

An ISO 9001 Company

Bharat Heavy Electricals Limited

(High Pressure Boiler Plant)
Tiruchirappalli – 620014, TAMIL NADU, INDIA
CAPITAL EQUIPMENT/ MATERIALS MANAGEMENT

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Web : www.bhel.com

TWO PART BID

Tender to be submitted in two parts.

Enquiry Number: Date: of quotation: 22.04.2011

You are requested to quote the Enquiry number date and due date in all your correspondence. This is only a request for quotation and not an order.

Please note that under any circumstances both delayed offer and late offers will not be considered. Hence vendors are requested to ensure that the offer is reaching physically our office before 14.00 hrs on the Date of tender opening.

Item	Description	Quantity	Delivery (Item required at BHEL on)
10	APFC Panel for SS 300 KVAR as per the technical specification, general guidelines instructions & commercial conditions applicable (to be downloaded from web site www.bhel.com or http://tenders.gov.in)	05 Nos.	30.05.2011

Important points to be taken care during submission of offer

- 1. Checklist to be filled and enclosed along with the offer failing which, the offer will not be considered for evaluation.
- 2. Subsequent to the hosting of this Enquiry, any corrigendum to the Enquiry that may be hosted in the BHEL Web-site as well as Government Tendersportal shall be viewed by the vendors regularly to know the details of corrigendum. In case if any vendor without seeing the corrigendum quoted as per original Enquiry and intimate that they have wrongly quoted will not be considered and rejected. However as per the appropriate Policy of BHEL action will be taken on them in this regard.

BHEL's General guidelines / instructions (refer MM/CE/GT/001) including bank guarantee formats and list of consortium banks, commercial terms check-list can be downloaded from BHEL web site http://www.bhel.com or from the Government tender website http://tenders.gov.in (public sector units > Bharat Heavy Electricals Limited page) under Enquiry referred above.

Tenders should reach us before 14:00 hours on the due date Tenders will be opened at 14:30 hours on the due date Tenders would be opened in presence of the tenderers who have submitted their offers and who may like to be present

Yours faithfully,
For BHARAT HEAVY ELECTRICALS LIMITED

Manager MM / Capital Equipment

S.KARUNANIDHY

Manager

MM / Capital Equipment

BHEL. TRICHY-620 014

TECHNICAL SPECIFICATION FOR APFC PANEL OF 300KVAR./ Qty-5Nos.					
SI. Na		Vendor's to specify	Deviation		
	Supply and commissioning of Automatic Power Factor Improvement Capacitor Panel as per the BHEL Technical speicification details.				
1.0	Capacitor Bank Rating	300 KVAR.			
1.1	No. of capacitor stages and ratings, type (min 12 stages)	50KVAR/ 2Nos., 25 KVAR / 6Nos., 12.5 KVAR / 4 Nos.			
1.2	Model and make of capacitor	MD Heavy Duty capacitor, MDXL Super Heavy Duty capacitor.			
1.3	Rated Voltage	415 Volts.			
1.4	Rated Frequency	50 HZ.			
1.5	Current measurement CT ratio	1000/5.			
1.6	System	3 Phase, 4 wire system.			
2.0	Type of service	Continuous, indoor operation.			
3.0	Automatic PF controller -make of Electronican/L&T/ABB or other make acceptable to BHEL.	Intelligent Microprocessor based power factor controller.			
4.0	Switching Time	Variable and selectable.			
5.0	Protection.	Over voltage			
6.0	Detection and display.	Over voltage, over current, harmonics			
7.0	Manual operation.	Selectable option			
8.0	Contactors for capacitor switching with MCBs. Suitable Capacitor duty contactors with MCB of 1) 160A rating for 50KVAR, 2) 63A for 25 KVAR, 3) 32A for 12.5KVAR. Incomer MCCB rated for 630 Amps. The makes of MCB/MCCB are Schnider, MDS, Merlin Gerlin, Seimens and L&T. The makes of Capacitor duty contactors are ABB, Seimens, L&T,. The makes of capcitors are GE, Schnider, Ducati, L&T, Meher, Unistar, EPCOS.	Capacitor duty contactors.			

M. LOGANATHAN

Sr. Deputy General Manager

Maintenance & Services

BHEL. Tiruchy (1974)

VIBAMODARAM Senior Manager Maintenance & Services Maintenance & Services 1 Trichy - 620 014.

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	Digital indicating meters for current ,voltage and	Vendor to confirm
	power factor should be provided in the panel front.	(Size,make,range)
10.0	No volt release in the event of power failure	Vendor to confirm
10.0	Required.	
! 17 ()	Necessary switchgear, contactors, HRC fuses Required.	Vendor to confirm
	Dimension, weight H1500 X W1200 X D 500	Vendor to confirm
, ,	mm and 600 Kg. Weight (Appr.).(Panel should	
—	be CRCA sheet with thickness of 3mm).	
I 13 DE	Panel ventilation 2 nos. of 510 CFM exhaust fan	Vendor to confirm
13.0	to be provided.	
14.0	Max. temperature range Ambient .	+/- 50 deg. C
15.0	Panel shall conform to IER with provision for	Vendor to confirm
13.0	earthing, fully wired, painted Required.	
	Technical catalogue furnishing the features of	Vendor to confirm
1 1	the controller and panel shall be enclosed with	
	the offer Required.	
	The capacitor, APFC controller and contactors/switch gears offered should be	Vendor to confirm
	reputed make acceptable to BHEL.	
		Vendor to confirm
	Detuned harmonic suppression filters rated	Vendor to commit
	for 7 % of capacitive reactance for individual capacitor controls has to be provided.	
<u>-</u>		
	Qualifying condition.	
[I	Only those vendors who have supplied and	
1 1	commissioned similar or higher capacity/ size	
	APFC panel and working satisfactorily for at	
	least one year after commissioning should	
!!	quote.(Necessary supporting documents should	
	be enclosed with the offer).	

M. LOGANATHAN
Sr. Deputy General Manager
Maintenance & Services
BHEL, Tiruchy - 620 014

V. DAMODARAN

Senior Manager

Maintenance & Services

BHEL / Trichy - 620 014.

Prove 2/3

Note: 1) GA drawings and bill of materials to be submitted for approval before manufacturing of the panels.2) Final inspection to be offered at site before despatch.3)During commissioning the APFC panel in the substation, programming of the capacitors to suit the reactive compensation to be supported by the firm and necessary training to our staffs should be given. 4)3 sets of Operation, Maintenance & programming manual in English . Circuit/ wiring diagram to be supplied along with the each panel Required. Single copy of make, rating details, technical details and catalogue of all the bought out items used in the each panel. 5)Point by point confirmation is required from the supplier otherwise the offer will not be considered.

Vendor to confirm

Janahan 11.3.2011

V. DAMODARAN

Senior Manager

M. LOGANATHAN Maintonance & Services:
Sr. Deputy General Manag BHEL / Trichy - 6.2:
Maintenance & Services

BHEL, Tiruchy - 620 014