

NATIONAL INSTITUTE OF TECHNOLOGY RAIPUR – 492 010, CHHATTISGARH

Single Tender Enquiry

Department: Mechanical Engineering Department

Enquiry No: NITRR/S & P/Prop/ME/2024-25/26/1047

Date: 04/10/2024

То,

M/s Ecosense Sustainable Solutions Pvt. Ltd., F-34/8 Okhla Phase -2, New Delhi- 110020

Dear Sir,

We intend to purchase the commodities specified in this document and invite quotations in accordance with the terms and conditions detailed in the bid document. If you are interested, kindly send your offer with prices and complete terms within the time mentioned above.

Please send your quotation to:

REGISTRAR NATIONAL INSTITUTE OF TECHNOLOGY RAIPUR G. E. ROAD, RAIPUR – 492 010, CHHATTISGARH

Yours sincerely,

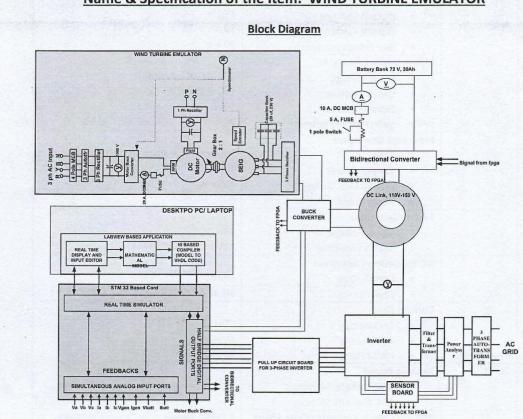
Sd/-

Registrar National Institute of Technology, Raipur

Enclosed:

- (1) Name and specification of the Item.- Annexure 1
- (2) Special Terms & Condition (Optional) Annexure 2
- (3) General terms and conditions Annexure 3
- (4) Price Bid Format in INR Annexure 4
- (5) Price Bid Format in of imported items in currency other than INR -Annexure 5

Annexure 1



Name & Specification of the Item: WIND TURBINE EMULATOR

Detailed Specifications

1. Wind Emulator:

S. No.	Component	Specification	
1.	DC Motor		
	Output Power	3.5kW (5HP)	
	Nominal Field Voltage	220V DC	
	Nominal Armature	220V DC	
	Speed at rated voltages	1500	
2.	DC Drive		
	Input voltage	230 V	
	Input Current	13 A	
	Output Voltage	200 V	
	Output Current	15 A	
	Contraction of the second s	20 kHz	-

	Switching Frequency	
3.	Buck Converter after generator	
	Input voltage	450 V
	Output Voltage	150 V
	Output Current	10 A
	Switching Frequency	20 kHz
4.	Bidirectional Converter	
	Input voltage	105 V (Battery Side)
	Output Voltage	150 V (Inverter Side)
	Output Current	10 A
	Switching Frequency	20 kHz
5.	Induction Generator	
	• Type	Squirrel Cage Type (Self Excited)
	Output Power	1.5 kW
	Line to Line Voltage	415V AC
	No of Poles	8
6.	Tacho-Generator	
	Input Voltage	24V DC
	Speed Encoding	10V DC for 1500RPM
7.	AC Excitation Capacitors	
	Connection	delta
	Capacitance	50 μF AC
8.	Control Card	
1	Technology	STM32
	ADC Inputs	Available
	PWM Ports	Available
9.	Sensing Board	
	4DC Voltage Sensors	
	3DC Current Sensors	
10.	Pull-Up Card for Inverter Gate Firing	8 PWM Signals
11.	Bridge Rectifier	
	Rating	10A, 400V
	Capacitor	3300μF, 450V
12.	Three Phase Inverter	
	3 Leg inverter	
	Maximum DC Input Voltage	150V DC
•	Output Voltage	112 V AC
	Output Current	25 A
	Switching Frequency	10kHz
13.	Step UP Power Transformer	
	Connection	Delta to Star
	Rating	1000VA
14.	Measurement	
	DC Link Voltage Voltmeter	0-1000 V
	Armature Voltage Voltmeter	0-1000 V
	Field Voltage Voltmeter	0-1000 V
	Battery Voltage Voltmeter	0-200 V
	 Rectified Voltage Voltmeter 	0-1000 V

	Battery Current Ammeter	0-10 A
	Tachometer	0-2000 RPM
15.	Three Phase LC Filter	
	Inductor	3mH, 10A
	Capacitor	10μF, 400V
16.	Protection	
	AC and DC MCBs	
17.	Battery Bank	
	Voltage	72 V (Lithium-ion battery)
	Capacity	30 Ah
	Total No. Of Batteries	1
18.	Autotransformer Single Phase	
	Voltage Range	0-250 V
	Max. Current	5 A
19.	Autotransformer Three Phase (For	
	Motor)	
	Voltage Range	0-450 V
	Max. Current	15 Amp.
20.	Autotransformer Three Phase (For	
	Grid)	
	Voltage Range	0-450 V
	Max. Current	8 Amp.

(Annexure – 2)

Special Terms & conditions (Optional)

- 1. The supplier must have experience in supplying similar items in different CFTIs (Centrally Funded Technical Institutes) of India.
- 2. Demo and installation is required.

Annexure 3

General Terms & conditions

Instructions to the bidder

- The bid should remain valid for a period of 60 days. In case your offer has a different validity period that should be clearly mentioned in the quotation.
 Validity period may also be extended without change in bid prices, if required on mutually agreed basis only.
- 2. Excise Duty: The Institute have the Excise Duty exemption certificate.
- 3. Custom Duty: Institute have the custom duty exemption certificate.
- 4. Entry Tax: The State of Chhattisgarh charges entry tax on all goods entering the State. Please include it in your quotation as a separate item. Entry Tax will be reimbursed on production of proof of payment.
- 5. Please address your quotation with all the required documents to "Registrar, NIT RAIPUR (C.G) 492010" and super scribe the envelope "Quotation for the Department of Mechanical Engineering" Bid may also be sent to through e-mail on or before 29/10/2024.
- 6. The bidders should quote their offer/rates in clear terms without ambiguity in attached **Annexure 4 or 5 only**.
- 7. Technical brochure/catalogue should also be enclosed to support the specification of the items issued by OEM.
- 8. **Warranty Period:** The warranty period should be minimum 1 year (with spares) until and unless specified differently from the date of installation. For standard items which carry warranty of more than one year, standard warranty shall be applicable.
- 9. The successful bidder has to furnish "Performance Security of 03% of the ordered value", in the form of Account Payee Demand Draft, / Fixed deposit and/or unconditional Bank guarantee en-cashable on demand from the Director, NIT, Raipur, from a nationalized Bank with validity period of sixty days beyond the date of completion of all contractual obligations of supplier including guarantee/ warranty obligations. The Performance Security is to be furnished in favour of the Director, National Institute of Technology, Raipur. Payment will be processed only after receipt of the Performance Security.

10. **Terms of Payment:** The method and conditions of payment to be made to theSupplier under this Contract shall be as follows:

Payment for Goods and Services offered from India/aboard in INR: Payment shall normally be made in Indian Rupees, as follows: 100% payment will be made in account payee cheque or Draft / online Transfer using RTGS to the Supplier within ten (10) days after the successful installation and commissioning of equipments subject to submission of performance security.

Payment for Goods and services offered from abroad in foreign currency:

Payment of foreign currency portion shall normally be made in the currency of contract in the following manner:

On Shipment: Ninety (90) percent of the Contract Price of the Goods shipped shall be paid through irrevocable letter of credit opened in favour of the Supplier in a bank in its country, upon submission of following documents specified as below. Within 24 hours of dispatch, the supplier shall notify the purchaser the complete details of dispatch and also supply following documents by Registered Post/ courier and copies thereof by FAX.

- a) Two copies of supplier's Invoice giving full details of the goods including quantity, value, etc.;
- b) Packing list;
- c) Certificate of country of origin;
- d) Manufacturer's guarantee and Inspection certificate/test report;
- e) Inspection certificate issued by the Purchaser's Inspector, if any.
- f) Insurance Certificate, if required under the contract;
- g) Name of the Vessel/Carrier;
- h) Bill of Lading/Airway Bill;
- i) Port of Loading;
- j) Date of Shipment;
- k) Port of Discharge & expected date of arrival of goods.
- 1) H S code of classification of goods.
- m) Any other document(s) as and when required in terms of the contract.

Note:

- The nomenclature used for the item description in the invoices(s), packing list(s) and the delivery note(s) etc. should be identical to that used in the contract. The dispatch particulars including the name of the transporter should also be mentioned in the Invoice(s)
- 2. The above documents should be received by the Purchaser before arrival of the Goods and, if not received, the Supplier will be responsible for any consequent expenses.

On Acceptance: Ten (10) percent of the Contract Price of Goods received shall be paid normally within thirty (30) days of receipt of the Goods and successful

installation & commissioning upon submission of claim supported by the acceptance certificate issued by the Purchaser along with the Performance security.

The L/C will be confirmed at the suppliers cost, if requested specifically by the supplier. If L/C is requested to be extended/ reinstated for reasons not attributable to the purchaser, the charges thereof would be to the suppliers' account. All bank charges in India to the account of the opener and all bank charges outside India to the account of the beneficiary. Payment of local currency portion shall be made in Indian Rupees normally within thirty (30) days of presentation of claim supported by a certificate from the Purchaser declaring that the Goods have been delivered and that all other contracted Services have been performed. The LC for 100% value of the contract shall be established after deducting the agency commission payable, if any to the Indian agent from the CIF value.

- 11. **Delivery period:** Delivery should be made within 150 days from the date of order of placement of goods offered from India or opening of the LC in case of goods offered from abroad. However early delivery shall be appreciated.
- 12. Any disputes arising out of this enquiry shall be dealt in the Raipur jurisdiction.
- 13. Bidder need to submit the following certificates along with the quotation :
 - Proof of establishment of Firms/shop/business/ manufacturing unit etc. and Dealership certificate from the principals etc.
 - Proof of **GST** registration as per applicability.
 - Photocopies of the latest purchase orders received from IITs/NITs/any central govt. organization/State Govt. Organization/reputed private sectororganization for the offered item.
 - Authorization certificate from Principal
 - \circ Propriety Certificate stating that they are the only source of supply/ Manufacturer.
 - Proof of PAN
 - User list IITs/NITs/Central govt. organization/ State Govt /reputed private sector Organization for the offered item.
 - o Any other relevant document, if any

14. Clearance & delivery

On arrival of shipment/consignment, the supplier is required to arrange custom clearance and transportation of the consignment up to NIT RAIPUR premises. The expenses incurred will be reimbursed on actual basis not exceeding the quoted amount. The custom duty, demurrage (in case of delay in release of custom duty tothe custom department by NIT Raipur) and government taxes/levies (if any) will be paid extra by the buyer after as per term of payment. Please note that the State of Chhattisgarh may charge entry tax on all goods entering the State. This may be included in your quotation as a separate item. Entry Tax will be reimbursed onproduction of proof of payment. Principals will themselves have to procure anyrequisite permission from the Govt. of country of origin of equipment.

15. Agency Commission/other charges

Agency commission or other charges, if any should be clearly mentioned by the Bidder and will be paid in Indian Currency. Please note that actual reimbursement will not exceed the quoted amount in any circumstances.

> Sd/-Registrar

NIT-Raipur

Department : Mechanical Engineering

Annexure-4

Price Schedule form: Price Schedule for Goods Being Offered from India/Abroad in INR (Separate form to be used for each item offered)

Name of the Bidder:

Name & Model No. of offered item:

Tender Enquiry No.:

Sr.	Details			Price per
No.				Unit in INR
1.	Ex-works, Ex-warehouse, Ex-show room off the shelf price			
2.	Custom Duty** pay	Custom Duty** payable if any		
3.	Excise duty** payable, if			
	GST taxes mentioned as under:			
4.	TAXES	GST Percentage	Amount	
	CGST			
	SGST IGST			
5.	Any other tax & duty if any			
6.	Packing & forwarding up to station of dispatch, if any			
	Charges for inland transportation, insurance to ultimate destination			
7.	i.e. NIT, Raipur, if any			
8.	Installation, Commissioning and training Charges, If any			
9.	Any other charges (Please specify)			
Total		lo. 1 to 9) FOR NIT RA		

** NIT Raipur have custom Duty/excises Duty exemption certificate.

Total Bid price in Indian currency: -----

Bid Price In words:

Note: The cost of optional items may be indicated separately.

Seal & Signature of Bidder

Annexure-5

 Price Schedule Form:
 Price schedule for goods being offered from abroad in currency other than INR

(Separate form to be used for each item offered)

Name of the Bidder:

Name & Model No of offered item:

Tender Enquiry No.:

Sr.	Details		Price per unit in ()	
No					
1.	Country of origin				
2.	FOB (named por	FOB (named port of shipment)			
	Or				
	FCA (named pla				
3.	Freight and Insurance up to Indian Airport/port				
4.	Total Price at Indian Airport /port (2+3)				
5.	**Custom charges /Duty (please mentioned %)				
6.	GST taxes ment	tioned as under:			
	TAXES	GST Percentage	Amount		
	CGST				
	SGST				
	IGST				
7.	Custom clearance and other charges if any (with				
	breakup)				
8.	Inland Charges for Insurance & transportation to NIT				
	Raipur				
9.	Installation, commissioning and training Charges, if any				
10.	If any other charges (Please Specify)				
11.	Total Price (FOR NIT Raipur) (a) in foreign currency:				
	(b) In INR				
	(Sum of Sr. No.	,			
	Tota	al Charges in INR			

** NIT Raipur have custom Duty /excises Duty exemption certificate.

Total Bid price in foreign currency: -----

Total Bid Price in Foreign currency words: _____

(a) Indian agents name & address

(b) The cost of optional items shall be indicated separately------

(c) Cost/Charges in INR wherever applicable should be mentioned separately

Seal & Signature of Bidder