# NATIONAL INSTITUTE OF TECHNOLOGY

## TIRUCHIRAPPALLI – 15

#### CENTRE FOR ENERGY AND ENVIRONMENTAL SCIENCE AND TECHNOLOGY

Web: www.nitt.edu Phone: 0431 - 2503108



# TENDER DOCUMENT

Tender Notification No.: NITT/EMD/EMC/CEESAT/MP/DST/ 2009 -2010/35(A)Dated: 20.8.2009

Name of the component : 15 KVA GENSET (Single Phase)

Quantity required : 1 No.

EMD amount : Rs.8.000/-

Delivery : 6 to 8 weeks from the date of purchase order

Last Date of submission of Tender : 11.9.2009 upto 3.00 p.m.

Address for submission of Tender : Dr. (Mrs). M.Premalatha

CEESAT/National Institute of Technology

Tiruchirappalli – 620 015 E-mail : latha@nitt.edu

Phone No: 0431-2503108, Mobile: 98946 00407

Date of opening of bid : 11.9.2009 at 3.30 p.m



#### NATIONAL INSTITUTE OF TECHNOLOGY TIRUCHIRAPPALLI – 15

#### CENTRE FOR ENERGY AND ENVIRONMENTAL SCIENCE AND TECHNOLOGY

Tender Notification No.: NITT/EMD/EMC/CEESAT/MP/DST/ 2009 -2010/35(A)Dated: 20.8.2009

#### **NOTICE INVITING TENDER**

The National Institute of Technology, Tiruchirappalli (NITT) is an autonomous body under MHRD, GOI, imparting Technical Education and engaged in Research Activities. It is proposed to procure the following component for the departmental academic/research activities.

Sealed Quotations are invited for the following component subject to the following terms and conditions, from the reputed manufacturers or their authorized dealers so as to reach this office on or before scheduled date and time. The quotations will be opened on the same day in the presence of bidders or their authorized agents who may choose to be present.

Name of the component : 15 KVA GENSET (Single Phase)

Quantity required : 1 No

EMD amount : Rs.8,000/-

Time for completion of supply after placing purchase order: 6 to 8 weeks from the

date of purchase order

Last Date of submission of Tender : 11.9.2009 upto 3.00 p.m.

Tender to be submitted at the following address : Dr. (Mrs). M.Premalatha

CEESAT/ National Institute of Tech.

Tiruchirappalli – 620 015 E-mail : latha@nitt.edu Phone No: 0431- 2503108

Mobile: 98946 00407

Place, Date and time of opening of bid

<u>Date:</u> 11.9.2009 <u>Time:</u> 3.30 p.m <u>Venue:</u> CEESAT

**Note:** The Institute shall not be responsible for any postal delay about non-receipt / non delivery of the bids or due to wrong addressee.

#### **SECTION: 1 INSTRUCTION TO BIDDER**

1. The bidders should provide list of customers of previous supply of similar items to Universities, Institutes or Government Departments/Undertakings/public sectors with contact details. The details of the bidder/profile should be furnished along with the copy of all related documents.

#### 1.1 Documents to be submitted in the Bid:

- (i) The bidder should furnish copy of licence certificate for manufacture/supply of the item.
- (ii) The bidder should furnish Income Tax PAN number
- (iii) Catalogue of the product with detailed product specifications
- (iv) Shelf-life of the chemicals offered for supply is to be specified.
- (v) EMD, if applicable, by Demand draft drawn on any scheduled bank in favour of "The Director, NIT, Trichy" payable at Trichy should be submitted. EMD shall bear no interest. Any bid not accompanying with EMD is liable to be treated as non-responsive and rejected.
- 2. The bidder should submit their rate as per the format given in Section 4 of the Notice Quotation in this cover. Rate should be quoted in Indian Rupee. The rate should be quoted both in words and figures. All the pages of the bid should be signed affixing the seal. All corrections and overwriting should be initialed.

The bid cover should be duly superscribed with the following details.

(1)	Quotation Notification Number (2) Quotation for the supply of	(3)	Date
of o	pening		

Mention "Kind Attention: Contact's person's name and phone number", and submit at the address given in the quotation Notice.

- 3. The quotation will be acceptable only from the manufacturers or its authorized supplier.
- 4. The bid shall be in the format of price schedule given in Section 4. The contract form as per format given in section 5 shall be submitted. Incomplete or conditional quotation will be rejected.
- 5. Details of quantity and the specifications are mentioned in Section 3 appended to this quotation Notice.
- 6. The item to be used is strictly according to the specification and subject to test by the Institute/concerned authorities.
- 7. The Institute reserves the right to cancel or reduce the quantity included in the schedule of requirements at any time after acceptance of the quotation with a notice. The Contractor/Supplier shall have no claim to any payment of compensation or otherwise whatsoever, on account of any profit or advantage which he might have derived from the execution of the work/supply in full but he did not derive in consequence of the foreclosure of the whole or part of the works.

- 8. 5% of the supply value will be retained by the Institute towards Performance Security and will be returned to the supplier after the period of warranty.
- <u>Release of EMD</u>: The EMD shall be released after receipt of performance security from successful bidder.
- 10. <u>Validity of bids</u>: The rate quote should be valid for a minimum of 60 days. No claim for escalation of rate will be considered after opening the Quotation.
- 11. <u>Imports:</u> In case, goods are to be imported, the Indian agent should furnish authorization certificate by the principles abroad for submission of the bid in response to this Quotation Notice.
- 12. <u>Clarification of Quotation Document</u>: A prospective bidder requiring any clarification of the Quotation document may communicate to the contact person given in this notice inviting quotation.
- 13. <u>Amendment of quotation document:</u> At any time prior to the last date of receipt of bids, Institute may for any reason, whether at its own initiative or in response to a clarification requested by prospective bidder, modify the Quotation document by an amendment.
- 14. The Institute may at its own discretion extend the last date for the receipt of bids.
- 15. The bids shall be written in English language and any information printed in other language shall be accompanied by an English translation, in which case for the purpose of interpretation of the bid, the English translation shall govern.
- 16. The Institute reserves the right of accepting any bid other than the lowest or even rejecting all the bids. The decision of the Institute Purchase Committee is final in all matters of quotation and purchase.
- 17. The bidder should give the following declaration while submitting the Quotation.

#### **DECLARATION**

I/we have not tampered/modified the quotation forms in any manner. In case, if the same is found to be tampered/modified, I/we understand that my/our quotation will be summarily rejected and full Earnest Money Deposit (EMD) will be forfeited and I/we am/are liable to be banned from doing business with NIT, Trichy and /or prosecuted.

Signature of the Bidder	:
Name and Designation	:
Business Address	:
Place :	
Date :	Seal of the Bidder's Firm

18. Any other details required may be obtained from the contact person given in the notice inviting quotation during the office hours.

#### **SECTION: 2 CONDITIONS OF CONTRACT**

- 1. The rates should be quoted in Indian Rupee FOR NIT, Trichy for supply within India.
- 2. In case of import both CIF and / or FOB rate should be quoted. All components of expenditure to arrive at Chennai need to be explicitly specified.
- 3. The bidder shall indicate the excise duty exemption for the goods if applicable
- 4. The Institute is eligible for customs duty and excise duty exemption.
- 5. The rate quoted should be on unit basis. Taxes and other charges should be quoted separately, considering exemptions if any.
- Rate quoted should be inclusive of Testing, commissioning and installation of equipment and training.
- 7. <u>Payment</u>: No advance payment will be made. Payment will be made only after the supply of the item in good and satisfactory condition and receipt of performance security by supplier. In case of imports, the payment will be made through LC after installation and performance security need to be submitted at the time of LC commitment.
- 8. Guarantee and Warrantee period should be specified for the complete period conforming to the section 3 of this quotation document.
- Period required for the supply and installation of item should be specified conforming to the section 3 of this quotation document.
- 10. In case of dispute, the matter will be subject to Tiruchirappalli, Tamil Nadu Jurisdiction only.

#### SECTION: 3 SCHEDULE OF REQUIREMENTS, SPECIFICATIONS AND ALLIED DETAILS

1. Name of the Component to be procured : 15 KVA GENSET (Single Phase)

#### **TECHNICAL SPECIFICATION:**

Providing, installation, testing, commissioning of 'silent type' diesel generating set along with having prime power rating 15 KVA 230volts,50 HZ, single phase at 1500 rpm 0.8 lagging p.f and 0.85 load factor consisting of the following:-

#### a) Diesel engine

Diesel engine 4 stroke water cooled electric start of suitable BHP at 1500 rpm suitable for above output for alternator at 40 deg.C,50% RH and at 1000 mtr.M.S.L conforming to BS 5514,BS 649,IS 10000 capable for taking 10% overloading for one hour after 12 hours of continous operation. The engine will be fitted with all the required accessories

#### b) Engine Mounted instrument panel fitted having display for the following

- 1. start-stop switch with key
- 2. Water temperature indication
- 3. Lubrication oil pressure indication
- 4. Lubrication oil temperature indication
- 5. Battery charging indication
- 6. RPM indication
- 7. Over speed indication
- 8. Low lub oil trip indication
- 9. Engine hour's indication

#### C) Alternator

Synchronous alternator rated at 15KVA 230 volt at 1500rpm, 1 phase 50 HZ, AC supply with 0.8 lagging power factor at 40 deg. C, 50% RH and at 1000 meter MSL. The alternator shall be having SPDB enclosure brushless continuous duty, self excited and self regulated through AVR conforming to IS: 4722/BS 2613 suitable for tropical conditions and width glass – F/H insulation.

#### D) Base frame & foundation:

Both the engine and alternator shall be mounted on suitable base frame made of MS channel with necessary reinforcement which shall be installed on suitable cement concrete foundation and vibrator and isolation arrangement as per recommendation of the manufacturer

#### e) Fuel tank:

Daily service fuel tank of 100 lts capacity of 3 mm thick MS sheet complete with all standard accessories and fuel piping between fuel tank and diesel engine with MS class C pipe of suitable dia. Complete with valves, level indicators and accessories as required as per specifications.

#### f) Exhaust system:

Dry exhaust main fold with hospital exhaust silences and catalytic converter.

#### g) Starting system:

- 12V DC starting system comprising of starter motor, voltage regulator and arrangement for initial excitation complete with suitable numbers of batteries (13 plate,88AH capacity lead acid add type) as required as per specifications.
- h) Acoustic and weather proof enclosure with arrangement for fresh air intake for cooling of the engine and alternator, extraction, discharging hot air into the atmosphere as per the CPC norms
- i) Fabricating, installing, testing and commissioning of automatic mains failure control including auto bypass panel, suitable for 15KVA silent type DG set complete with relays, timer, set of CTs for metering and protection and energy analyzer to indicate currents, phase and line voltages, frequency power factor, KWH, KVARH and provision to overload, short circuit, restricted earth fault, under frequency, control cabling from AMF panel to diesel engine and elsewhere, if required all complete4 and interlocking including the following:
- a) 2 Nos of 63 Amps, 2 pole on load changeover switch
- b) 2 Nos of 63 Amps DP, MCCB
- c) 2 Nos of 63 Amps SP & N contactor
- d) Auto/ manual/ test /Off selector switch
- e)1 No over voltage relay,1 No rev power relay and 1 no of under voltage relay
- f) 3 sets of current transformer
- g)Energy analyzer unit to indicate current, voltage, frequencies, power factor and KWH
- h) indicating lamps for load on main and on set
- i) Fuse for instrument
- j) Battery charger, complete with transformer rectifier, DC voltmeter and ammeter, selector switch for trickle off and boost and current adjustments
- k) Main supply failure monitor
- I) Supply failure monitor
- m) Restoration timer
- n) Control unit with 3 impulse automatic engine start/ stop and failure to start lock out.
- o) Impulse counter with locking and reset facility
- p) On/Off/ control circuit switch indicator
- q) Audio/ video commutation for
- i) High water temperature ii) To low lubricating oil pressure iii) Engine fails to start. iv) full load/maximum load warning. v) Engine over speed

#### h) EARTHING:

Earthing with G.I.earth plate 600mm x 600mm x 3mm thick including accessories and providing masonary enclosure with cover plate having locking arrangement watering pipe etc.(but without charcoal and coke and salt) as required

-4 sets

Extra for using salt and charcoal for G.I. or copper plate

-3 sets

Earth electrode as required

Providing and fixing 25mm x 5mm copper strip in

-6 meters

40mm dia G.I. pipe from earth electrode as required

Providing and fixing 25mm x 5mm copper strip on

-30 meters

Surface or in recess for connections etc. as required

Quantity : One

Any other details/requirement : Nil

Warranty period required : Three Years

Delivery schedule expected after release of purchase order (in weeks)

: 6 to 8 weeks

EMD (in Rupees) : Rs.8,000/-

### **SECTION: 4 PRICE SCHEDULE**

[To be used by the bidder for submission of the bid]

1.	Component Name	:	
2.	Specifications (confirming to Section 3 of Quotation document-enclose additional sheets if necessary)	:	
3.	Currency and Unit Price	:	
4.	Quantity	:	
5.	Item cost (SI.No.3 & SI.No.4) (in Indian Rupee)		
6.	Taxes and other charges	:	
	<ul><li>(i) Specify the type of taxes and duties in percentages and also in figures</li><li>(ii) Specify other charges in</li></ul>	·	
	figures	·	
7.	Warranty period (confirming to the Section 3 of Quotation document. This should be mentioned in Technical bid also in order to get qualified for Financial bid)	:	
8.	Delivery Schedule (confirming to the	:	
9.	Section 3 of Quotation document)  Name and address of the firm for placing purchase order	:	
10.	Name and address of Indian authorized agent (in case of imports only)	:	
Sigr	nature of the Bidder :		
Nam	ne and Designation :		
Bus	iness Address :		
Plac	ee:		
Date		Seal of the Bidder's Firm	

### **SECTION: 5 CONTRACT FORM**

[ To be provided by the bidder in the business letter head ]

1.	•	Firm) hereby abide to deliver theby the ned in the Section 3 quotation document for supply of the items if the d.				
2.	The item will be supplie without any defect and de	d conforming to the specifications stated in the quotation document viations.				
3.		r the period mentioned in the quotation document and service will be on of NIT, Trichy during this period.				
Sigr	Signature of the Bidder :					
Nan	ne and Designation :					
Bus	siness Address :					
Plac	ce:					
Date	e :	Seal of the Bidder's Firm				