION –VII ANNEXURES (STANDARD FORMATS)**

**ANNEXURE A**

**TENDER ACCEPTANCE LETTER**

**(To be submitted on Company Letter Head)**

Date: \_\_\_\_\_

To,

**The Director  
Indian Institute of Technology Bhilai,  
GEC Campus Sejbahar,  
Raipur 492015 Chhattisgarh**

**SUB:** Acceptance of Terms & Conditions of Tender.

**Tender Reference No./ Date:**

**Name of Tender / Work:**

**Dear Sir,**

1. I / We have downloaded / obtained the tender document(s) for the above mentioned 'Tender/Work' from the web site(s) namely: [www.iitbhilai.ac.in](http://www.iitbhilai.ac.in), <http://eprocure.gov.in/eprocure/app> as per your NIT / 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), schedules(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 / organization too has 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 do hereby declare that our Firm has not been blacklisted / debarred by any Govt. Department/Public sector undertaking.
6. I / We certify that all information furnished by our Firm is true & correct and in the event that the information is found to be incorrect/untrue or found violated, then your department/ organization 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 fully said earnest money deposit absolutely.

Yours Faithfully,

Authorized Signatory:  
(Signature of the Bidder, with Official Seal)

**Supply and Installation of Equipment for Microgrid & Renewable Integration Studies &  
Research**

**ANNEXURE B**

**AUTHORITY LETTER**

**AUTHORIZATION**

We \_\_\_\_\_(name of the bidder) hereby authorise Shri / Smt. \_\_\_\_\_ (name of the authorised person) to sign and submit the bid to IIT Bhilai against their Tender No. \_\_\_\_\_ dated \_\_\_\_\_. Shri / Smt. \_\_\_\_\_ (name) is also authorised to negotiate the terms and conditions pertaining to the said tender on behalf of M/s \_\_\_\_\_ (name of bidder). The specimen signature of Shri / Smt. \_\_\_\_\_ (name) is appended below.

Specimen Signature:

Name:

The undersigned is authorised to delegate the authority on behalf of M/s \_\_\_\_\_ (name of bidder), as stipulated above

For \_\_\_\_\_  
(name of bidder)

Signature & Company Seal:

Name:

Designation:

Email:

Mobile No.:

**Supply and Installation of Equipment for Microgrid & Renewable Integration Studies &  
Research**

**ANNEXURE C**

**SUMMARY INFORMATION SHEET**

<b>Sr. No.</b>	<b>Information heading</b>	<b>Details</b>
1	Name of the Vendor	
2	Name of the person(s) to whom, all references shall be made, regarding this TENDER/PROJECT (Authorized Signatory)	
3	Address of the Contact Person	
4	Designation of the Contact Person	
5	Telephone number(s) of the Contact Person.	
6	Mobile number of the Contact Person	
7	Fax number of the Contact Person	
8	Email ID(s) of the Contact Person	
9	Annual Turnover (in Lakhs): Last three Years (In INR)	1)
		2)
		3)
10	Years of Operation (in Years):	
11	PAN Number	
12	GSTN	
13	Bank Name and Account No.	
14	IFS Code	

Authorized Signatory:  
(Signature of the Bidder, with Official Seal)

**Supply and Installation of Equipment for Microgrid & Renewable Integration Studies &  
Research  
ANNEXURE D**

**PROFORMA OF BANK GUARANTEE**  
(on non-judicial paper of appropriate value)

To,

**The Director  
Indian Institute of Technology Bhilai,  
GEC Campus, Old Dhamtari Road  
Sejbahar, Raipur 492015 Chhattisgarh**

BANKS GUARANTEE NO:  
DATE:

Dear Sir(S)

This has reference to the Purchase Order No. \_\_\_\_\_ Dated \_\_\_\_\_ been placed by Indian Institute of Technology Bhilai (IIT Bhilai), Raipur on M/s \_\_\_\_\_ (Name & Address of Bidder) for supply, installation, commissioning and warranty of \_\_\_\_\_ (description of items) at client's site.

The conditions of this order provide that the Bidder shall,

1. Arrange to deliver the items listed in the said order to the consignee, as per details given in said order, and
2. Arrange to install and commission the items listed in said order at client's site, to the entire satisfaction of IIT Bhilai and
3. Arrange for the comprehensive warranty service support towards the items supplied by Bidder on site as per the warranty clause in said purchase order.

M/s (Name of bidder) has accepted the said purchase order with the terms and conditions stipulated therein and have agreed to issue the performance bank guarantee on their part, towards promises and assurance of their contractual obligations vide the Supply Order No. \_\_\_\_\_ M/s. \_\_\_ (name of vendor) holds an account with us and has approached us and at their request and in consideration of the promises, we hereby furnish such guarantees as mentioned hereinafter.

IIT Bhilai shall be at liberty without reference to the Bank and without affecting the full liability of the Bank hereunder to take any other undertaking of security in respect of the suppliers obligations and / or liabilities under or in connection with the said contract or to vary the terms vis-a – vis the supplier or the said contract or to grant time and or indulgence to the supplier or to reduce or to increase or otherwise vary the prices or the total contract value or to forebear from enforcement of all or any of the obligations of the supplier under the said contract and/or the remedies of IIT Bhilai under any security now, or hereafter held by IIT Bhilai and no such dealing(s) with the supplier or release or forbearance whatsoever shall have the effect of releasing the bank from its full liability of IIT Bhilai hereunder or of prejudicing right of IIT Bhilai against the bank.

This undertaking guarantee shall be a continuing undertaking guarantee and shall remain valid and irrevocable for all claims of IIT Bhilai and liabilities of the supplier arising up to and until

**Supply and Installation of Equipment for Microgrid & Renewable Integration Studies & Research**

\_\_\_\_\_ (date).

This undertaking guarantee shall be in addition to any other undertaking or guarantee or security whatsoever that IIT Bhilai may now or at any time have in relation to its claims or the supplier's obligations/ liabilities under and / or in connection with the said contract and IIT Bhilai shall have the full authority to take recourse to or enforce this undertaking guarantee in preference to the other undertaking or security(ies) at its sole discretion and no failure on the part of IIT Bhilai in enforcing or requiring enforcement of any other undertaking or security shall have the effect of releasing the bank from its full liability hereunder.

We\_\_\_\_\_(Name of Bank) hereby agree and irrevocably undertake and promise that if in your (IIT Bhilai's) opinion any default is made by M/s\_(Name of bidder) in performing any of the terms and /or conditions of the agreement or if in your opinion they commit any breach of the contract or there is any demand by you against M/s\_\_\_\_\_(Name of bidder), then on notice to us by you, we shall on demand and without demur and without reference to M/s\_\_\_\_\_(Name of bidder), pay you, in any manner in which you may direct, the amount of Rs.\_\_\_\_\_/-(Rupees\_\_\_\_\_

\_\_\_\_\_ Only ) or such portion thereof as may be demanded by you not exceeding the said sum and as you may from time to time require. Our liability to pay is not dependent or conditional on your proceeding against M/s\_(Name of bidder) and we shall be liable & obligated to pay the aforesaid amount as and when demanded by you merely on an intimation being given by you and even before any legal proceedings, if any, are taken against M/s\_\_\_\_\_(Name of bidder)

The Bank hereby waives all rights at any time inconsistent with the terms of this undertaking guarantee and the obligations of the bank in terms hereof shall not be anyway affected or suspended by reason of any dispute or disputes having been raised by the supplier (whether or not pending before any arbitrator, Tribunal or Court) or any denial of liability by the supplier or any order or any order or communication whatsoever by the supplier stopping or preventing or purporting to stop or prevent payment by the Bank to IIT Bhilai hereunder.

The amount stated in any notice of demand addressed by IIT Bhilai to the Bank as claimed by IIT Bhilai from the supplier or as suffered or incurred by IIT Bhilai on the account of any losses or damages or costs, charges and/or expenses shall as between the Bank and IIT Bhilai be conclusive of the amount so claimed or liable to be paid to IIT Bhilai or suffered or incurred by IIT Bhilai, as the case may be and payable by the Bank to IIT Bhilai in terms hereof.

You (IIT Bhilai's) shall full liberty without reference to us and without affecting this guarantee, postpone for any time or from time to time the exercise of any of the powers and rights conferred on you under the contract with the said M/s\_(Name of bidder) and to enforce or to forbear from endorsing any power or rights or by reason of time being given to the said M/s\_\_(name of bidder) which under law relating to the sureties would but for the provisions have the effect of releasing us.

You will have full liberty without reference to us and without affecting this guarantee, postpone for any time or from time to time the exercise of any of the powers and rights conferred on you under the contract with the said M/s\_(Name of bidder) and to enforce or to forbear from endorsing any power or rights or by reason of time being given to the said M/s\_\_(Name of bidder) which under law relating to the sureties would but for the provisions have the effect of



**Supply and Installation of Equipment for Microgrid & Renewable Integration Studies & Research**

releasing us.

Your right to recover the said sum of Rs.\_\_\_\_/- (Rupees\_\_only) from us in manner aforesaid will not be affected/ or suspended by reason of the fact that any dispute or disputes have been raised the said M/s\_\_\_\_\_(Name of bidder) and/ or that any dispute or disputes are pending before any officer, tribunal or court or Arbitrator.

The guarantee herein contained shall not be determined or affected by the liquidation or winding up, dissolution or change of constitution or insolvency of the said M/s\_\_\_\_\_(Name of bidder) but shall in all respects and for all purposes be binding and operative until payment of all dues to IIT Bhilai in respect of such liability or liabilities.

Our liability under this guarantee is restricted to Rs.\_\_\_\_\_-/- (Rupees\_\_\_\_\_Only). Our guarantee shall remain in force until unless a suit action to enforce a claim under guarantee is filed against us within six months from (which is date of expiry of guarantee) all your rights under the said guarantee shall be forfeited and we shall be relieved and discharged from all liabilities there under.

We have power to issue this guarantee in your favour under Memorandum and Articles of Association of our Bank and the undersigned has full power to do under the power of Attorney dated.

Notwithstanding anything contained herein:

- a) Our liability under this guarantee shall not exceed Rs\_\_\_\_\_(in words)
- b) This bank guarantee shall be valid up to\_\_\_\_\_ & unless a suit for action to enforce a claim under guarantee is filed against us within six months from the date of expiry of guarantee. All your rights under the said guarantee shall be forfeited and we shall be relieved and discharged from all liabilities there after i.e. after six months from the date of expiry of this Bank guarantee
- c) We are liable to pay the guaranteed amount or any parts thereof under this bank guarantee only and only if you serve upon us a written claim or demand or before \_\_\_\_\_
- d) The Bank guarantee will expire on (Min 16 months from the date of successful installations of the items in the order) \_\_\_\_\_ Granted by the Bank

Signature of the authorized officer of the bank  
Name of the officer \_\_\_\_\_  
Designation of the officer \_\_\_\_\_  
Seal, name, email and address of the Bank and  
address of the Branch.

**Supply and Installation of Equipment for Microgrid & Renewable Integration Studies & Research**

**ANNEXURE E**

**PREVIOUS WORK ORDER DETAILS**

(To be submitted on Company Letter Head)

Evaluation Criteria	Name of the Client	Order No. & Date	Amount	Remark
List of Purchase Order / Work Orders in 2 IITs or R & D Institutes where the similar systems (as per the technical specifications mentioned in the present tender)	1.			Supporting document are to be attached along with the Annexure-III
	2.			
	3.			
	4.			
	5.			

Date:

Place:

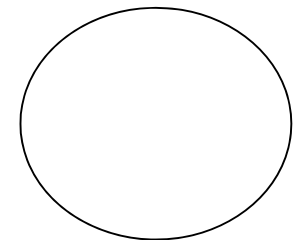
Authorized Signatory

Seal

Name:

Designation:

Contact No:



**Supply and Installation of Equipment for Microgrid & Renewable Integration Studies & Research**

**ANNEXURE F**

**TURNOVER DETAILS**

(To be submitted on Company Letter Head)

<b>Evaluation Criteria</b>			<b>Remark</b>
Bidder's Annual Turnover for  last three financial years	Financial  Year	Turnover in  Rs.	
	2019-20		Supporting  Documents are to be attached.
	2018-19		
	2017-18		

Authorized Signatory:  
(Signature of the Bidder, with Official Seal)

**Supply and Installation of Equipment for Microgrid & Renewable Integration Studies & Research**

**ANNEXURE G**

Form - A

**NO PURCHASE PREFERENCE - SELF DECLARATION**

(TO BE GIVEN BY VENDORS WITH BID)

<b>NIT No.</b>	To be filled by vendor
<b>Tendered Item/ Equipment</b>	To be filled by vendor

With reference to the above mention NIT, we hereby confirm that for this case <b>we do not wish to avail the Preference to Make in India</b> as the made in India content / indigenous content as a <b>percentage of the Basic Cost</b> of the Product / Service is less than 50%.	
<b>Indigenous %</b>	Please Mention
<b>Imported %</b>	Please Mention
<b>Name of firm</b>	
<b>Address</b>	
<b>Details of technology collaboration agreement/ transfer of technology agreement, if any.</b>	

*We undertake that any False declaration on our part is a breach of the Code of Integrity under Rule 175(1)(i)(h) of the General Financial Rules for which we or our successors will be debarred for up to 2 years as per Rule 151(iii) of the General Financial Rules along with such other actions as may be permissible under the law.*

Signature with seal

**Supply and Installation of Equipment for Microgrid & Renewable Integration Studies & Research**

Form – B

**SELF DECLARATION OF LOCAL CONTENT AND PURCHASE PREFERENCE**

(TO BE GIVEN BY VENDORS WITH BID)

<b>NIT No.</b>	To be filled by vendor
<b>Tendered Item/ Equipment</b>	To be filled by vendor

With reference to the above mention NIT, we hereby confirm that for this case <b>we wish to avail the Preference to Make in India</b> as made in India content / indigenous content as a <b>percentage of the Basic Cost</b> of the Product / Service as given below:		
<b>Specify Indigenous %</b>	Please Mention	
<b>Imported %</b>	Please Mention	
<b>Classification</b>	<b>Class – I Supplier</b>	<b>Class – II Supplier</b>
<b>Name of Indian Partnering firm with document or consent letter</b>		
<b>Details of Location(s) of local value addition claimed as indigenous</b>		

**Note: Bidder will be required to submit a cost auditor certificate (on percentage of local content) for the procurement value more than 10 Crores along with this declaration.**

*We undertake that any False declaration on our part is a breach of the Code of Integrity under Rule 175(1)(i)(h) of the General Financial Rules for which we or our successors will be debarred for up to 2 years as per Rule 151(iii) of the General Financial Rules along with such other actions as may be permissible under the law.*

Signature with seal

**Supply and Installation of Equipment for Microgrid & Renewable Integration Studies & Research**

**CHECK LIST - UNDERTAKING**

<b>S.NO</b>	<b>Document Description</b>	<b>Enclosed (Yes/No)</b>	<b>Page No.</b>	<b>Remarks</b>
1	Scanned copy of Tender fee payment advice of Rs. 1,500/- showing DU number clearly or <b><i>valid MSME/NSIC Exemption certificate.</i></b>			
2	Scanned copy of EMD payment advice of Rs. 1,22,000/- or <b><i>valid MSME/NSIC Exemption certificate</i></b>			
3	Scanned copy of OEM/ Authorized dealer certificate			
4	Details of Similar setups supplied as per Pre-eligibility			
5	Detailed Price bid			
6	Annual turnover details for last three years			
7	Scanned signed copies of Annexures from A to G, whichever is applicable			
8	Scanned copy of Technical Compliance			

I / We do hereby declare that all the above mentioned documents are enclosed as per the tender document.

Authorized Signatory:  
(Signature of the Bidder, with Official Seal)