



429-002/A

BHARAT HEAVY ELECTRICALS LIMITED

(A Government of India Undertaking)
HIGH PRESSURE BOILER PLANT
PURCHASE DEPARTMENT - FOSSIL BOILERS
THIRUCHIRAPALLI - 620014
TAMILNADU (INDIA)

PHONE :2577645
GRAMS : BHARATELEC
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Enquiry No	Enquiry Date	Due Date for Quotation
2681400031 - 79	04.11.2014	29.11.2014
Please quote Enquiry No, Date and due date in all correspondences. This is only a request for quotation and not an order. <u>Bid should be submitted in Two Parts. 1. Techno-commercial Bid (Part-I) and 2. Price Bid (Part-II) in a separate sealed cover and both the covers must be placed in a Third Cover and Sealed. Our Enquiry No., Enq. date & Enq. Due date must be written on all Three covers.</u>		

Item	Description	Unit	Quantity	Delivery Quantity	Schedule Date
10	The supplier has to dismantle the existing water cooled air-conditioning system and accessories completely from the clean room/Bldg no.77/ATP and hand over the materials to BHEL. Then a new air cooled air conditioning system comprising of all accessories except ducting has to be designed, supplied, installed to the existing ducting system, then above installation has to be tested and commissioned by the supplier in the above location as per the Annexures Annexure I - Pre-Qualification Criteria Annexure II - Technical Specification Annexure III - BOQ (Bill of Quantity)	NO	1.000	1.00	04.04.15

General Note:

1. Please submit your detailed offer in three part bid system i.e Part-1. EMD amount of Rs.2,00,000 in one separate sealed cover.
Part-II. Technical bid+ Unpriced bid indicating taxes & duties (Annexure-B) + Checklist (Annexure-B) in a sealed cover
Part-III. Priced offer in another separate sealed cover.

All the three covers shall be duly super-scribed with tender reference and due date of opening. These covers shall be put in a single cover duly super-scribed with tender reference and due date of opening and addressed to us.

2. Point-to-point confirmation to BHEL's specification and commercial terms & conditions shall be provided Annexure-A. All the Annexures should be filled and submitted along with the technical bid (no row shall be left blank), else your offer is liable for rejection.


3. Offers with validity of less than 180 days and non-acceptance of LD, RP clause, PBG, EMD & Payment terms, will lead to liable for rejection of submitted offer.

4. If the due date of tender opening happens to be a holiday, the tenders will be opened on the next working day.

The offers should reach us 30 minutes before the time of opening of tenders. The offers will be opened at 14.30 hrs on the due date of tender in the presence of tenderers who have submitted their offer and who may like to be present for the tender opening. Late and delayed offers are liable to be rejected.

VIGILANCE AWARENESS WEEK
27th OCT to 1st NOV 2014
FOR VIGILANCE RELATED COMPLAINTS,
CONTACT DGM/VIGILANCE
PHONE:0431-2577552,2577636

Yours faithfully,
For **BHARAT HEAVY ELECTRICALS LIMITED**


MANAGER/ PURCHASE
(FOSSIL BOILERS)
Yours faithfully,



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2681400031 / 04.11.2014

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5. All clarifications may be sought at least ten days prior to tender due date, from the undersigned with due written request.

6. BHEL reserves the right to go for a reverse auction (RA) instead of opening the submitted sealed bid, which will be decided after technical evaluation. Information and general terms and conditions covering RA are given in commercial terms and conditions (Annexure-A/Point no.18)

7. Corrigendum if any, with respect to this tender will be hosted only in the website <http://www.bhel.com> or <http://tenders.gov.in>. You are requested to visit the website regularly for updates.
BHEL will consider MSME vendor as per Government guidelines.

Special Provisions for Micro and Small Enterprises (MSE)

MSE suppliers can avail the intended benefits only if they submit along with offer, attested copies of either EM II (Entrepreneur Memorandum Part II) certificate having deemed validity (five years from the date of issue of acknowledgement in EM II) or valid NSIC certificate or EM II certificate along with attested copy of a CA certificate (Format enclosed as per Annexure - IV applicable for the relevant financial year (latest audited), certifying quantum of investment in plant and machinery within the permissible limit as per the act for relevant status (Micro or small) where the deemed validity of EM II is over. Date to be reckoned for determining the deemed validity will be the last date of technical bid submission. Offer/s received without these documents will lead to consideration of their offer at par with other bidders and MSE status of such suppliers shall be shifted to Non MSE supplier.

List of Attachments:

1. Qualifying Criteria_ Annexure-I
2. Technical specifications _Annexure-II & III
3. Commercial Terms and Conditions _ Annexure-A
4. Price Bid format Annexure-B

Enclosures:

"LD clause has to be confirmed without fail."

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The offers will be opened at 14.30 hrs on the due date of tender in the presence of tenderers who have submitted their offer and who may like to be present for the tender opening. Late and delayed offers are liable to be rejected.

VIGILANCE AWARENESS WEEK


27th OCT to 1st NOV 2014

FOR VIGILANCE RELATED COMPLAINTS,

CONTACT DGM/VIGILANCE

PHONE:0431-2577552,2577636

Yours faithfully,
For **BHARAT HEAVY ELECTRICALS LIMITED**


MANAGER / PURCHASE

(FOSSIL BOILERS)

Yours faithfully,

Senior Manager

Purchase / W
BHEL THIRUCHIRAPALLI

Design,Supply, Installation,Testing & Commissioning of Airconditioning system at 77 Building - ANNEXURE I.

QUALIFICATION CRITERIA		
S.No	Description	Vendor to specify details
1	Only those vendors, who have Design,Supplied and commissioned such type of airconditioning system for at least three companeies in the past five years and such item should be working satisfactorily for a minimum period of one year after completion of commissioning as on the date of opening of this tender.	
2	The vendor should submit following details which are necessary for qualifying their offer.	
2.1	Name and postal address of the customer / company where similar equipment commissioned.	
2.2	Name and designation of the contact person of the customer.	
2.3	Phone, FAX no and email address of the contact person of the customer.	
2.4	Along with Technical offer, the Vendor should submit performance certificate from minimum one customer for the satisfactory performance of the same, supplied to them in the customers letter head.	
3	BHEL reserves the right to verify the information provided by vendor. In case the information provided by vendor is found to be false / incorrect, the offer shall be rejected.	

ANNEXURE II - TECHNICAL SPECIFICATION

Name of work: Dismantling of Existing old Water cooled Air Conditioning system and Design ,Supply (except ducting) , Installation, Testing, commissioning of New Air Cooled Heat Ventilation & Air-conditioning system in 77 Building at BHEL, Trichy

Scope of work: The supplier has to dismantle the existing water cooled Airconditioning system and accessories completely from the Clean room / Bldg no.77 / ATP/ BHEL/Trichy and handover the materials to BHEL.Then a new Air cooled airconditioning system comprising of all accessories except ducting has to be designed , supplied ,Installed to the existing ducting system, then the above installation has to be tested and commissioned by the supplier in the above location as per the following technical specification.

SI No.	Description	Specified/To be confirmed by vendor	Qty	Offered	Deviations
1	Dismantling of Existing Water cooled Air Conditioning system				
1.10	Dismantling, shifting and storing of existing (3 x 86 TR) water cooled air conditioning system (package units) consisting Compressors, Air Handling Units , Motors , Condensers, Cooling Towers , Piping, pipe fittings, valves, electrical controls etc are in the scope of Vendor.	Vendor to confirm	3 Units		
	Equipment Details of Existing Water cooled Air conditioning System				
1.11	Air Handling Units : Make : Voltas Capacity : 45 TR Type : Horizontal flow Accessories: Fan motors,all piping systems & fittings ,all valves and supports	Vendor to confirm	6 No's		
1.12	Compressor Unit with Condensor: Type: Reciprocating Capacity : (3X86TR) Make: Voltas Motor capacity: 90 HP (2 No's) & 100 HP (1 No)	Vendor to confirm	3 No's		
1.13	Cooling Towers: Capacity : 65 m3/hr Type : Induced Draft square type (2 No's) Induced Draft circular type (1 No)	Vendor to confirm	3 No's		

SI No.	Description	Specified/To be confirmed by vendor	Qty	Offered	Deviations
1.14	<p>Existing Piping system: Compressor Room Pipe Lines Water line PIPE(4") = 100 m Refregent Line(Discharge) - 1.5" = 12 m Refrigent Line(Liquid Line) - 1.5"= 25 Mtr Refrigent Line(Suction Line) - 3"=16 Mtr PUMP SUCTION LINE (Cooling Tower Pump) - 4"=34 M PUMP Delivery LINE (Cooling Tower Pump) - 4" = 12 M Cooling Tower Drain Line-1 .5" = 24 M</p> <p>AHU -Pipe Line Liquid Line - 1.5"= 47 Mt Gas Line - 1.5" = 70 M Supporting Structure pipe-1 .5"= 15 M Note :Piping system are at an maximum elevation of 3 meters. It is under vendor scope to dismantle the supporting structure also.</p>	Vendor to confirm			
2	General Instructions for Dismantling of existing Air conditioning system				
2.10	Tools & tackles: All required tools and tackles for dismantling the above existing installations are in the scope of Vendor	Vendor to confirm			
2.11	Cranes: Where ever EOT cranes are available at the locations the same will be provided by BHEL at free of cost for dismantling of the subject components. Otherwise it is the responsibility of the supplier to arrange for Mobile cranes as per the requirement for the above work.	Vendor to confirm			
2.12	Duration of work: All dismantling work has to be completed with in a short period(max.15 days)	vendor to confirm			
2.13	All required man power for the above work is in contractors scope.	Vendor to confirm			
2.14	The vendor has to endure that all the above works are carried out as per the instructions and guidelines of BHEL Engineer / supervisor.	Vendor to confirm			

SI No.	Description	Specified/To be confirmed by vendor	Qty	Offered	Deviations
2.15	All the system dismantled should be shifted, stored and stacked properly in a store room inside the factory premises which will be provided by BHEL. All required tools, tackles, conveyance , loading & Unloading vehicles are in the scope of the contractor	Vendor to confirm			
2.16	All Major Civil works such wall breaking , finishing works , foundation works etc will be under BHEL scope and all minor civil works such as jumbering , wall drilling and, welding machines , cutting sets etc will be under contractor scope	vendor to confirm			
2.17	All the consumables like water,air,electricity,elctrodes,cutting gas will be issued by BHEL at free of cost.	Vendor to confirm			
2.18	Vendor may visit the site to assess the quantum of work	Vendor to confirm			
3	Design, Supply , Installation, Testing and commissioning of New Heat Ventilation Air-conditioning system in 77 Building				
	DESIGN INPUT DATA				
3.10	Total Area	25000 Sq.Ft			
3.11	Height	35 Ft			
3.12	Occupancy	70 No's			
3.13	Equipment Load	180 HP			
3.14	Lighting load	13000 Watts			
3.15	Required Fresh air changes per hour	50 No's			
3.16	Required Inside design Temperature	70+/- 2 Deg F			
3.17	Inside design RH	55+/-5 %			
3.18	Required filtration for the condition area.	5 Microns			
3.19	Out side condition	113 Deg F			
3.20	Operating hours of the plant	20 Hours			
3.21	Application for which the air conditioning is required.	Manufacturing activities like Welding,Fabrication, machining etc.			
3.22	Dehumidified Air Quantity	58000 CFM			
3.23	Existing system	Bldg.77:Existing Units Capacity of 86TR x 3 Nos Water Cooled Reciprocating plant(2 Working & 1 Standby)			
3.24	Air Handling system	Type : Horizontal flow Capacity: 45 TR of 6 No's Make: Voltas			
3.25	Ducting arrangement (existing)	Square Duct of size 1175 x 1200 mm and length 180 mtrs. Duct Material: GI sheet			
3.26	Layout of existing AC system	Enclosed			

SI No.	Description	Specified/To be confirmed by vendor	Qty	Offered	Deviations
Item 04	Design and Supply of Aircooled screw chillers with minimum operating capacity of 100TR x 3 nos. units (with two working & one as standby) with microprocessor based control panel, air cooled condenser, chiller, refrigerant piping , screw compressor, motors, pump, required valves etc.				
4.10	Specification for Air Cooled Chiller Unit				
4.11	Type	Air cooled Screw chiller			
4.12	Capacity of the Chiller at operating condition	Vendor to specify			
4.13	Refrigerant to be used R134 A(non-CFC)	Vendor to confirm			
4.14	Unit observed power	Vendor to specify			
4.15	KW/TR	Vendor to specify			
4.16	Number of Compressors	Vendor to specify			
4.17	Number of Refrigerant circuit	Vendor to specify			
4.18	Method of starting	Vendor to specify			
4.19	Dimensions (mm)	Vendor to specify			
4.20	Overall weight	Vendor to specify			
Item No. 05	Specification for COMPRESSOR				
5.10	Type of Compressor:	Semi-hermetic / hermetic rotary screw type			
5.11	Capacity at operating conditions	Vendor to specify			
5.12	BHP at operating conditions	Vendor to specify			
5.13	BHP /TR at operating conditions	Vendor to specify			
5.14	Power consumption at 100 % Load 75 % Load 50 % Load	Vendor to specify			
5.15	Lubrication system	Lubrication system should be force-fed and should include an integral oil separation system, oil sump and oil filter. Vendor to confirm			
5.16	Temperature Control System	The temperature should be controlled during operation to maintain proper oil temperatures throughout lubrication system.Hence, suitable temperature control system to be integrated Vendor to confirm			
5.17	Capacity Control Sytem	The step-less capacity control system should be there to modulate compressor capacity automatically. Vendor to confirm			
5.18	Compressor-Motor assembly	The asebmly should be installed on a common base frame with anti-vibration mounts. Vendor to confirm			
	Accessories	Suction check valve, suction filter, suction service valve and discharge check valve. Vendor to confirm			
5.20	Overall dimensions & weight	Vendor to specify			

SI No.	Description	Specified/To be confirmed by vendor	Qty	Offered	Deviations
5.21	Noise level at 1 meter distance in dB (A)	Vendor to specify			
5.22	Vibration level	Vendor to specify			
Item 06	Specification of water pump				
6.10	Type	Mono block Centrifugal chilled Water pump			
6.11	Capacity	Vendor to specify			
6.12	Pump motor type & rating	Vendor to specify			
6.13	Quantity	2 Working & 1 stand by	3 Nos		
Item No. 07	Specification for AIR-COOLED CONDENSER				
7.10	Type of Condenser	Air-cooled type which uses ambient air to condense the refrigerant.			
7.11	Tube material	Seamless copper tubes			
7.12	Tube diameter, thickness and length	Vendor to specify			
7.13	Number of tubes	Vendor to specify			
7.14	Shell Diameter and length (mm)	Vendor to specify			
7.15	Number of Passes	Vendor to specify			
7.16	Fouling factor	Vendor to specify			
7.17	Condenser coil arrangement	Internally grooved type, arranged in staggered rows & are mechanically expanded into hydrophilic super slit aluminium fins having self-spacing collars to give superior heat transfer efficiency.			
7.18	Air Flow rate	Vendor to specify			
7.19	Number of fans	Vendor to specify			
7.20	Fans	Dynamically and statically balanced helicoids fans, direct drive must be installed.			
7.21	Class of Protection	Vendor to specify			
7.22	Safety Devices	The condensor should be provided with all necessary safety devices and vendor should list down the same.			
7.23	Evaporator	Evaporator should have a built-in distributor for feeding refrigerant evenly under the tube bundle to produce a uniform boiling action and baffle plates shall ensure vapour separation. Vendor to confirm			

SI No.	Description	Specified/To be confirmed by vendor	Qty	Offered	Deviations
7.24	Water heads	Should be of carbon steel and designed for easy removal for mechanical tube-cleaning and/ or tube removal. Vendor to confirm			
7.25	Number of passes in Water head	Vendor to specify			
7.26	Standard accessories	Pressure relief valve, purge valve, angle relief valve at liquid refrigerant outlet and drain connections to be provided. Vendor to confirm			
Item 08	Specification of Refrigerant Piping				
8.10	Material of Refrigerant pipe lines	Hard copper tubes Vendor to confirm			
8.11	Refrigeration accessories	Hand-shutoff valves with charging port, hygroscopic liquid sight glass, solenoid valve, flash economiser and modulating refrigerant expansion devices and etc to be provided			
8.12	Refrigerant control system	The modulating refrigerant control system should be provided to optimise efficiency by restricting the flow of refrigerant vapour in condenser from entering the vapour at reduced load, by directly modulating a motorized refrigerant valve in the liquid line entering the evaporator. In addition, the refrigerant control system shall measure the level of liquid refrigerant in the flooded evaporator and restrict refrigerant flow entering the evaporator upon a rise in the level protecting the compressor from slugging liquid refrigerant. Vendor to confirm			
8.13	Piping design pressure	The refrigerant piping shall be designed for minimum 20kg/ cm ² Nitrogen pressure. Vendor to confirm			
8.14	Insulation	The cooler and suction line shall be factory insulated with adequate thickness of foam rubber or equivalent insulating material to prevent condensation. The entire suction line and liquid line between the expansion valve and cooler shall be insulated with flexible closed shell insulation. Vendor to confirm			
Item 09	CHILLED WATER PIPING				
9.10	Supply , Installation , Testing and Commissioning of MS 'C' Class chilled water piping with 50 mm thick Thermacol section insulation above wrapped with poly sheet & Aluminium cladding including necessary supports, fittings, flanges, etc as per the specifications.	Vendor to confirm			
Item 10	Specification of Air handling units				
10.10	Type of flow	Horizontal flow type			
10.11	Mounting	Floor mounting			
10.12	Capacity(Minumam 50 TR)	Vendor to confirm			

SI No.	Description	Specified/To be confirmed by vendor	Qty	Offered	Deviations
10.13	Quantity	6 No's	6 Nos		
10.14	Type of Casing	Double Skin Construction with Min 50 mm thick PUF insulation			
10.15	Inner skin & Outer skin material & thickness	Vendor to specify			
10.16	Pre Filter section	The filters shall be arranged to suit the AHU configuration in frame and all mounted directly on AHU for easy removal			
10.17	Maximum face velocity across prefilters	Vendor to specify			
10.18	Cooling Coil Section	Should consist cooling coil made up of copper tube with mechanically bonded aluminium fins.			
10.19	Thickness of copper coil	Vendor to specify			
10.20	Number of cooling coil rows	Vendor to specify			
10.21	Fin spacing	Vendor to specify			
10.22	Drain Pan	Drain pans (thermally insulated) are to be provided for cooling coil. Drain Pan shall be made of minimum 16G G.I sheet			
10.23	Maximum Face velocity across cooling coil	Vendor to specify			
10.24	Maximum water pressure drop across the coil	Vendor to specify			
10.25	Maximum water velocity through coil	Vendor to specify			
10.26	Type of fan	Should be centrifugal, forward curved, multi- blade double inlet double width type.			
10.27	Number of fans	Vendor to specify			
10.28	Fan shaft power & Fan rpm	Vendor to specify			
10.29	Fan motor rating kW (As per IS Standard)	Vendor to specify			
10.30	Fan outlet velocity (max)	Vendor to specify			
10.31	Dampers	Vendor to specify	6 Nos		
10.32	Supply , Installation , Testing and Commissioning of 5 Micron filters	Vendor to confirm	144 Nos		
Item 11	Air Distribution System				
11.10	Interconnecting ducts from existing duct to mouth piece of new AHU and Supply & fixing of canvass connection and mouth damper is under vendor scope Note : Existing Duct details Duct Size 1175 x 1200 Material : GI sheet	Vendor to confirm			

SI No.	Description	Specified/To be confirmed by vendor	Qty	Offered	Deviations
Item 12	Specification of Rigid Frame Work				
12.10	Framework details	The framework comprises an assembly of extruded Double Wall Anodized Aluminium Profiles frame and imported Peralluman plastic or aluminium corner joints			
Item 13	Valves and Fittings				
13.10	Supply, Installation , Testing and commissioning of 3 way motorised modulating valve with insulation and all necessary fittings and flanges and fastners				
	Type of Valve	Vendor to specify			
	Material construction	Vendor to specify			
	Size	Vendor to specify			
	Quantity	Vendor to specify			
13.20	Supply, Installation , Testing and commissioning of balancing valve for chilled water pipe line inlet and outlet with insulation and all necessary fittings				
	Type of Valve	Vendor to specify			
	Material construction	Vendor to specify			
	Size	Vendor to specify			
	Quantity	Vendor to specify			
13.30	Supply, Installation , Testing and commissioning of shut off butterfly valves with insulation and all necessary fittings , flanges and fastners				
	Type of Valve	Vendor to specify			
	Material construction	Vendor to specify			
	Size	Vendor to specify			
	Quantity	Vendor to specify			
13.40	Supply, Installation , Testing and commissioning of non return valves with insulation and all necessary fittings , flanges and fastners				
	Type of Valve	Vendor to specify			
	Material construction	Vendor to specify			
	Size	Vendor to specify			
	Quantity	Vendor to specify			
13.50	Supply, Installation , Testing and commissioning of Y -strainer with insulation and all necessary fittings , flanges and fastners				
	Size	Vendor to specify			
	Quantity	Vendor to specify			
	SITC of flexible connections at inlet and outlet of chillers and pumps with counter flanges, bolt & nuts, gasket, etc.	Vendor to confirm			

SI No.	Description	Specified/To be confirmed by vendor	Qty	Offered	Deviations
13.60	Supply, Installation , Testing and commissioning of other accessories in chilled water piping.				
	Dial type imported thermometers with thermowell and mounting box.	Vendor to confirm			
	Dial pressure gauge with isolating gate valve / cock with insulation	Vendor to confirm			
	SITC of Ball valve without strainer for FCU's	Vendor to confirm			
	SITC of Ball valve with strainer for FCU's	Vendor to confirm			
	Ball valves for drain, etc.	Vendor to confirm			
	Automatic air vents with ball valve	Vendor to confirm			
13.70	SITC of PVC Chilled water make up water tank including float valve				
	Capacity (1000Litre)	Vendor to confirm			
Item 14	Safety System for the chiller unit				
14.10	Each chiller unit should be equipped with all necessary components and in conjunction with the control system should provide the unit with protection against the following a) Loss of refrigerant charge b) Reverse rotation c) Low chilled water temperature d) Current imbalance e) Compressor thermal overload f) Automatic compressor unloading in case of excessive air temperature g) High Pressure i) Electrical over load j) Loss of phase/ Phase reversal k) Fan motors should be protected by individual circuit breaker	Vendor to confirm			

SI No.	Description	Specified/To be confirmed by vendor	Qty	Offered	Deviations
Item 15	Specification of Control Panels				
15.10	<p>The control panel should be Microprocessor based provided with all operating and safety controls. The same shall be preassembled, Wired and mounted on the unit. All the gauges mounted on the panel shall be clearly visible. The microcontroller to have following features viz.</p> <ol style="list-style-type: none"> 1. Memory Backup 2. Digital control of temperature 3. Auto restart 4. Built in time delay for compressors 5. Single phasing/phase reversal /overload/short circuit protection. 6. Temperature setting control to decimal 0.1C 7. Operation in manual & auto mode. 8. Fault Failures Display. <p>The above features are only indicative</p>	Vendor to confirm			
	<p>Thermostatic control arrangement for control of temperature, Safety controls as indicated earlier, thermostatic expansion valves control with solenoid valves for pump down cycle etc. shall be considered by the bidders. The loading and unloading of cylinder depending on load shall be through solid-state temperature controller</p>	Vendor to confirm			
Item 16	SUPPORTS FOR PIPES				
16.10	<p>All supports for pipes from ceiling shall be pre fabricated type epoxy painted MS member with GI down rod having adequate strength. All piping supports at terrace shall be with brick saddles duly finished with sand cement plaster. Otherwise the supports shall be fabricated out of G.I. / epoxy painted M.S. members having adequate strength. However the vendor shall submit proper drawings for supporting arrangement for approval prior to installation.</p>	Vendor to confirm			

SI No.	Description	Specified/To be confirmed by vendor	Qty	Offered	Deviations
Item 17	ELECTRICAL CABLING WORK				
17.00	Supply,Installation ,testing and commissioning of 3Phase,415 Volts,50HZ,400Amps,Isolator with suitable Fuse for chiller units	Vendor to specify			
17.10	Supply,Layinig,cable end to end termination,testing and Commisioning of electrical cables from isolator to Chiller units . including internal wiring,lables,ferrules,cable termination gland plate,earth terminals,painting and control & intrlocking accessories complete with connections/interconnections etc.,	Vendor to specify			
17.11	Supply,Layinig,cable end to end termination,testing and Commisioning of electrical cables from star delta starter to AHU (Excisting power supply of 415V,3-phase 50Hz,63Amps AC supply Isolater for AHU-6 Nos and Star-Delta Starter for AHU- 6 Nos,can be Used) including internal wiring,lables,ferrules,cable termination gland plate,earth terminals,painting and control & intrlocking accessories complete with connections/interconnections etc.,	Vendor to specify			
17.12	Supply,Layinig,cableend to end termination,testing and Commisioning of electrical cables from star delta starter to chilled water pump (Excisting power supply of415V,3-phase 50Hz,32Amps AC supply Isolater for Chilled water pump-3 Nos and Star-Delta Starter for - Chilled water pump 3 Nos,) including internal wiring,lables,ferrules,cable termination gland plate,earth terminals,painting and control & intrlocking accessories complete with connections/interconnections etc.,	Vendor to specify			
17.13	Size of Cable	Vendor to specify			
17.14	Length of Cable	Vendor to specify			
Item 18	EARTHING				
18.1	Providing and fixing 25mm x 5mm GI strip on surface or in recess for connections etc.,	Vendor to specify			
18.2	Providing and fixing 6SWG dia GI wire on surface or in recess for loop earthing along with the existing surface/recessed conduit/sub main wiring cable	Vendor to specify			

SI No.	Description	Specified/To be confirmed by vendor	Qty	Offered	Deviations
Item 19	INSPECTION & TESTING				
19.10	<p>Inspection and testing shall be conducted in a manner satisfactory to and shall be subject to approval from BHEL. Detailed procedure for the tests to be performed should be approved by BHEL. The supplier has to submit a detailed quality Assurance Procedure for approval of BHEL before proceeding with the manufacturing of the chiller unit. The inspection shall be carried out by BHEL at vendor site. Following approvals are necessary before proceeding with manufacturing of the chiller unit:</p> <p>a) QAP b) Design Drawings c) Design calculation which should include thermal design, flow design Following tests shall be carried out by BHEL during inspection of chiller at the supplier premises before despatch of material. d) Thermal Load test e) Material Test certificates of part components related to QA</p>	Vendor to confirm			
Item 20	Installation & Commissioning				
20.10	<p>The supplier shall install and commission the Air cooled HVAC system which includes</p> <p>a) Positioning and installation of the all the equipment at their proper place with due care. The required material handling equipments shall be provided by BHEL b) Total inter connecting piping and insulation work including those outside the base frames of supplied equipment. The required material like pipe, insulation, valves etc and joining of the same (welded/flanged) is in the scope of supplier. c) Top up charge of refrigerant.</p>	Vendor to confirm			
20.11	<p>Disamantling should be done one by one units and not dismantle all units simutaniously.dismantling of second unit should be carried out only after the installation of first removed unit inoder to maintain the availability of AC plant</p>	Vendor to confirm			
20.12	<p>Erecting electrical, mechanical and instrumentation items will be done by the vendor under the supervision of M/s BHEL.</p>	Vendor to confirm			

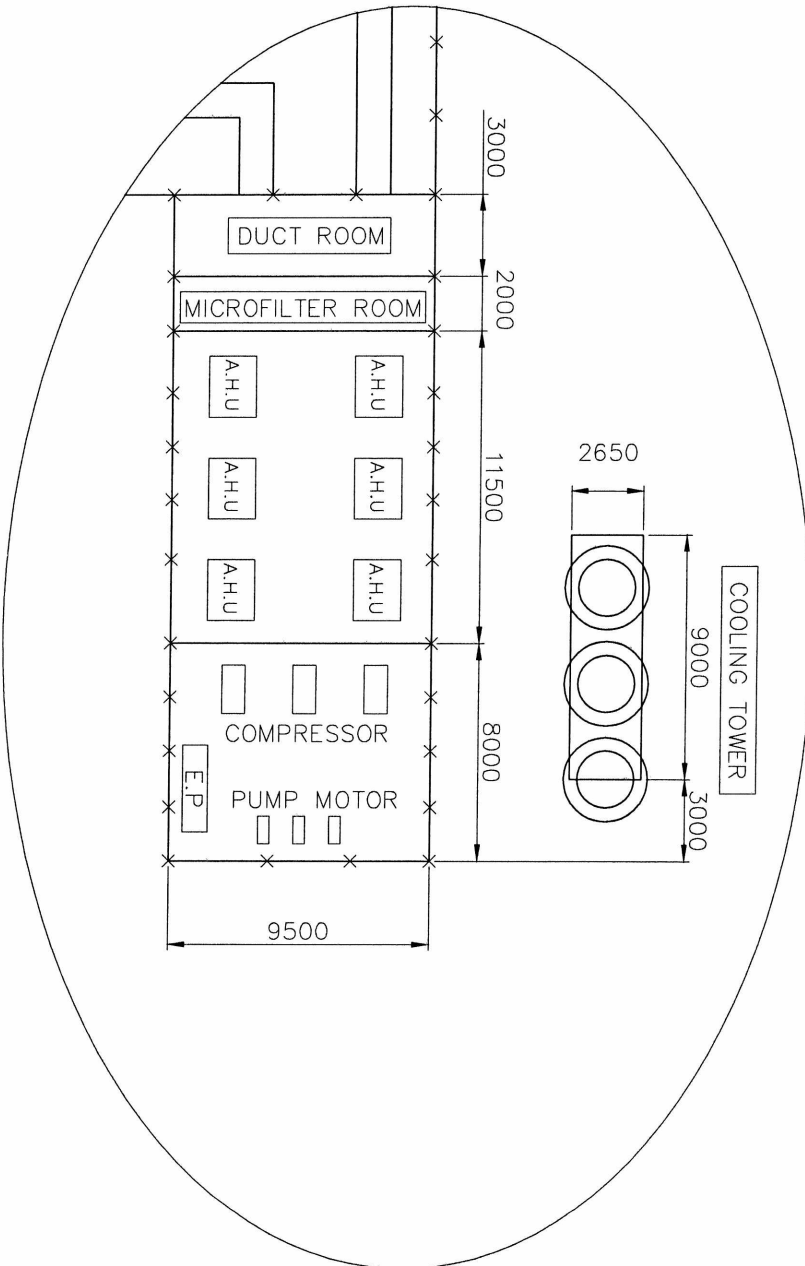
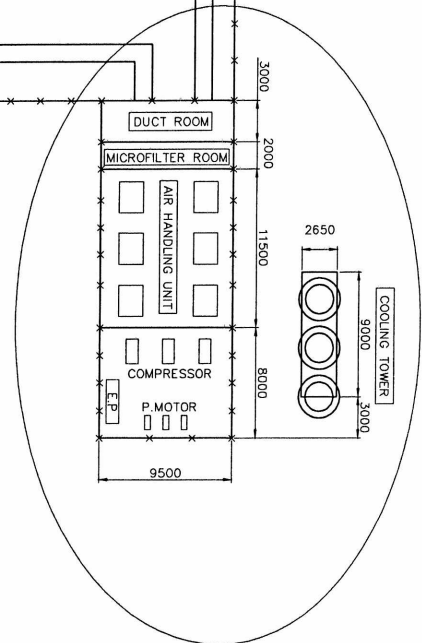
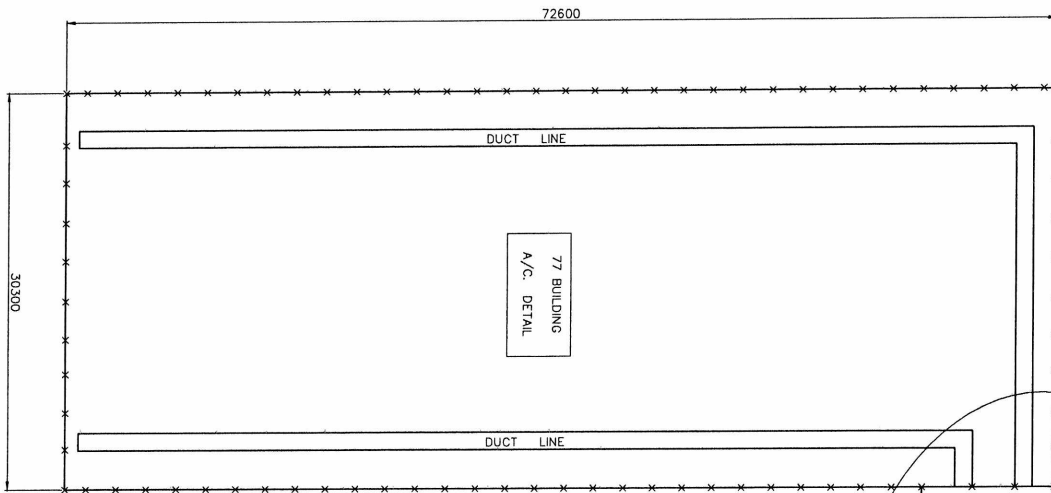
SI No.	Description	Specified/To be confirmed by vendor	Qty	Offered	Deviations
Item 21	GENERAL POINTS				
21.10	All technical specifications, drawings, Heat Calculation details and product catalogue for Air conditioning system to be submitted with offer.	Vendor to provide			
21.11	The air conditioning contractor shall take all necessary precautions to have minimum noise generation and its transmission. Minimum vibration as permitted by ISO standard shall be followed.	Vendor to confirm			
21.12	Delivery Duration - 12 to 16 Weeks	Vendor to confirm			
21.13	Pre-despatch inspection at vendor site is required	Vendor to confirm			
21.14	All equipments supplied should have a warranty of 12 months from the date of commissioning	Vendor to confirm			
21.15	All the components should have technical details marked in a name plate	Vendor to confirm			
21.16	One set complete recommended spares should be supplied	vendor to confirm			
21.17	Minimum 5 years required for supporting supply of critical spares and technical assistance	Vendor to confirm			
21.18	For all the components supplied and for the full system, user manual (including wiring diagrams) is to be provided (one softcopy + three hard copies)	Vendor to confirm			
21.19	Erection and commissioning will under the scope of vendor.	Vendor to confirm			
21.20	Eligibility: i) The vendor should have supplied Air conditioning system of similar or above capacity and should provide required documents with a letter of satisfactory working from a reputed company.	Vendor to provide			
21.21	Vendor has to compulsorily visit the site/BHEL before quoting for the same to understand the field requirement	Vendor to confirm			
21.22	Annual Maintenance Contract	The supplier shall submit an offer for AMC of the offered chiller for two years after the completion of warranty period.			

BOQ FOR BUILDING NO: 77 AC PLANT - ANNEXURE III			
SL.NO.	Description	Unit	Quantity
1	CHILLERS		
	Supply ,installation,testing ,commissioning energy efficient Semi-hermetic rotary screw type Air cooled chilling unit of 100TR capacity complete	Nos	3
2	CHILLED WATER PUMPS as per IS Standard		
	Supply,Installation ,testing and commissioning of monobloc pumps complete with motor,base frame,vibration isolators and other accessories.Pumps shall have mechanical seal.The pump motor shall be suitable for 415+ or - 10% volts,3 phase power supply. water flow rate 120gpm/454 LPM Head -28m Motor HP -15HP	Nos	3
3	VIB PADS	Lot	One Lot
4	Expansion Tank with float Valve(1000 L capacity including M.S Stand)	No	1
5	AIR HANDLING UNITS		
	Supply,Installation ,testing and commissioning of double skin construction,draw through Horizontal Air Handling units complete with prefillers chilled water section with coil,stainless steel drain pan,fan motor ,and other accessories as per specification.water coil shell of copper tubes and aluminium pin construction and coil shall be selected for a maximum face velocity of 500 feet/minute shall be total 8 row deep in two part 4 row deepeach.Motor shall be IP 55 degree Floor mounted AHUs Air Quantity -20000 CFM static Pressure-100 mmwg coil row deep -8 row	Nos	6
6	Supply,Installation ,testing and commissioning of damper for AHU	Nos	6
7	Supply,Installation ,testing and commissioning of 5mm Micron filter	Nos	144
8	CHILLED WATER PIPING		
	Supply,Installation ,testing and commissioning of Chilled water pipes in MS class 'C' construction with fittings,bends elboe,unions & MS supports as per standard specification. The pipes will also insulated with 50mm thick thermocole section and covered with overlap on joints and fixed with self tapping screw	Lot	One Lot

SL.NO.	Description	Unit	Quantity
9	BUTERFLY VALVES		
	Supply,Installation ,testing and commissioning of following sizes of butterfly valve with bolts,gasket & supports etc., The valves should also including thermocole insulation and aluminium cladding.		
a)	150mm dia	Lot	One Lot
b)	125mm dia	Lot	One Lot
c)	80mm dia	Lot	One Lot
10	BALANCING VALVES		
	Supply,Installation ,testing and commissioning of following sizes of balancing valve with bolts,gasket & supports etc., The valves should also including puff insulation and aluminium cladding.		
a)	100mm dia	Lot	One Lot
b)	80mm dia	Lot	One Lot
11	CHECK VALVES		
	Supply,Installation ,testing and commissioning of following sizes of Check valve with bolts,gasket & supports etc., The valves should also including puff insulation and aluminium cladding.		
a)	100mm dia	Lot	One Lot
12	Y - STRAINER		
	Supply,Installation ,testing and commissioning of following sizes of Y-STRAINER with bolts,gasket & supports etc., The Y-STRAINER should also including puff insulation and aluminium cladding.		
a)	100mm dia	Lot	One Lot
b)	80mm dia	Lot	One Lot
13	MOTORIZED VALVES		
	Supply,Installation ,testing and commissioning of following sizes of Motorized valves with bolts,gasket & supports etc., The valves should also including puff insulation and aluminium cladding. All control wiring,actuaters,thermostat,panel should be included	Lot	One Lot
14	AUTO VENT VALVES & DRAIN VALVES		

SL.NO.	Description	Unit	Quantity
a)	Providing and filling Auto vent valves -25mm	Lot	One Lot
b)	Drain valves for AHUs -25mm	Lot	One Lot
15	VIBRATION ELIMINATORS		
	Vibration Eliminators with double bellows ,tie rods and MS Flanges etc., as required	Lot	One Lot
16	PRESSURE GAUGES AND THERMOMETERS		
	Pressure gauges	Lot	One Lot
	Thermometers	Lot	One Lot
17	DRAIN PIPING		
	Supply,Installation ,testing and commissioning of following G.I. drain pipes with insulation from drain pans to nearest floor drain with interconnection flanges,elbows tees,nuts,p-trap etc.,		
	50mm	Mt	Actual Qty
	32mm	Mt	Actual Qty
18	DUCTING		
	Fabrication,supply,Installation,testing & commissioning of ducting complete with M.S. support etc.,as per specification		
a)	1.0mm thickness ducting	Sqmt	Actual Qty
b)	0.80mm thickness ducting	Sqmt	Actual Qty
19	Interconnecting ducts from the existing ducts to the mouthpiece of the new AHU	Job	1
20	Supply and fixing of canvass connection and mouth damper	Nos	6
21	DUCT INSULATION		
	12mm thick closed cell cross linked Polyethylene(XLPE) foam with factory laminated ALPE foil for supply and return Air duct	Sqmt	Actual Qty
22	ELECTRICAL ISOLATOR FOR CHILLERS		
22.10	Supply,Installation ,testing and commissioning of 3Phase,415 Volts,50HZ,400Amps,Isolator with suitable Fuse for chiller units	Nos	3
23	CABLING		
I	Supply of following sizes of 1.1KV grade multicore aluminium/copper conductor XLPE insulated PVC sheathed & armoured cable conforming to IS:1554(part-I)1988		

SL.NO.	Description	Unit	Quantity
a)	4C X 10 Sq.mm (copper cable)	Mt	Actual Qty
b)	4C X 6 Sq.mm (copper cable)	Mt	Actual Qty
c)	3.5C X 300 Sq.mm (aluminium cable)	Mt	Actual Qty
II	Supply and laying of sizes of 1.1 KV grade multicore copper conductor XLPE insulated PVC sheathed & armoured cable		
a)	3C x 1.5 Sq.mm	Mt	Actual Qty
24	GLAND TERMINATION		
	Supply and making end termination with brass compression glands and aluminium lugs for PVC insulated and PVC sheathed aluminium/copper conductor cable of 1.1 KV grade of the following sizes are required		
a)	4C X 10 Sq.mm	Nos	Actual Qty
b)	4C X 6 Sq.mm	Nos	Actual Qty
c)	3.5C X 300 Sq.mm	Nos	Actual Qty
d)	3C x 1.5 Sq.mm	Nos	Actual Qty
25	Cable Trays		
	Fabricating and insulating following sizes of perforated M.S. cable trays including horizontal and vertical bends. Reducers,tees,cross members and other accessoriess as required and duly suspended from the ceiling with M.S. suspenders and including painting with powder coating etc.,		
a)	150mm.Width x50mm. Depth x 1.6mm Thickness	Mt	Actual Qty
b)	300mm.Width x50mm. Depth x 1.6mm Thickness	Mt	Actual Qty
c)	100mm.Width x50mm. Depth x 1.6mm Thickness	Mt	Actual Qty
26	EARTHING		
	Providing and fixing 25mm x 5mm GI strip on surface or in recess for connections etc.,	Mt	Actual Qty
	Providing and fixing 6SWG dia GI wire on surface or in recess for loop earthing alongwith the existing surface/recessed conduit/submain wiring cable	Mt	Actual Qty
27	Dismantling and shifting of old materials/equipment from site including AHU refrigerant piping electrical panel, cabling, CHILLERS	Job	1
28	Installation, Testing and commissioning	Job	1



BHARAT HEAVY ELECTRICALS LIMITED TIRUCHIRAPALLI

CAPITAL PURCHASE

Annexure-A

ACCEPTANCE OF COMMERCIAL TERMS AND CONDITIONS BY THE VENDORS.

(This should be essentially filled in and sent along with the techno-commercial offer without fail. If this check list is not filled and submitted along with techno-commercial offer (Part I) or if the vendor does not confirm acceptance to the terms and conditions proposed, BHEL reserves the right to reject such offer)

CHECK-LIST FOR VENDORS

SI No	DESCRIPTION
1.	<p>The Bidders shall submit the offer in THREE INNER ENVELOPES as indicated below which shall be sealed in one outer envelope.</p> <ul style="list-style-type: none"> ❖ Envelope I: This sealed envelope should be clearly marked as “ Part I: EMD Amount” and must contain the required EMD amount of Rs. 2,00,000/- EMD shall be payable as per the instructions, otherwise the offer will not be considered. Pay order / DD No / Cash receipt no. & date should be furnished separately. ❖ Envelope II: This sealed envelope should contain all the copies of technical bid together with un-priced commercial bid. This envelope should be clearly marked “Part II - Technical and Commercial bid”, indicating Enquiry No., Due Date and Address & Reference of the Bidder. ❖ Envelope III: This sealed envelope should contain price details. This envelope should be clearly marked “Part III - Price bid”, indicating Enquiry No., Due Date and Address & Reference of the Bidder. This part should contain the schedule of price particulars and must be co-related to the technical details provided in Part II. <p>All the three envelopes (Part I,II & III) shall be put in one cover, duly sealed, super scribing as “Part I ,Part II and Part III of Enquiry No., due date of opening” and the address and reference of the Bidder. The offer received without the above guidelines, will not be considered for opening..</p> <p>The above offer should reach this office on or before the due date by 14.00 Hrs (IST). Late offers will not be considered. Tender should not be addressed to any Individual's name but only by designation to:</p> <p style="text-align: center;">Sr. MGR / CAPITAL PURCHASE / MFG 24 Building/IVth Floor BHARAT HEAVY ELECTRICALS LIMITED HIGH PRESSURE BOILER PLANT TIRUCHIRAPALLI - 620 014 TAMIL NADU, INDIA</p> <p>Tenders should be free from CORRECTIONS AND ERASURES, Corrections if any, must be attested. All amounts shall be indicated both in words as well as in figures. In case of any difference between amount quoted in words and figures, amount quoted in words shall prevail.</p> <p>Offers should be in ENGLISH and accompanied by detailed technical literature, catalogue and detailed dimensional drawings in ENGLISH or otherwise, the offers will not be considered.</p>
2.	<p><u>OPENING OF TENDERS</u></p> <p>The part I – EMD would be opened on the tender opening date and if EMD is not furnished the offer will be duly rejected.</p> <p>The Part II - Technical & commercial bid would be opened on the Tender opening date.</p> <p>Part III - Price bid of technically suitable Bidders alone would be opened after complete evaluation of Part-II. BHEL reserves the right to go for a Reverse Auction (RA) instead of opening the submitted sealed bid, which will be decided after technical evaluation. Information and general terms and conditions covering RA are given in this Annexure-A (Point no.18). Date and time of Price Bid (Part-III) opening / RA conducting date shall be intimated to the technically and commercially acceptable bidders only. Clarifications if any required by BHEL for Technical evaluation would be sought from bidders before opening of Part III - price bid/ (RA).</p>
3.	<p>Taxes and Duties :</p> <p>All Taxes and Duties payable as extra to the quoted price should be specifically stated in offers along with CST & TIN No / Tariff No. etc., failing which the purchaser will not be liable for payment of such Taxes and Duties. Our TIN No. 33243560005, TNGST No. 3560005, CST. No. 239383 Dt. 11-06-1991 & BHEL ECC No. AAACB4146PXM012, Service Tax Reg No (STC)- AAACB4146PST006. Assessment circle Tiruverambur.</p> <p>Cenvat credit & VAT credit (for Indian Bidders only): the quotation must indicate Tariff item number and rate of Excise Duty applicable. The original Excise Duty Gate Pass will be required to be furnished in case Excise Duty is applicable. If the bidder is availing Cenvat credit for his input materials, the effect of proforma credit should be passed on to BHEL.</p> <p>Income Tax applicable Any service charges payable towards supervision of E&C, training, performance prove-out etc., will be released after deduction of Income Tax as per Indian Income Tax Act / as per the Govt. of India rules and TDS certificate will be issued by BHEL for such deductions. Applicable service tax on E&C charges will be payable extra. The liability of depositing the same to the Govt. will be of the supplier.</p>

4. DETAILS OF EARNEST MONEY DEPOSIT & SECURITY DEPOSIT

Earnest Money is to be paid by the Tenderer either in Cash (as permissible under Income Tax Act), Pay Order (or) Demand Draft drawn in favour of “**Bharat Heavy Electricals Ltd, Tiruchirapalli**” payable at **Tiruchirapalli**.

EMD by the Tenderer will be forfeited as per Tender Documents if

- After opening the Tender, the Tenderer revokes his Tender within the validity period or increases his earlier quoted rates.
- The Tenderer does not commence the work within the period as per LOI/Contract. (In case the LOI/Contract is silent in this regard then within 15 days after award of the Contract).

EMD given by all unsuccessful Tenderers shall be refunded normally within 15 days of acceptance of award of work by the successful Tenderer. EMD shall not carry any interest.

SECURITY DEPOSIT

The successful Tenderer should pay Security Deposit before start of the work and the Rate of Security Deposit will be as below.

Value of Contract	Rate of Security Deposit
Upto Rs.10 Lakhs	10%
Above Rs.10 lakhs and upto Rs.50 lakhs	Rs.1 Lakh + 7.5% of the amount exceeding Rs.10 Lakhs
Above Rs.50 lakhs	Rs.4 Lakhs + 5% of the amount exceeding Rs.50 Lakhs

Security Deposit may be furnished in any one of the following forms.

- i) Cash (as permissible under the Income Tax Act)
- ii) Pay Order, Demand Draft in favour of **Bharat Heavy Electricals Limited, Tiruchirapalli** payable at **Tiruchirapalli**
- iii) Local Cheques of Scheduled Banks, subject to realization.
- iv) Securities available from Post Offices such as National Savings Certificates, Kisan Vikas Patras etc (Certificate should be held in the name of Contractor furnishing the security and duly pledged in favour of BHEL and discharged on the back)
- v) Bank Guarantee from Scheduled banks / Public Financial Institutions as defined in the Companies Act subject to a maximum of 50% of the total Security Deposit value. The balance 50% has to be remitted either by cash or in the other form of security. The Bank Guarantee format should have the approval of BHEL.
- vi) Fixed Deposit Receipt issued by Scheduled banks / Public Financial Institutions as defined in the Companies Act. The FDR should be in the name of the Contractor, A/C BHEL, duly discharged on the back.
- vii) Security Deposit will also be recovered at the rate of 10% from the running bills. However in such cases at least 50% of Security Deposit shall be paid by the Contractor before start of the work and the balance 50% will be recovered from the running bills.
- viii) EMD of the successful Tenderer shall be converted and adjusted against Security Deposit.

Note: Acceptance of security Deposit against SI.no.(iv) and (vi) above will be subject to hypothecation or endorsement on the documents in favour of BHEL. However BHEL will not be liable or responsible in any manner for the collection of interest or renewal of the documents or in any other matter connected therewith.

Security deposit shall not carry any interest. Security Deposit shall not be refunded to the Contractor except in accordance with the terms of the Contract

Security Deposit shall be payable by the successful vendors as per the above instructions Security Deposit will be refunded within 30 days after successful completion of Contract by the successful vendor.

5. Performance Bank Guarantee (PBG): The Bidder, in the event of an order, should furnish a Bank Guarantee from an Indian Bank approved by BHEL, at no extra cost in a format prescribed by BHEL, along with the order, for an amount equivalent to **10% (Ten percent)** of the value of the contract. The PBG shall be valid for period of 18 months from the date of dispatch or **12 months** from the date of receipt / acceptance / commissioning of the equipment at BHEL, Tiruchi whichever is more, with a claim period of two months.

The Performance Bank Guarantee shall be obtained from any one of the following banks which is a member Bank in our consortium of Banks.

LIST OF CONSORTIUM BANKS
 1.DEUTSCHE BANK 2.HDFC BANK 3.ANZ GRINDLAYS BANK 4.CITI BANK 5.STANDARD CHARTERED BANK 6.BANK OF AMERICA 7.ABN AMRO BANK 8.IDBI LTD 9.ICICI BANK LTD 10.THE HONGKONG AND SHANGHAI BANKING CORPORATION LTD.

LIST OF NATIONALISED BANKS
 1.ALLAHABAD BANK 2.ANDHRA BANK 3.BANK OF INDIA 4.BANK OF BARODA 5.BANK OF MAHARASTRA 6.BHARATH OVERSEAS BANK 7.CANARA BANK 8.CENTRAL BANK OF INDIA 9.CORPORATION BANK 10.DENA BANK 11.INDIAN BANK 12.INDIAN OVERSEAS BANK 13.OREINTAL BANK OF COMMERCE 14.PUNJAB NATIONAL BANK 15.PUNJAB & SIND BANK 16.STATE BANK OF INDIA 17.STATE BANK OF TRAVANCORE 18.STATE BANK OF MYSORE 19.STATE BANK OF BIKANER & JAIPUR 20.STATE BANK OF HYDERABAD 21.STATE BANK OF PATIALA 22.STATE BANK OF MAHARASTRA 23.STATE BANK OF SOURASTRA(SBI-13.09.08) 24.SYNDICATE BANK 25.UCO BANK 26.UNION BANK OF INDIA 27.UNITED BANK OF INDIA 28.VIJAYA BANK

If PBG is issued by a Foreign counter part of the BHEL consortium Indian Bank, in case of claim against the PBG , it will be lodged in any one of the Indian counters of the Foreign Bank which issued the PBG.

Vendor's confirmation

	No row shall be left blank. Please indicate NA, in case the item is “not applicable”	Vendor's confirmation
6.	Validity: Validity of the offer should be 180 days from the date of tender opening.	
7.	Release of Purchase Order: <ul style="list-style-type: none"> ➤ Purchase Orders (separate for supply and service portion if applicable) will be released on the successful vendor (L1 vendor) ➤ The retrofitting works are composite in nature and cannot be split-up to more than one vendor. Hence the entire work will be awarded to only lowest bidder of the tender. Work cannot be split-up and given to MSME vendor if they are L2 or above ranking in the tender. 	
8.	Payment terms for Supply Portion 80% Payment after receipt and acceptance of material and balance 20% within 45-90 days after receipt, acceptance and commissioning of supply material against submission of 10%PBG for order value.	
	Erection & Commissioning Portion (if applicable only): 100% of the Erection / commissioning charges (in case contract involves erection /commissioning) shall be paid only on completion of such erection / commissioning at BHEL	
	Any deviation in the above payment term will attract loading as mentioned below. “Base rate of SBI (as applicable on the date of bid opening. Techno-commercial bid opening in case of two part bids) + 6% shall be considered for loading for the period of relaxation sought by bidders.	
9.	Liquidated damages (LD): The delivery of the goods specified in the purchase order should be made within the time prescribed. LD for delay in ‘Supply’ and/or ‘E&C’ will be applicable to the delays attributed to vendor. LD will be considered separately for ‘Delivery’ and ‘E&C’. Where the seller supplies or dispatches the goods, beyond the delivery period Liquidated damages shall be applicable 0.5% of the total order value per week or part thereof subject to a maximum of 10% of the total order value. The rate of LD for delayed E&C shall be @ 0.5% per week of delay of total PO value (Supply + E&C) in E&C subject to a maximum of 10% of total PO value (Supply + E&C). For staggered delivery schedule, LD shall be 0.5% of the undelivered portion per week of the delay or part thereof subject to a maximum of 10% of the total order value. Any deviation from the above LD clause, loading will be applied to the extent to which it is not agreed by the bidder (at offered value). For the purpose of Imposing LD, the FOB delivery (B/L date) shall be considered	
10.	Risk Purchase: Alternatively the purchaser at his option will be entitled to terminate the contract and to purchase elsewhere at the risk and cost of the seller either the whole of the goods or any part which the supplier has failed to deliver or dispatch within the time stipulated as aforesaid or if the same were not available from the best and the nearest available substitute. The supplier shall be liable for any loss which the Purchaser may sustain by reason of such risk purchases.	
11.	Delivery terms and evaluation process: Indian Bidders should submit their offer on FOR BHEL, Tiruchy basis. Packing & Forwarding and Freight & Insurance charges from works to BHEL, Tiruchy to be indicated separately if extra from basic rate. Applicable % of ED & Sales Tax , Commissioning Charges should be clearly indicated. Evaluation of offers shall be on the basis of delivered cost (Net cash outflow to BHEL)	
12.	Guarantee: Vendors shall provide a guarantee for a period of 12 months from the date of commissioning of the equipment or 18 months from date of supply, whichever is earlier. The date of B/L or AWB shall be taken as the date of supply.Also, a PBG has to be given which shall cover the guarantee period (with additional 2 months as claim period). Normally No deviation permitted and the deviated offers are liable for rejection.	
13.	Short shipment / Warranty replacement: In case of any short shipment in the main equipment / spares, Customs Duty levied on such supplies, shall be borne by the supplier. Any warranty replacement during the warrantee period shall be on FOR, BHEL, Tiruchirappalli, basis.	
14.	Inspection & Testing: All goods shall be subject to inspection by BHEL or its authorized representatives at supplier's works or at BHEL stores or at any other place in India indicated by BHEL as the case may be. The supplier will not charge for the facilities provided for inspection of goods. In case of machine tools, the machine would be inspected and proved at supplier's works prior to dispatch however, final inspection and acceptance of the machine will be carried after installation of the machine at BHEL, Tiruchirappalli.	

15.	<p>Test certificates / Operating and Maintenance manuals : The Bidders shall clearly mention in their offer, that Test Certificates and Operating Maintenance Manuals, etc., as called for in the Technical Specification, in the required number of copies will be provided at no extra cost.</p>	
16.	<p>Payment through Bank is not preferred. In case of Payment through Bank is opted by Supplier, BHEL prefers documents submission through bank with copy of LR and door delivery of Goods to Site/Stores with Consignee copy attached. In this case Loading will be 3% on the offered value. Offers of indigenous Suppliers with payment terms as LC/Advance Payment are liable for rejection.</p>	
17.	<p>BHEL will consider the ranking after the loading is applied as referred above wherever deviations are observed.</p>	
18.	<p>Reverse Auction (RA): BHEL reserves the right to conduct on-line internet Reverse Auction ie. ONLINE BIDDING (THROUGH A SERVICE PROVIDER) for finalizing the Tender. This decision will be communicated to the technically qualified vendors after technical evaluation. Details / General terms / guidelines for conduct of RA are shown below Vendors are requested to confirm their acceptance for BHEL proceeding with RA route for finalization of the enquiry.</p> <ol style="list-style-type: none"> 1. For the proposed reverse auction, technically and commercially acceptable bidders only shall be eligible to participate. 2. BHEL will engage the services of a service provider who will provide all necessary training and assistance before commencement of on line bidding on internet. 3. BHEL will inform the vendor in writing in case of reverse auction, the details of Service Provider to enable them to contact & get trained. 4. Business rules like event date, time, start price, bid decrement, extensions etc. also will be communicated through service provider for compliance. 5. Vendors have to fax the Compliance form in the prescribed format (provided by Service provider) before start of Reverse auction. Without this, the vendor will not be eligible to participate in the event. 6. BHEL will provide the calculation sheet (e.g., EXCEL sheet) which will help to arrive at "Total Cost to BHEL" like Packing & forwarding charges, Taxes and Duties, Freight charges, Insurance, Service Tax for Services and loading factors (for non-compliance to BHEL standard Commercial terms & conditions) for each of the vendor to enable them to fill-in the price and keep it ready for keying in during the Auction 7. Reverse auction will be conducted on scheduled date & time. 8. At the end of Reverse Auction event, the lowest bidder value will be known on the network. 9. The lowest bidder has to Fax/e-mail the duly signed Filled-in prescribed format as provided on case-to-case basis to BHEL through Service provider within 24 hours of Auction without fail. 10. Any variation between the on-line bid value and the signed document will be considered as sabotaging the tender process and will invite disqualification of vendor to conduct business with BHEL as per prevailing procedure. 11. In case BHEL decides not to go for Reverse Auction procedure for this tender enquiry, the Price Bids and price impacts, if any, already submitted and available with BHEL shall be opened as per BHEL's standard practice. 12. BHEL reserves the right to negotiate if need be, with the "L1" vendor of the Reverse Auction 13. <u>BHEL reserves the right not to consider offers from vendors not complying with the RA process for finalization of the enquiry.</u> 14. If the Bidder or any of his representatives are found to be involved in Price manipulation/ cartel formation of any kind, directly or indirectly by communicating with other bidders, action as per extant BHEL guidelines, shall be initiated by BHEL and the results of the RA scrapped/ aborted. 15. In case BHEL decides to go for reverse auction, the H1 bidder(s) (whose quote is highest in online sealed bid) may not be allowed to participate in further RA process. 	
19.	<ul style="list-style-type: none"> ➤ Point to point confirmation for the Technical Specification enclosed to be provided. If there are any deviations, the same should be clearly specified. Offers received without confirmation to our specifications will be liable for rejection. If needed additional sheets shall be used. ➤ Equipment offered shall be "New". Re-built / Re-conditioned / Used equipments will not be accepted. Incomplete offers will not be considered for further processing Fixed price: ➤ BHEL reserves its right to reject a tender due to unsatisfactory past performance in the execution of a contract at any of BHEL projects / units. ➤ BHEL shall be at liberty to reject or accept any tender, part or in full, at their own discretion and any such action is not liable for any question or claim against BHEL. ➤ Security Deposit shall be payable as per the instructions furnished in clause no.4. ➤ All Equipments / Services including concerned personnel for carrying out the erection and commissioning of the equipment shall be arranged by the vendor. If any Services are availed from BHEL, it is only on chargeable basis unless otherwise specified. ➤ The vendor shall provide necessary drawings, Test Certificates and Operating Maintenance Manuals etc., as called for in the Technical Specification, in the required number of copies at no extra cost ➤ The Supplier shall arrange for securely protecting and packing the stores to avoid loss or damages during transit. 	

20.	COMPANY DETAILS & CONTACT			
	Full Address of the company for future correspondence.(Copy of address proof & PAN card shall be attached along with Part-II)			
	Company Email ID:		Phone No.:	
	Fax No		Pan No	
	CST /TIN No		Service Tax No.	
	Name of the contact person:		Mobile No.:	
	e-mail ID			
21.	TO BE CONFIRMED BY VENDOR			
	Details of EMD	DD/CR/PO-No.	Dt:	Rs.
	Country of origin:			
	Station of dispatch/Port Of Shipment			
	Delivery Terms (For destination or Ex-works)			
	Packing & Forwarding Charges, if any (in % or Lumpsum) ie. extra from basic rate			
	% of Excise Duty with cess			
	% of TAX (CST/VAT) (TNGST with FORM-17 or CST with C-FORM)			
	Freight & transit insurance charges (if any, in Lumpsum (or) percentage) from Dispatching station to BHEL Tiruchirappalli, (Note:If the delivery terms is Ex Works the materials has to be sent through BHEL approved carrier only, in this case the freight & Insurance will be borne by BHEL)			
	(If applicable only) Erection & commissioning charge is inclusive (or) exclusive on basic rate			
Service tax applicable extra or not				
22.	Delivery from the date of Letter of Intent / Purchase Order. (This should be inclusive of Order acceptance, drawing approval and time period required for dispatch (B/L or date) etc.,			
	Period for completion of the Retrofitting / Reconditioning (erection & Commissioning) work at BHEL shall be clearly specified in the offer			
23.	Weight & Cubage of package: Approximate Net weight of the total consignment:- Approximate Gross weight of the total consignment: - Approximate volume of the total consignment:-			
	For any queries / clarifications the bidders may contact us through our FAX NO. +91 431 2520719 or through e-mail <pgavictor@bheltry.co.in>			

NOTE:-

- a) Your specific acceptance to our Payment terms, LD, Risk Purchase Clause & Submission of PBG for 10% of the order value are essential for consideration of your offer. Otherwise your offer is liable for rejection.
- b) No row shall be left blank. Please indicate NA, in case the item is “not applicable”

Declaration:-

I/We have gone through and understood the ‘General guidelines & instructions to bidders for submitting offer’ enclosed as a part of the Tender and confirm that our offer has been made in line with the same.

(AFFIX OFFICIAL SEAL HERE)

Signature with date:

Name:

Designation:

Department:

(PLEASE AFFIX YOUR SIGNATURE WITH SEAL ON EACH PAGE)

MODEL PRICE BID FORMAT FOR INDIAN BIDDERS

Enquiry No. & Date:
Bidder's Offer No. & Date:

Sl No	Description of item	Unit (SET /No)	QTY	Rate /Qty in Rs. (excluding of all taxes)	VAT/CST in % (TNGST with FORM-17 or CST with C-FORM)	ED in %	Service Tax in %	Total Value in Rs. (inclusive of all taxes)
	Supply portion							
	Erection & Commissioning (if available in scope only)							
	Packing & Forwarding charges (if any) in percentage (or) Lumpsum							
	FOR Dispatching station value in Rs.							
	Percentage of Freight & transit insurance charges, if any (Lumpsum or %) Freight & Insurance charges from Dispatching station to BHEL, Tiruchirappalli (Note:If the delivery terms is Ex Works the materials has to be sent through BHEL approved carrier only, in this case the freight & Insurane will be borne by BHEL)							
	Approximate Net weight of the total consignment							
	Approximate Gross weight of the total consignment							
	Approximate Dimensions of the Consignment							

Indicative Price for AMC contract	In Rs.
Indicative price for AMC of the offered chiller for two years after the completion of warranty period excluding taxes.	

Signature & Seal of Vendor

The price bid should be submitted only as per the above format. No row shall be left blank. Please indicate NA, in case the item is "not applicable"

Certificate by Chartered Accountant on letter head

This is to Certify that M/S
(hereinafter referred to as 'company') having its registered office at
..... is registered under MSMED Act 2006, (Entrepreneur
Memorandum No (Part-II) dtd:.....,
Category: (Micro/Small)). (Copy enclosed).

Further verified from the Books of Accounts that the investment of the company as on
date..... as per MSMED Act 2006 is as follows:

1. **For Manufacturing Enterprises:** Investment in plant and machinery (i.e. original cost excluding land and building and the items specified by the Ministry of Small Scale Industries vide its notification No.S.O.1722(E) dated October 5, 2006 :
Rs.....Lacs
2. **For Service Enterprises:** Investment in equipment (original cost excluding land and building and furniture, fittings and other items not directly related to the service rendered or as may be notified under the MSMED Act, 2006:
Rs.....Lacs

The above investment of Rs.....Lacs is within permissible limit of
Rs.....Lacs forMicro / Small (~~Strike off which is not applicable~~)
Category under MSMED Act 2006.

Date:

(Signature)

Name -

Membership number -

Seal of Chartered Accountant