



भारत हेवी इलेक्ट्रिकल्स लिमिटेड

**Bharat Heavy Electricals Limited**

(भारत सरकार का उपक्रम/A Govt. of India Undertaking)

मानव संसाधन विकास संस्थान/Human Resource Development Institute

क्रय विभाग/PURCHASE DEPARTMENT



**By COURIER SERVICE**

Please Quote TENDER ENQUIRY No in all correspondence

TENDER ENQUIRY

Tender Enquiry No.MG/RG/PUR/009

Date: ..31/01/2012 (31/01/12)

M/S

**Tender Submission Date: ..07/02/2012 (1.00 PM)**

**Tender Opening Date: ....08/02/2012 (4.00 PM)**

Sub: **HVAC RENOVATION WORKS at HRDI, Noida**

Dear Sirs,

You are requested to submit your most competitive rates as per Scope of Work/BOQ/Price-Format as given in Annexure-I & II to this enquiry letter read in conjunction with the following which constitutes the tender documents in totality, duly sealed, so as to reach this office at HRDI Bldg at Noida on or before ....07/02/2012 (01.00 PM) in the manner explained below:

1. Scope of Works/BOQ/Price Format: **Annexure-I**
2. Scope of Work for Repair & Recommissioning of 3 TR Tower Split A.C.: **Annexure-II**
3. Pre-Qualifying Criteria & Special Conditions of Contract: **Annexure-III**
4. General Instruction to Bidders: **Annexure-IV**
5. General Terms & Conditions: **Annexure-V**
6. No Deviation Certificate: **Annexure-VI**
7. Type of Insulation & Finish: **Annexure-VII**
8. Technical Specification (List of Makes): **Annexure-VIII**
9. General Terms & Conditions for Reverse Auction: **Annexure-IX**

**Unsolicited offer will not be considered and offer received late shall be ignored.** You are advised to visit our office at the address indicated below for inspection of the premises, layout etc, and your assessment prior to submission of your offer.

**Procedure for submission of sealed tender:**

The bidder must submit their Tender as required in separate covers prominently superscribed as:

Part-I, Cover-I EMD (Offer received without EMD will not be considered.)

Part-I, Cover-II: Techno Commercial Bid and

Part-II, Cover III: Price-Bid.

**Each cover should also indicate the Tender No., Due date & Time as mentioned above and each cover should be properly sealed.**

Part-I/ Cover-I: Earnest Money Deposit (EMD):

Cont- 2/....

दूरभाष/Telephone: 0120-2416354, फ़ैक्स/Fax: 0120-2515431, E-mail-[rajivkgupta@bhel.in](mailto:rajivkgupta@bhel.in), Home Pg. [www.bhel.com](http://www.bhel.com)  
एच.आर.डी. एवं ई.एस.आई. परिसर, प्लॉट नं. 25, सेक्टर-16 ए, नोएडा-201301, गौतम बुद्धनगर, (यू.पी.)

HRD & ESI Complex, Plot No. 25, Sector-16A, NOIDA-201301, Gautam Budh Nagar (U.P)

पंजीकृत कार्यालय: बी.एच.ई.एल. हाउस, सीरी फोर्ट, नई दिल्ली -110 049 Regd. Office: BHEL House, Sirifort, New Delhi-10049.



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**Bharat Heavy Electricals Limited**

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क्रय विभाग / PURCHASE DEPARTMENT



Only EMD of Rs. 1,50,000.00 (Rupees One Lac Fifty Thousand only) in form of Demand Draft/ Banker's Cheque/ Pay order in favour of BHEL payable at New Delhi to be submitted in Part-I/ cover-I.

**Part-I/ Cover-II: Techno Commercial Bid:**

No deviation certificate as per Annexure -VI, along with original copy of tender document duly signed and stamped on each page as token of your acceptance to the tender conditions are to be submitted in Part-I/ cover-II.

**Part-II/ Cover-III: Price-Bid:**

Only price bid in the prescribed Price-Format as per Annexure-I & II is to be submitted in Part-II/ Cover-III.

These three separate covers (Cover I, II & III) shall together be enclosed in a separately sealed fourth envelope and this sealed cover shall also be superscribed with Tender Name, Tender No., and Due Date & Time and submitted to this office at the following address.

**Sr. Engineer (PUR.)**

**Bharat Heavy Electricals Limited**

**Human Resource Development Institute / (HRDI)**

**HRD & ESI Building, Plot No.-25, Sector-16A,**

**NOIDA - 201301 (U.P.)**

Your offer should reach this office latest by 1300 hrs on 07/02/2012 Part-I /cover-I of Tender (EMD) will be opened first at 1600 hrs on 08/02/2012 in presence of the representatives of the tenderers who choose to be present. Part-II/cover-II (Techno Commercial Bid), of only those bidders who's EMD has been received and found in order as per terms & conditions of this enquiry, will be opened thereafter on the same date 08/02/2012 itself. 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 governing RA as per Annexure-IX.

BHEL reserves the right to accept or reject any tender without assigning any reasons thereof.

  
Ram Prasad Regar  
Sr. Engineer/PUR

**Encls:**

1. Scope of Works/BOQ/Price Format: Annexure-I
2. Scope of Work for Repair & Recommissioning of 3 TR Tower Split A.C.: Annexure-II
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दूरभाष/Telephone: 0120-2416354, फैक्स/Fax: 0120-2515431, E-mail-rajivkgupta@bhel.in, Home Pg. www.bhel.com  
एच.आर.डी. एवं ई.एस.आई. परिसर, प्लॉट नं. 25, सेक्टर-16 ए, नोएडा-201301, गोतम बुद्धनगर, (यू.पी.)

HRD & ESI Complex, Plot No. 25, Sector-16A, NOIDA-201301, Gautam Budh Nagar (U.P)

पंजीकृत कार्यालय: बी.एच.ई.एल. हाउस, सीरी फोर्ट, नई दिल्ली -110 049 Regd. Office: BHEL House, Sirifort, New Delhi-10049

## ANNEXURE-I

PART-A (SUPPLY) of ANNEXURE-I

Sl. No.	Description	Unit	Qty	Rate in Rs.	Amount in Rs.
1.	Supply of Double Skin type Air Handling Units for replacement of AHU Nos. – 4 & 5 (Ground floor Conference Hall, HRDI) consisting of chilled water 6 row deep Cooling Coil, Centrifugal Blower, TEFC Squirrel Cage Induction Motor, Drive Set, GI Filters and other accessories of capacity 6,000 CFM & cooling coil capacity of 12.0 TR with outer skin of 0.6 mm preprinted galvanized sheet and inner skin of 0.6 mm galvanized sheet, 50 mm static pressure along with 15KW tubular strip duct heater and integrating the same with the existing system.	No.	1		
2.	Supply of Double Skin type Air Handling Units for replacement of AHU No. 12 (2 <sup>nd</sup> floor Library & Conference hall) consisting of chilled water 6 row deep Cooling Coil, Centrifugal Blower, TEFC Squirrel Cage Induction Motor, Drive Set, GI Filters and other accessories of capacity 4500 CFM & cooling coil capacity of 9.0 TR with outer skin of 0.6 mm preprinted galvanized sheet and inner skin of 0.6 mm galvanized sheet, 50 mm static pressure alongwith 12KW tubular strip duct heater and integrating the same with the existing system.	No.	2		
3.	Supply of double Skin type Air Handling Units for replacement of AHU No. 1 (Ground floor PS NR Side) consisting of chilled water 6 row deep Cooling Coil, Centrifugal Blower, TEFC Squirrel Cage Induction Motor, Drive Set, GI Filters and other accessories of capacity 7,500 CFM & cooling coil capacity of 15.0 TR with outer skin of 0.6 mm preprinted galvanized sheet and inner skin of 0.6 mm galvanized sheet, 50 mm static pressure along with 18KW tubular strip duct heater and integrating the same with the existing system	No.	1		
4.	Supply of Double Skin type Air Handling Units for replacement of AHU Nos. 8 &9 (2 <sup>nd</sup> I/s CIT) consisting of chilled water 6 row deep Cooling Coil, Centrifugal Blower, TEFC Squirrel Cage Induction Motor, Drive Set, GI Filters and other accessories of capacity 15,000 CFM & cooling coil capacity of 30.0 TR with outer skin of 0.6 mm preprinted galvanized sheet and inner skin of 0.6 mm galvanized sheet, 50 mm static pressure along with 36KW tubular strip duct heater and integrating the same with the existing system.	No.	1		

5.	Supply of Double Skin type Air Handling Units for replacement of AHU No. 10&11 (2 <sup>nd</sup> floor outside CIT) consisting of chilled water 6 row deep Cooling Coil, Centrifugal Blower, TEFC Squirrel Cage Induction Motor, Drive Set, GI Filters and other accessories of capacity 4,000 CFM and cooling coil capacity of 10 TR with outer skin of 0.6 mm preprinted galvanized sheet and inner skin of 0.6 mm galvanized sheet, 50 mm static pressure along with 9KW tubular strip duct heater and integrating the same with the existing system.	Nos.	2		
6(I)	Supply of Fan Coil Unit (FCU) of Capacity 2.0 TR with all accessories as specified & integrating the same with the existing system.	Nos.	26		
6(II)	a. Ball valve dia. 20 mm for the inlet (with strainer/filter) of 2.0 TR FCUs.	Nos.	26		
6(III)	b. Ball valve dia. 20 mm for the inlet (without strainer/filter) of 2.0TR FCUs.	Nos.	26		
7(I)	Supply of Fan Coil Unit (FCU) of Capacity 3.0 TR with all accessories as specified & integrating the same with the existing systems.	Nos.	5		
7(II)	a. Ball valve dia.25mm for the inlet (with strainer/filter) of 3.0 TR FCUs.	Nos.	5		
7(III)	b. Ball valve dia. 25 mm for the inlet (without strainer/filter) of 3.0 TR FCU's.	Nos.	5		
8	Supply of Supply of Butterfly valve – PN -16				
8(i)	125 NB	Nos.	4		
8(ii)	80 NB	Nos.	2		
8(iii)	65 NB	Nos.	2		
8(iv)	50 NB	Nos.	6		
8(v)	40 N B	Nos.	6		
9(a)	Supply of 3 – Way valve with actuator linkage + temperature controller				
9(a)(i)	80 NB	No.	1		
9(a)(ii)	65 NB	No.	1		
9(a)(iii)	50 NB	Nos.	3		
9(a)(iv)	40 NB	No.	3		
9(b)	Supply of Balancing Valve				
9(b)(i)	125 NB	Nos	1		
9(b)(ii)	100NB	Nos	1		
9(b)(iii)	80NB	Nos	1		
10	Supply of Piping (‘B’ Class M. S Pipe)				
10(i)	80 NB	Rmt	30		
10(ii)	65 NB	Rmt	10		

Sl. No.	Description	Unit	Qty																																					
10(iii)	50 NB	Rmt	155																																					
10(iv)	40 NB	Rmt	20																																					
10(v)	25 NB	Rmt	150																																					
10 (vi)	20 NB	Rmt	60																																					
11	Supply of Cu Piping																																							
11(I)	a. 25 NB	Rmt	100																																					
11(II)	b. 20 NB	Rmt	100																																					
12	Supply of GSS Zinc Coating 120 GSM factory fabricated ducting complete with hangers/supports & dampers.																																							
12(I)	18G	Sqm	50																																					
12(II)	20G	Sqm	50																																					
12(III)	22G	Sqm	120																																					
12(IV)	24G	Sqm	50																																					
13	Supply of Pan type humidifier for each AHU room – 6 kw	Nos.	15																																					
14	Supply Acoustic insulation of first 5M of ducting from AHU outlets-resin bonded fiber glass of 32 kg/m3 -- 50 mm thick.	Sqm	70																																					
15	<p>Supplying of factory built MV panel board (for AHU's), cubical type made of 2 mm thick CRCA sheet powder coated through seven tank process treatment for pickling &amp; degreasing including connections and inter-connections to all mountings cable alleys as per specifications and with following mountings in (for 5.5 kw AHU Motor with Star Delta/DOL Starter). The panel should be CBRI approved.</p> <p>Suitable rating contactors/switch gears to be accommodated in the panel for duct strip heaters and Pan De-Humifier (6KW) as per the following details:</p> <table border="1"> <thead> <tr> <th>Item. no.</th> <th>AHU No.</th> <th>CFM</th> <th>Capacity (KW)</th> <th>Pan De - Humidifier</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>4</td> <td>6000</td> <td>15</td> <td>6KW</td> </tr> <tr> <td>2.</td> <td>9(2 nos.)</td> <td>4500</td> <td>2 X 12= 24</td> <td>2X6KW</td> </tr> <tr> <td>3.</td> <td>1</td> <td>7500</td> <td>18</td> <td>6KW</td> </tr> <tr> <td>4.</td> <td>7</td> <td>15000</td> <td>36</td> <td>6KW</td> </tr> <tr> <td>5.</td> <td>8(2 nos.)</td> <td>4000</td> <td>2 X 9 = 18</td> <td>2X6KW</td> </tr> <tr> <td>6</td> <td>13</td> <td>6000</td> <td>15</td> <td>6KW</td> </tr> </tbody> </table>	Item. no.	AHU No.	CFM	Capacity (KW)	Pan De - Humidifier	1.	4	6000	15	6KW	2.	9(2 nos.)	4500	2 X 12= 24	2X6KW	3.	1	7500	18	6KW	4.	7	15000	36	6KW	5.	8(2 nos.)	4000	2 X 9 = 18	2X6KW	6	13	6000	15	6KW	Nos.	8		
Item. no.	AHU No.	CFM	Capacity (KW)	Pan De - Humidifier																																				
1.	4	6000	15	6KW																																				
2.	9(2 nos.)	4500	2 X 12= 24	2X6KW																																				
3.	1	7500	18	6KW																																				
4.	7	15000	36	6KW																																				
5.	8(2 nos.)	4000	2 X 9 = 18	2X6KW																																				
6	13	6000	15	6KW																																				
16	Supply of Tubular Strip heaters in AC ducts of following Capacity complete with new panels for heaters and Pan-humidifiers (6KW) having Contactors, Geysterstats along with thermostat, Cabling, Mounting Frames and interlocking & controls with AHU starters suitable for operation with 415 V, 3 phase power supply for each AHU room:	Nos.	3																																					

	18500 cfm - 45KW - AHU 3,11&12				
17	Supply of In Line Fan dia. 200 mm	Nos.	2		
18	Supply of FRP type cooling tower with all accessories and controls (for replacement of the damaged cooling tower) suitable for the water chilling unit of 100 TR and condenser water flow of 100 CMH.	Nos.	2		
19	Supply of TFA Double Skin type Air Handling Units for replacement of AHU No. 16 (3 <sup>rd</sup> Floor Hostel Block, HRDI) consisting of chilled water and 6 row deep Cooling Coil, Centrifugal Blower, TEFC Squirrel Cage Induction 6,000 Drive Set, F1 Fitters and other accessories of capacity 6,000 CFM, with outer skin of 0.6 mm preprinted galvanized at and inner skin or 0.6 mm galvanized sheet, 50 mm static pressure and integrating the same with the existing system.	No.	1		
20	Supply of Thermal Insulation of 'B' Class MS Pipe ( NB 40,50, 65 and 80)	Rmt	250		
21	Supply of Expansion MS Tank (insulated) for chilled water with all accessories. Capacity 1 cubic meter	No	1		
22.	Supply of PVC Pipe 20mm	Rmt	48		
23	Supply of Nipples ¾ inch	Nos	48		
24	Supply of Elastomeric closed cell pipe insulation with sealed properly adhesive and tape	Rmt	115		
	Total				
	Taxes if any in percentage (%)				
	Total (A) inclusive of %				

**PART-B (Erection & Commissioning) of ANNEXURE-I**

<b>Part B – Erection &amp; Commissioning</b>					
<b>Sl. No.</b>	<b>Description</b>	<b>Unit</b>	<b>Qty</b>	<b>Rate (Rs.)</b>	<b>Amount (Rs.)</b>
1(a)	Dismantling of old existing piping from Main Header to AHU No. 12 and the existing AHU No. 12 with all accessories and erecting and commissioning of Double Skin type Air handling Units for replacement of AHU No. 12 (2 <sup>nd</sup> floor Library) consisting of Chilled Water Cooling Coil, centrifugal Blower, TEFC Squirrel Cage Induction Motor, Drive Set, SS Filers and other accessories of capacity 4500 CFM with cooling capacity of 9.0TR including fabrication of MS Piping from Main Header(125 NB) using 65mm reducer connecting to Hostel Block FCU supply line, installation of Balancing Valve & associated accessories , Blanking where required to make the system complete and integrating with the existing system.	No.	1		
	Storing the dismantled AHU to predetermined site and disposing the malba outside BHEL Premises – with in 100 mtrs.				
	Making well all the damaged Civil work to the satisfaction of the Engineer – in – charge.				
1(b)	Erecting & Commissioning of Double Skin type Air handling Units (2 <sup>nd</sup> floor Conference Hall) consisting of Chilled Water Cooling Coil, centrifugal Blower, TEFC Squirrel Cage Induction Motor, Drive Set, SS Filers and other accessories of capacity 4500 CFM with cooling capacity of 9.0TR and integrating with the existing system.	No	1		
	Storing the dismantled AHU to predetermined site and disposing the malba outside BHEL Premises – with in 100 mtrs.				
	Making well all the damaged Civil work to the satisfaction of the Engineer – in – charge.				
2	Dismantling of existing AHU and erecting Double Skin type Air handling Units for replacement of AHU No. 1 (Ground floor PSNR side) consisting of Chilled Water Cooling Coil, centrifugal Blower, TEFC Squirrel Cage Induction Motor, Drive Set, SS Filers and other accessories of capacity 7500 CFM with cooling coil capacity of 15.0 TR and integrating the same with the existing system. Storing the dismantled AHU to predetermined site and disposing the malba outside BHEL Premises – with in 100 mtrs. Making well all the damaged Civil work to the satisfaction of the Engineer – in – charge.	No	1		
3	Dismantling of existing AHU and erecting and commissioning of Double Skin type Air handling Units for replacement of AHU No. 8 & 9 (2 <sup>nd</sup> floor, I/s CIT) consisting of Chilled Water Cooling Coil, centrifugal Blower, TEFC Squirrel Cage Induction Motor, Drive Set, SS Filers and other accessories of capacity 15000 CFM with cooling coil capacity of 30.0 TR and integrating the same with the existing system.	No	1		
	Storing the dismantled AHU to predetermined site and disposing the malba outside BHEL Premises – with in 100 mtrs.				

	Making well all the damaged Civil work to the satisfaction of the Engineer – in – charge.				
4	Dismantling of existing AHU and erecting and commissioning of Double Skin type Air handling Units for replacement of AHU No. 10&11(2 <sup>nd</sup> Floor, outside CIT)consisting of Chilled Water Cooling Coil, centrifugal Blower, TEFC Squirrel Cage Induction Motor, Drive Set, SS Filers and other accessories of capacity 4000 CFM and integrating the same with the existing system.	No	2		
	Storing the dismantled AHU to predetermined site and disposing the malba outside BHEL Premises – with in 100 mtrs.				
	Making well all the damaged Civil work to the satisfaction of the Engineer – in – charge.				
5	Dismantling of existing AHUs (2 Nos) and erecting and commissioning of Double Skin type Air handling Units for replacement of AHU No. 4&5(Ground floor Conference hall )consisting of Chilled Water Cooling Coil, centrifugal Blower, TEFC Squirrel Cage Induction Motor, Drive Set, SS Filers and other accessories of capacity 6000 CFM and integrating the same with the existing system.	No	1		
	Storing the dismantled AHU to predetermined site and disposing the malba outside BHEL Premises – with in 100 mtrs.				
	Making well all the damaged Civil work to the satisfaction of the Engineer – in – charge.				
6	Dismantling of existing FCU's and erecting and commissioning of 2.0 TR Fan Coil with all the accessories (Like Cu-tubing, flair tubing& etc. including 2 way Valve. Valve will be supplied by BHEL) as specification & integrating the same with the existing system.	No	26		
	Storing the dismantled AHU to predetermined site and disposing the malba outside BHEL Premises – with in 100 mtrs.				
7	Dismantling of existing FCU's and erecting and commissioning of 3.0 TR Fan Coil with all the accessories (Like Cu-tubing, flair tubing& etc. including 2 way Valve. Valve will be supplied by BHEL) as specification & integrating the same with the existing system.	No	5		
	Storing the dismantled AHU to predetermined site and disposing the malba outside BHEL Premises – with in 100 mtrs.				
8	Electrical work like supply, erection and commissioning of power cabling and MCB Panel to take care of the modification of the MCB Panel to cater the load of the segmented AHU's as required for renovation.	Lot	1		
9	Installation and commissioning of 2 way valve in 2.0 TR FCU's with new Cu-tubing, flair nuts etc. (Valve will be provided by BHEL)	Nos.	53		
10	Erection and commissioning of Expansion MS Tank (insulated) for chilled water with all accessories as required and integrating the same with the existing system . Capacity 1 m3	No.	1		
11	Erection and commissioning of Expansion GSS Zink Coating 120 GSM ducting complete with				

i	18G	Sqm	50		
ii	20G	Sqm	50		
iii	22G	Sqm	120		
iv	24G	Sqm	50		
12	Erection and commissioning of Pan type humidifier for each AHU ducting from AHU outlets	Lot	15		
13	Fixing Acoustic insulation of first 5M from AHU outlets	sqm	50		
14	Fixing and commissioning of Relay based control panel (including Local Control panel / Pushbutton stations AHU Rooms) complete for above AC Plant with all controls, interlocks, special cable etc. as specified.	Nos.	8		
15	Mounting and commissioning of 6 KW PanDe-Humidifiers and Tubular Strip heaters in AC ducts of following Capacity complete with Contactors, Geysersstats along with thermostat, Cabling, Mounting Frames suitable for operation with 415 V, 3 phase power supply for each AHU room in the existing panels: 18500 cfm - 45 KW - AHU 3,11&12	Sets	3		
16	Dismantling of existing FRP type cooling tower with all accessories and controls (for replacement of the damaged cooling tower), erecting and commissioning of water chilling unit of 100 TR and condenser water flow of 100 CMH & integrating the same with the existing system. Including Electrical works like supply, erection and commission of Power cabling, Instrument cabling and MCC panel to take care the modification of the MCC Panel to cater the load of the Cooling Tower. Storing the dismantling cooling tower to a predetermined site and disposing the malba outside BHEL premises.  Making good all the damaged civil work to the satisfaction of Engineer – In charge.	Nos.	02		
17	Dismantling of existing AHU -13 and erecting and commissioning of Double Skin type Air handling Units for replacement of AHU-16( 3rd floor Hostel Block )consisting of Chilled Water Cooling Coil, centrifugal Blower, TEFC Squirrel Cage Induction Motor, Drive Set, SS Filers and other accessories of capacity 6000 CFM and integrating the same with the existing system. Including Electrical work like supply, erection and commissioning of power cabling and MCB Panel to take care of the modification of the MCB Panel to cater the load of the segmented AHU's as required for renovation.  Making good all the damaged civil work to the satisfaction of Engineer – In charge.	No	1		
18	Repairing and commissioning off Existing 15 Nos Split Units as per Annex-II	Nos	15		
19	Complete Thermal Insulation of 'B' Class MS Pipe( NB 40,50,65&80)	Rmt	250		
20	Erection & commissioning of drain of each FCU (61 nos.) to be	Nos	61		

	connected to a common header of 50mm die and the same shall be connected to existing FCU drain.				
	Total				
	Taxes if any in percentage (%)				
	TOTAL (B) inclusive of %				

Total (A+B) = Rs. -----  
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NOTE: Value in Rs. is to be written in Figures and Words both.

Date:

Name of the Company

(Signature & Seal of the Company)

Annexure- II**Specification & Scope of Work for Repair & Re-commissioning of 3 TR Tower Split Air- conditioners-15 Nos.**

SI No	Including but not limited to Item Description	Qty.	Amount (INR)
01	<p>(a) Providing and fixing the following:</p> <p>i) two nos. new Remote Control Panel with Circuit Board</p> <p>ii) 15 nos. Charging Valve (1/4 inch) of Kim/Pim by suitable modification of copper piping.</p> <p>iii) Five nos. MN 16 Contactors of L&amp;T make</p> <p>iv) Fifteen nos. Single Phase Preventer 16 Amp of VSP2, L&amp;T make,</p> <p>v) Fifteen nos. Indication lamps</p> <p>vi) Ten nos. Push Buttons</p> <p>vii) Forty five Fuses, 35Amp of L&amp;T make</p> <p>viii) Insulation for all indoor units &amp; suction pipe with UP Twiga</p> <p>(b) Repairing ten nos. Remote Control, two nos. Digital Display Unit, rectification of Control wiring &amp; redressing &amp; reaffixing the same.</p> <p>(c) Replacement of two nos. defective Compressors with 3 TR capacity.</p> <p>(d) Pressure testing of the system, leakage repairs if necessary and charging fresh M22 refrigerant in all the fifteen units and commission all the units.</p> <p>(e) Providing and fixing of covers for both the indoor &amp; outdoor units.</p> <p>(f) Any other item not covered above but found necessary to operationalize the Split ACs.</p>	1 LOT	
02	<b>Taxes, if any in %</b>		
03	<b>Total</b>		

**Annexure-III****Pre-Qualifying Criteria & Special Terms & Conditions of Contract for HVAC RENOVATION WORKS at HRDI****Pre-Qualifying Criteria:**

1. Proof of PAN & Service Tax registration no.
2. Average Annual financial turnover during the last 3 years, ending 31st March of 2010-2011 should be at least Rs.22.50 Lacs.
3. Experience of having successfully completed supply, installation and commissioning of HVAC Chillers/ Fan Coil Units/ Air Handling Units/ Cooling Towers during last 7 years, ending 31st October - 2011 with either of the following: -
  - a. Three similar completed works costing not less than the amount equal to Rs. 30.0 Lacs.  
Or
  - b. Two similar completed works costing not less than the amount equal to Rs.37.50 Lacs.  
Or
  - c. One similar completed work costing not less than the amount equal to Rs.60.0 Lacs.  
  
d. Bidder should furnish copy of following.
    - i) PAN No.
    - ii) Service Tax Registration no. and VAT or TIN No.
- iii. Similar Work means 'Supply, installation and commissioning of HVAC Chillers/ Fan Coil Units/ Air Handling Units/ Cooling Towers

**Note: Documentary evidence in support of all the above said stated requirements are to be provided along with the Techno commercial Bid.**

Owner reserves the right to ask the bidder/contractor to provide any or all of the original documents referred above at any time during bid evaluation and / or currency of contract which bidder/ contractor has to comply. Failure to do so or furnishing of incorrect information will invite action as specified in the tender documents.

**Special Terms & Condition of the Contract:**

**1. Rates to be quoted on FOR BHEL HRDI site basis, i.e. inclusive of packing & forwarding, freight & transit insurance etc. Taxes & duties will be paid extra as per actuals.**

**2. Validity of the offer:**

The offer shall be valid for 3 months from the date of tender opening.

**3. Warranty/Guarantee Period:**

Warranty/guarantee shall be for a period of 12 months from the date of commissioning of respective equipment.

**4. Completion Period:**

Delivery of equipment shall be within 18 weeks from the date of LOI/work order, with Erection & commissioning within 2 weeks from the date of delivery of equipment. 14 (fourteen) weeks from the date of receipt of LOI/Work Order.

**5. Liquidity Damage:**

(i) ½ % of equipment value per week of delay or part there of subject to a maximum of 10% of contract value from the scheduled date of supply of equipment.

(ii) ½ % of erection and commissioning value per week of delay or part there of subject to a maximum of 10% of contract value from the scheduled date of commissioning of equipment

**6. Security Deposit (SD):** Specified amount of SD shall be valid till warranty/guarantee period i.e., 12 months from the date of successful commissioning of the system.

**7. Payment Terms:**

**(i) For supply of equipment:**

Eighty percent (80%) of basic price of materials supplied along with applicable 100% taxes and duties will be payable against certification of physical receipt of materials at site including Manufacturers' Test Certificate, Technical details in respect of AHU, FCU, Cooling Tower, O&M Manuals & Guarantee/warranty Certificate.

Twenty percent (20%) on successful completion of commissioning of all the equipments.

**(ii) For Erection and Commissioning:**

Hundred percent (100%) payment on successful completion of commissioning to the satisfaction of BHEL Engineer- In – Charge.

Successful completion of commissioning should mean – Erection of the respective equipments, complete with all connections, piping, valves, instruments etc as applicable and successful running of such equipment. In case of AHU, FCU & Cooling Tower, the contractor will have to demonstrate the parameters as per the data sheet approved by BHEL Engineer in Charge.

**Annexure-IV**

**GENERAL Instructions TO TENDERERS**

1. This tender specification as a whole furnishing all the details and other documents as required in the following pages, shall be duly signed and sent in a sealed cover superscribing the name of work as given in the tender notice.
2. The tender shall be addressed to: OFFICER INVITING TENDER AS INDICATED IN THE TENDER NOTICE.
3. Tenders submitted by post shall be sent as “REGISTERED POST ACKNOWLEDGEMENT DUE” and shall be posted with due allowance for any postal delay. Tenders received after the due date and time of opening are liable to be rejected. Telegraphic offers and offers received by telex may not be considered.
4. Tenders shall be opened at the time and date as specified in the tender notice in the presence of such of those tenderers or other authorized representatives who may be present.
5. The tenderers shall closely peruse all the clauses, specifications and drawings indicated in the tender documents before quoting should the tenderer have any doubt about the meaning of any portion of the Tender Specifications or find discrepancies/omission in the Drawings of the Tender documents issued are incomplete or shall require clarification on any of the technical aspects – scope of work etc., he shall at once contact the authority inviting the tender for clarifications before submission of the tender.
6. Before tendering, the tenderers are advised to inspect the site of work / environments and be acquainted with the actual working and other prevalent conditions, facilities available, position of material and labour. No claim will be entertained later on ground of lack of knowledge.
7. Tenderers must fill up all the schedules and furnish all the required information as per the instructions in various sections of the Tender Specification the information furnished shall be complete by itself.
8. **EARNEST MONEY DEPOSIT:**

Every tender must be accompanied by the prescribed amount of Rs 1,50,000/- towards Earnest Money Deposit either in Pay order or Demand Draft form in favour of BHEL payable at New Delhi.

  - 8.1 Tenders received without Earnest Money in full in the manner prescribed above will not be considered.
  - 8.2 The Earnest Money deposit of the successful tenderers shall be refunded/adjusted against Security Deposit, as the case may be.
  - 8.3 In case of unsuccessful tenderers, the Earnest Money will be refunded to them within 15 days after finalization of the tender without interest.

8.4 BHEL reserves the right of forfeiture of Earnest Money deposit in case the successful tenderers:-

- a) After opening of Tender, revokes/withdraws his tender within the validity period revises/alters his earlier quoted rates/conditions.
- b) Fails to communicate unqualified acceptance of Letter of Intent.
- c) Fails to start the work as may be indicated in the Letter of Intent.

**9. Tenderers must fill up Deviation statement and price bid separately.**

**10.** The tenderers shall quote the rates in English Language and international numerals. Those rates shall be entered in figures as well as in words. In case of difference in rates between words and figures THE LESSER of the two will be treated as valid rate. For the purpose of tender, the metric system of units shall be used.

**11.** All entries in the tender shall either be typed or be written in ink. Erasers and over writing are not permitted and may render such tenders liable to summary rejection. All cancellations and insertions shall be duly attested by the tenderers.

**12. EVALUATION CRITERIA**

Work will be awarded to overall L1 party.

**13. VALIDITY OF OFFER:**

THE OFFER SHALL BE KEPT OPEN FOR ACCEPTANCE FOR A PERIOD OF THREE MONTHS FROM THE DATE OF OPENING OF TENDERS.

**14. EXECUTION OF CONTRACT:**

The successful tenderers responsibility under this contract commences from the date of issue of the Letter of Intent by **Bharat Heavy Electricals Limited**. The successful tenderers shall be required to complete the job within 16 (Sixteen) weeks from the date of receipt of LOI/ Work Order.

**15. SECURITY DEPOSIT:**

15.1 Security Deposit shall be collected from the successful tenderer. The rate of Security Deposit will be as below:

- Up to Rs. 10 Lakhs: 10%
- Above Rs. 10 lakhs up to Rs. 50 lakhs: Rs.1Lakh + 7.5% of the amount exceeding Rs.10 Lakhs.
- Above Rs. 50 lakhs: Rs.4 lakhs + 5% of the amount exceeding Rs. 50 lakhs.

The security deposit shall be deposited by the successful tenderer before start of the work by him. The Security Deposit shall remain valid till 12 months from the date of successful commissioning of the system without carrying any interest. If the value of work done at any time exceeds the accepted agreement value, the Security Deposit shall be correspondingly enhanced and the extra amount of Security Deposit shall be immediately deposited by the contractor or recovered from payment due to him. BHEL reserves the right of forfeitures of Security Deposit in addition to other claims and penalties in the contractual obligations or in the event of termination of contract as per terms and conditions of contract.

15.2 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 BHEL.
- iii) Local cheques of scheduled banks, subject to realization.
- iv) Securities available from Offices such as National Saving Certificates, Kisan Vikas Patras etc. (Certificates should held in 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.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 can also be recovered at the rate of 10% from the running bills. However, in such cases at least 50% of the Security Deposit should be collected before start of the work and the balance 50 % may be recovered from the running bills.

(Note: In case of small value contracts not exceeding Rs. 10 lakhs and all SAS jobs, work can be started before Security Deposit is collected. However, payment can be released only after collection/recovery of initial 50% Security Deposit.)

- viii) EMD of the successful tenderer can be converted and adjusted against the security deposit.

ix)The security deposit shall not carry any interest.

(Note: Acceptance of Security Deposit against Sl. 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 of the collection of interest or renewal of the documents or in any other matter connected therewith).

## **16. RETURN OF SECURITY DEPOSIT:**

If the contractor fully performs and completes the work in all respects to the entire satisfaction of BHEL and presents an absolute "No Demand Certificate" in the prescribed form and returns properties to BHEL taken, borrowed or hired by him for carrying out the said works, security Deposit will be released to the contractor after deducting all costs, expenses and other amounts that are to be paid to BHEL under this or other contracts entered into with the contractor.

It may be noted that in no case the Security Deposit shall be refunded/ released prior to passing of final bill and completion of 12 months from the date of successful commissioning of the system. Interest shall not be paid on Security Deposit or on any moneys due to the contractor.

## **17. REJECTION OF TENDER AND OTHER CONDITIONS**

17.1 The acceptance of Tender will rest with BHEL which does not bind itself to accept the lowest tender or any tender and reserves to itself full rights for the following without assigning any reasons whatsoever.

17.2 To reject any or all of the tenders: If tenderers expire after the submission of his tender or after the acceptance of his tender, BHEL may at its discretion, cancel such tender. If a partner of a firm expires after the submission of the tender or after the acceptance of

- the tender, BHEL may cancel such tender at its discretion unless the firm retains its character.
- 17.3 BHEL will not be bound by any power of Attorney granted by the tenderers or by changes in the composition of the firm made subsequent to the execution of the contract. BHEL may, however, recognize such power of Attorney and changes after obtaining proper legal advice, the cost of which will be chargeable to the contractor concerned.
  - 17.4 If the tenderers deliberately give wrong information in his tender, BHEL reserves the right to reject such tender at any stage or to cancel the contract, if awarded and forfeit the Earnest Money /Security Deposit/any other moneys due.
  - 17.5 Canvassing in any form in connection with tender is strictly prohibited and the tenders submitted by the contractor who resorts to canvassing are liable to be rejected.
  - 17.6 Should a tenderers or contractor or in the case of a firm or Company of contractors/one or more of its partners/shareholders/directors have relation or relations employed in BHEL, the authority inviting tender shall be informed to the fact alongwith the offer, failing this BHEL may, at its sole discretion reject the tender or cancel the contract and forfeit the Earnest Money Deposit/Security Deposit.
  - 17.7 The successful tenderers should not sub-contract the part or complete work detailed in the tender specification without written permission of BHEL. The tenderers is solely responsible to BHEL for the work awarded to him.
  - 17.8 No deviations to the tender condition will normally be accepted.

Annexure – VGENERAL TERMS AND CONDITIONS

The following terms & expressions shall have the meaning hereby assigned to them except where the context otherwise requires.

1. **SCOPE OF WORK:** The Scope & Specification of items of work are explained in Annexure -I.
2. **Completion Period:** 16 (Sixteen) weeks from date of receipt of LOI / Work Order. Contractor has to mobilize manpower & arrange materials accordingly to achieve the stated completion period.
3. **Water and Electricity:** Shall be provided free of cost by BHEL.
4. **Evaluation Criteria:** Tender will be evaluated on total overall lowest cost to BHEL.

**5. MEASUREMENT OF WORK AND MODE OF PAYMENT**

- 5.1 Rates/Prices are to be quoted only on the Price Format Annexure-I and these shall be FIRM and fixed till the entire works executed. Rates/Prices should take into account all exacts & expenditure incidental to the works and Rates/Prices should be on **F.O.R. HRDI, at Noida basis.**
- 5.2 Payments to the contractor shall be made by NEFT. Contractor shall be required to provide relevant details/documents for the same. Payment will be as per the actual measurement of the work done. All statutory deductions shall be made by BHEL while releasing the payment.
- 5.3 Measurement shall be taken jointly by persons duly Authorized by BHEL and the Contractor. The quantities and percentages eligible for payment under different groups shall be decided by BHEL. The abstract of quantities and percentages so arrived at based on the terms of payment shall be entered in the Measurement Book (MB) and signed by both the parties.
- 5.4 Based on the above quantities, contractor shall prepare the bills in the prescribed Performa and work out the financial value. These will be entered in the Measurement Book and signed by both the parties. Payment shall be made by BHEL after affecting the recoveries due from the contractor.
- 5.5 The contractor shall bear the expenditure involved, If any in making the measurements and testing of materials to be used/used in the work.
- 5.6 The Contractor shall, without extra cost to BHEL, provide all the assistance with appliances and other things necessary for measurement.
- 5.7 Passing of bills covered by such measurements does not amount to acceptance by BHEL of the completion of the work measured. Any left out work has to be completed by the Contractor, as directed.
- 5.8 Final measurement bill shall be prepared in the Performa prescribed for the purpose, based on the certificate issued by the Engineer that the entire work as stipulated in the tender specification of BHEL. The Contractor shall give unqualified 'No Claim ' and 'No Demand' certificates. All the tools and tackles loaned to him should be returned to the satisfaction of BHEL. The abstract of final quantities and financial values shall also be entered in the Measurement Book and signed by both the parties. The final bill shall be paid within a reasonable time after completion of successful commissioning of the system. The SD amount will be released after 12 months from date of successful commissioning of the system.

## 6. RIGHTS OF BHEL

BHEL reserves to itself the following rights in respect of this contract without entitling the contractor or any compensation.

- 6.1. To get the work done through another agency at the risk and cost of the contractor, in the event of poor progress or the contractor's inability to progress the work for completion as stipulated in the contract poor quality of work, persistent disregard of instruction of BHEL, assignment, transfer, subletting of the contracted work without written permission of BHEL, non-fulfillment of any contractual obligations etc, and to claim/ recover compensation for such losses from the contractor including BHEL's supervision charges and overheads from Security Deposit/other dues.
- 6.2. To withdraw any portion of work and/ or to restrict/alter quantum of work as indicated in the contract during the progress of work and get it done through another agency and/ or by the departmental labor to suit BHEL's commitments to its customer or in case BHEL decides to advance the completion due to other emergent reasons/ BHEL's obligation to its customer.
- 6.3. To terminate the contract after due notice and forfeit the Security Deposit and recover the loss sustained in getting the balance work done through other agencies in addition to liquidated damages in the event of:
  - a. Contractor's continued poor progress.
  - b. Withdrawal from or abandonment of the work before completion of the work.
  - c. Corrupt act of the contractor.
  - d. Insolvency of the contractor.
  - e. Persistent disregard of the instructions of BHEL.
  - f. Assignment, transfer, subletting of the contract work without BHEL's written permission.
  - g. Non- fulfillment of any contractual obligations.
- 6.4. To recover any moneys due from the Contractor from out of any moneys due to the Contractor under this or any other Contract or from the Security Deposit.
- 6.5. To claim compensation for losses sustained including BHEL's supervision charges and overheads. In case of termination of contract and to levy liquidated damages for delay in completion of work, at the rate of ½% of the contract value per week of delay or part thereof subject to a ceiling of 10% of the contract value.
- 6.6. To determine the Contract or to restrict the quantum of work and pay for the portion of work done in case BHEL's contract with its customer is terminated for any reason.
- 6.7. To affect recoveries from any amounts due to the contractor under or any other contract or in any other form the moneys, which BHEL is forced to pay to anybody due to contractor's failure to fulfill any of his obligations.
- 6.8. To restrict or increase the quantity and nature of work to suit site requirements, since the tender specification is based on preliminary documents and quantities furnished there in are indicative and approximate and the rates quoted shall not be subject to revision.
- 6.9. To deploy BHEL's skilled and semiskilled workmen in case of emergency/poor progress/ deficiency in skill on the part of the employees of the contractor and to recover the expenditure on account of the same from the moneys due to the contractor.
- 6.10. While every Endeavour will be made by BHEL to this end, BHEL cannot guarantee uninterrupted work due to conditions beyond its control. The contractor will not be entitled to compensation/extra payment on this account.

6.11. In the event of any dispute of technical nature, the decision of BHEL shall be final and binding on the Contractor.

**7. RESPONSIBILITIES OF CONTRACTOR IN RESPECT OF LOCAL LAWS, EMPLOYMENT OF WORKERS, ETC.**

- 7.1 The following are the responsibilities of the Contractor in respect of observance of local laws, employment of personnel, payment of taxes etc.
- 7.2 As far as possible, unskilled workers shall be engaged from the local areas in which the work is being executed.
- 7.3 The contractor at all times during the continuance of this contract, shall in all his dealings with the local labour for the time being employed on or in connection with the work, have due regard to all local festivals, religious and other customer.
- 7.4 The Contractor shall comply with all state and central Laws, Statutory Rules, Regulations, etc., such as : The payment of wages Act, The Minimum Wages Act, The workmen's Compensation Act, The employer's Liability Provident fund Act, Employees, State Insurance Scheme.
- 7.5 The Contract Labor (Regulations and Abolition Act, 1970) and other Acts, Rules and Regulations for labour as may be enacted by the Government during the tenure of the contract and having force or jurisdiction at site. The contractor shall give to the local Governing Body, Police and other concerned Authorities all such notice as may be required under law.
- 7.6 The Contractor shall be responsible for proper accommodation including adequate medical facilities for the personnel employed by him.
- 7.7 The Contractor shall be responsible for the proper behavior and observance of all regulations by the staff employed by him.
- 7.8 The Contractor shall ensure that no damage is caused to any person / property of other parties working at site. if any such damage is caused, it shall be the responsibility of the contractor to make good the losses and compensate them.
- 7.9 The contractor shall fully indemnify and keep indemnified BHEL / its customer against all claims of whatever nature arising during the course of execution of this contract.
- 7.10 In case the contractor is required to undertake any work outside the scope of this contract, the amount payable shall be as may be mutually agreed upon.
- 7.11 Any delay in completion of works or non - achievement of periodical targets, due to reasons attributable to the contractor, will have to be compensated by the contractor either by increased manpower and resource or by working extra hours or more than one shift at no extra cost to BHEL.
- 7.12 The contractor shall execute the work under the conditions usual to such power plant construction and in conjunction with numerous other operations at site. The contractor and his personnel shall cooperate and coordinate with other agencies at project site and proceed in a manner that shall help in the progress of work at site as a whole.
- 7.13 The contractor will be directly responsible for payment of wages to his workmen. A pay - roll sheet giving details of all payments made to the workmen duly signed by the contractor's representative should be furnished to BHEL, if called for.
- 7.14 In case of any class of work for which there is no specification laid down in the contract, such work shall be carried out in accordance with the instructions and requirements of the Engineer.

- 7.15 No levy, payment or charges made or imposed shall be impeached by reason of any clerical error or by reason of any mistake in the amount levied, demanded or charged.
- 7.16 No idle labour charges will be admissible in the event of any stoppage of work resulting in the contractor's workmen being rendered idle due to any reason at any time.
- 7.17 The contractor shall take all reasonable care to protect the materials and the work till such time the plant / equipment has been taken over by BHEL / its customer.
- 7.18 Contractor shall not stop work or abandon the site for whatsoever reason or dispute, excepting for force majored conditions. All problems / disputes shall be separately discussed and settled without affecting the progress of work. Stoppage or abandonment of work, other than under force majeure conditions, shall be treated as breach of work of contract and dealt with accordingly.
- 7.19 The contractor shall keep the area of work clean and shall remove the debris etc. While executing day - to - day work. Upon completion of work, the contractor shall remove from the vicinity of work, all scrap, packing materials, rubbish, unused and other materials and deposit them in places specified by the Engineer. The contractor will also demolish all the hutments, sheds, offices, etc., constructed and used by him and shall clean the debris. In the event of his failure to do so, the same will be arranged to be done by the Engineer and the expenses recovered from the contractor.
- 7.20 The contractor shall execute the work in the most substantial and workman like manner in the stipulated time. Accuracy of work and timely execution shall be the essence of this contract. The contractor shall be responsible to ensure that the quality, assembly and workmanship conform to the dimensions and clearance given in the drawings and / or as per the instructions of the Engineer.

## **8. CONSEQUENCES OF CANCELLATION**

- 8.1 Whenever BHEL exercise its authority to terminate the contract /withdraw a portion of work, the work may be got completed by any other means at the contractor's risk and cost provided that in the event of the cost of completion (as certified by Engineer which shall be final and binding on the contractor) being less than the contract value, the advantage shall accrue to BHEL. If the cost of completion exceeds the moneys due to the contractor under the contract, the contractor shall either pay the excess amount demanded by BHEL or the same shall be recovered from the contractor. This will be in addition to the forfeiture of Security Deposit and recovery of liquidated damages as per relevant clauses.
- 8.2 In case BHEL completes the work under the provisions of this clause, the cost of such completion is to be taken into account for determining the excess cost to be charged to the contractor shall consist of cost of materials purchased and /or labour provided by BHEL with an addition of such percentage to cover supervision and establishment charges as may be decided by BHEL.

## **9. INSURANCE**

- 9.1 It shall be the sole responsibility of the contractor to insure his workmen against risks of accidents and injury while at work, including welding at height of 40 Fts. as required by the relevant Rules and to pay compensation, if any, to them as per workmen's compensation Act. The work will be shall also insure his staff against accidents. The work will be carried out in a protected area and all the

Rules and Regulations of BHEL / its client in the Project Area which are in force from time to time will be followed by the contractor. Documentary evidence of insurance policy to be submitted to BHEL.

- 9.2 If due negligence and / or non - observance of safety and other precautions, any accident / injury occurs to any other persons / public, the contractor shall pay necessary compensation and other expenses, if so decided by the appropriate authority.
- 9.3 The contractor will take necessary precautions and due care to protect the material, while in his custody from any damage / loss till the same is taken over by BHEL or customer. For lodging / processing of insurance claim the contractor will submit necessary documents. BHEL will reserve the right to recover the loss from the contractor, in case the damage / loss is due to carelessness / negligence on the part of the contractor. In case of any theft of material under contractor's custody, matter shall be reported to police investigation report shall be submitted to BHEL for taking up with insurance.

## **10. GUARANTEE**

Even though the work will be carried out under the supervision of the Engineer, the contractor will be responsible for the quality of the workmanship and shall Performance Warrantee the work done for a period of Twelve months from the date of successful commissioning of the system as certified by BHEL Engineer. Any defect arising thereof shall be rectified by the contractor free of cost and at his risk during the above period. BHEL may proceed to undertake the repairs of such defective works at the contractor's risk and cost, without prejudice to any other rights and recover the same from out of any moneys payable to the contractor or by other legal means.

## **11. ARBITRATION**

- 11.1 Any dispute, controversy or claim arising out of or relating to this contract or the breach, termination thereof shall be first settled amicably between the parties. In the event the disputes, controversies or claims cannot be settled amicably, the same shall be finally settled by Arbitration of 03 arbitrators, one to be appointed by each party and the third arbitrator to be appointed by the two arbitrators (who shall act as the [residing arbitrator) in accordance with the Arbitration & Conciliation Act. 1996, India, and any statutory modifications thereof. The language to be used in the arbitral proceedings shall be English. The award of the arbitrator shall be final and binding on both the parties. The venue of Arbitration shall be Delhi, India.

Notwithstanding the existence or any dispute or differences and/or reference for the arbitration, the Vendor shall proceed with and continue with the performance of the work under the contract with due diligence and expedition in a professional manner.

- 11.2 The Contract shall be governed by the laws for the time being in force in the Republic of India. Subject to clause 11.1 hereinabove, the Courts at Delhi, India shall have exclusive jurisdiction in respect of this contract.

**Annexure-VI**

**NO DEVIATION CERTIFICATE**

THIS IS TO DECLARE THAT WE DO NOT HAVE ANY DEVIATIONS IN THE STIPULATIONS OF YOUR TENDER AND ACCORDINGLY ACCEPT ALL THE STIPULATIONS WITHOUT ANY RESERVATIONS WHATSOEVER.

**Signature of the bidder  
With Company Seal**

Name:

Company's name:

Address:

Date:

**Annexure-VII****HVAC RENOVATION WORKS at HRDI****TYPE OF INSULATION & FINISH**

1. GLASS WOOL/ EXPANDED POLYSTYRENE
2. INSULATION FORM – SLAB
3. THICKNESS (mm) – 50
4. FINISH – F -4

STEP - 1. WRAPPING OF POLY-BONDED HESSAIN (PBH – TO ACT AS

VAPOUR SEAL) ON OUTERESURFACE OF INSULATION WITH 50mm

OVERIAP STITCHING AND SEALING OF OVERIAP WITH SYNTHETIC

ADHESIVE LIKE CPRX OR EQUIVAILENT.

STEP – 2. THE SURFACE THEN SHALL BE WRAPPED WITH 19mm MESH 24

SWG GL WIRE NETHING BUTTING ALL THE JOINTS AND LACED

DOWN WITH 22 SWG LACING WIRE.

STEP-3. SAND CEMENT (4:1) PLASTER SHALL BE APPLIED IN TWO LAYERS

TOTALLING TO 12.5 MMTHICK, THE SECOND LAYERBEING BROUGHT TO A SMOOTH FINISH. A WATER PROOFING COMPOUND SHALL BE ADDED TO THE CEMENT BEFORE ITS APPLICATION.

STEP-4. PAINTING THE SURFACE WITH TWO OR MORE COAT TO GIVE AN EVEN SHADE.

**Annexure-VIII****HVAC RENOVATION WORKS at HRDI****Technical Specification (List of Makes)**

<b>Sl. No.</b>	<b>Description</b>	<b>Makes</b>
1	<b>Air Handling Units</b>	Voltas/Blue Star/Carrier-Aircon/Zero/Carryaire (Flakt)/Ethos/Saiver Suvidha/Edge Tech./Web
2	<b>AHU Fan (Centrifugal Fan)</b>	CB Doctor/Flakt/Nicotra/Comfri/Kruger/Patel Air flow
3	<b>Cooling Coil for AHU</b>	Voltas/Blue Star/Carrier-Aircon/Jaypee/Zeco/Carryaire (Flakt)/Ethos/Saiver Suvidha/Edge Tech.
4	<b>Induction Motors (LT)</b>	Siemens/ABB/Kirloskar/Bharat Bijlee/CGL
5	<b>Cooling Tower</b>	Paharpur / Mihir
6	<b>Air Filters</b>	Purolator / Ucomesh / John Fowler /FMI/Anfilco/Tenacity SMI/Puromatic/ Spectrum
7	<b>3- Way Mixing Valve with actuating motor</b>	Siemens Building Technology/ Honeywell/Johnson
8	<b>Thermostats</b>	Honeywell /RANCO/Penn /Danloss /Indoss
9	<b>Insulation Material</b>	FGP / Lloyds /Bast/Mettur-Beardishell/UP Twiga.Owens Corning
10	<b>Y-Strainers</b>	Multitex /Greaves Cotton/Otoklin/Grand Prix/Jaypee/Gujrat Otofilit/Sant
11	<b>Butterfly Valve</b>	Audco/Fouress/Inter Valve/Keystone/BDK/Leader/Cable
12	<b>Piping</b>	Tata/Jindal/SAIL/BST/Surya Roshni
14	<b>Pressure Gauges</b>	Bells/ Auxitrol UK/general Insturment/AN Instruments/Manometer, Mumbai/Budenburg UK/Gluck India/H. Guru
15	<b>Temperature Gauges</b>	Bells/General Instruments/AN Insturments/Budenburg UK Dresser USA/Jhonson
16	<b>Induction Motors (LT)</b>	Siemens/ABB/Krioskar/Bharat Bijlee/CGL
17	<b>GI Sheets for Ducting</b>	SAIL/TISCO/Jindal/Bushan
18	<b>Balancing Valve</b>	Castle/Audco/Sant/Advance
19	<b>Insulation Material</b>	FGP/Lloyds/Basf/Mettur-Beardshell/Up Twiga/Owens Corning
20	<b>Humidistat</b>	Honeywell/Penn.
21	<b>Paint</b>	Asian/Berger/Nerolac
22	<b>Pan De-Humidifiers</b>	Sandhu & Sons/ Rapid Cool/KEPL
23	<b>Heaters</b>	DASSPASS/SEVCON

**Annexure-IX****GENERAL TERMS AND CONDITIONS OF Reverse Auction**

Against the enquiry for the subject item/system with detailed scope of supply as per enquiry specifications. BHEL may resort to REVERSE AUCTION PROCEDURE” i.e., ON LINE BIDDING OF INTERNET.

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 vender 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 Action event, the lowest bidder value will be known on the network.
9.	The lowest bidder has to Fax 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 s 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.