# **Department for Ocean Engineering**

# **Indian Institute of Technology Madras**

### Chennai – 600 036

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Ref.: OEC/2016/001/NILA Date: 23/Sep/16

**Due date: 07/Oct/16** 

- 1. Quotations are invited in duplicate for the two items as mentioned in enclosed annexures I & II.
- 2. The Quotations duly sealed and super scribed on the envelope with the reference No. and due date, should be addressed to the undersigned so as to reach him on or before the due date stipulated above.
- 3. The quotations must be in two bid system consisting of technical bid and financial bid. Both the bids should be in separate cover and enclosed in the single envelope in sealed cover.
- 4. Quotations should be valid for 60 days from the due date and period of delivery required, warranty terms etc. should also be clearly indicated. A minimum of two years warranty is required.
- 5. Brochure detailing technical specifications and performance, list of industrial and educational establishments where the items enquired have been supplied must be provided.
- 6. Compliancy certificate is to be provided indicating conformity to the technical specifications.
- 7. If the item is under DGS&D Rate contract No. and the price must be mentioned. It may also please be indicated whether the supply can be made direct to us at the Rate contract price (Please note that we are not Direct Demanding Officers). If so please send copy of the RC.
- 8. Relevant literature pertaining to the items quoted with full specifications (and drawing, if any) should be sent along with the Quotations, wherever applicable. Samples / machine/ equipment if called for should be submitted / demonstrated at free of charges, and collected back at the supplier's expenses.

- 9. The rate of sales / General Taxes and the percentage of such other taxes legally leviable and intended to be claimed should be distinctly shown along with the price quoted. Where this is not done, no claim for Sales / General Taxes will be admitted at any stage and on any ground whatsoever. The taxes leviable should be taken into consideration in a way such that we are entitled to have concessional Sales Tax applicable to non-Government Educational Institutions run with no profit motive for which a concessional Sales Tax Certificate will be issued at the time of final settlement of the bill.
- 10. Imported supplies should be quoted for CIF Madras.
- 11. IIT Madras is exempt from payment of Excise Duty and is eligible for concessional rate of custom duty. Necessary certificate will be issued on demand. IIT Madras will make necessary arrangements for the clearance of imported goods at the Airport/Seaport. Hence the price should not include the above charges.
- 12.Local firms to quote for free delivery and installation charges to this Institute. If quoted for Ex-Go down delivery charges be indicated separately.
- 13. Packing, delivery and installation charges must be clearly indicated and included in the quote.
- 14. Goods should be supplied carriage paid and insured.
- 15. Goods shall not be supplied without an official supply order.
- 16. Payment: Every attempt will be made to make payment within 30 days from the date of receipt of bill / acceptance of goods, whichever is later.
- 17. Delivery and installation at IIT Madras must be done by the vendor.
- 18. Acceptance and Rejection: I.I.T. Madras has the right to accept the whole or any part of the Tender or portion of the quantity offered or rejects it in full without assigning any reason.

Yours faithfully,

**Dr.Nilanjan Saha**Department of Ocean Engineering

**Enclosures:** 

Annexure I & II

### Annexure I

## **Technical Specifications**

**Item 1: Small wind turbine for laboratory testing** 

Sl.no	Parameters	Details
1	Rated Output	500-1200W
2	Peak Output	1500W-2000W
3	Rated Wind Speed	9m/s-9.5m/s
4	Cut-in Wind Speed	3 m/s - 4m/s
5	Number of blades	3
6	Rotor Diameter	2.0 m-3.5m
7	Warranty	2-3 years
8	Operating life	Min 20 years
9	Survival wind Speed	50-60 m/s
10	Generator	3 Phase PMG
11	Tower height	Rotor diameter + 50 cms (approx.)

• Furnish the details of mass, dimensions and Control Unit along with the Technical Specifications.

# The sealed quotation to be sent to:

Dr. Nilanjan Saha, Associate Professor, Dept. of Ocean Engineering, IIT Madras, Chennai-600036, Tamil Nadu, India

# For details you may contact

# Dr.Nilanjan Saha

Email: nilanjan@iitm.ac.in Tel: +91-44-22574827 FAX: +91-44-2257 4802

#### **Annexure II**

### **Technical Specifications**

### Item 2: Artificial Wind Generation System for laboratory testing

- 1. Generating Unit: 12 V for battery charge system and Power rating of 200 W.
- 2. Rotor Specifications: Rotor Diameter of 1-2 m with 3 numbers of detachable blades. Hub type: fixed/variable pitch.
- 3. Performance parameters: Rated wind speed: 9m/s (approx.).

Cut- in speed: 3.5m/s (approx.). Shut down speed: 23 m/s (approx.)

4. Frame: Length: 2.5 m (approx.)

Breadth: 1.3 m (approx.) Height: 1.7 m (approx.)

5. Accessories: manual, artificial smoke generator (optional)

## The sealed quotation to be sent to:

Dr. Nilanjan Saha, Associate Professor, Dept. of Ocean Engineering, IIT Madras, Chennai-600036, Tamil Nadu, India

# For details you may contact

# Dr.Nilanjan Saha

Email: <a href="mailto:nilanjan@iitm.ac.in">nilanjan@iitm.ac.in</a>
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