



डेडीफ्रेटकोरीडोर

डेडीफ्रेटकोरीडोरकार्पोरेशनऑफइंडियालि.
Dedicated Freight Corridor Corporation of India Limited
(भारत सरकार का उपक्रम)

(A Govt. of India Enterprises)

5th Floor, Pragati Maidan Metro Station Building Complex, New Delhi -110001

No.:HQ/EL/Maint/HVAC/Repairs/CAMC/288hp/2019-20/4

Date 12.04.2019

To,

M/s.....

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Subject: Repair of 9 Air Conditioning Circuits (288 HP) & CAMC of 01 year for existing 704 HP VRF HVAC System at Corporate Office, DFCCIL, New Delhi.

Please arrange to submit your quotation offer online using the link www.tenderwizard.com/DFCCIL on or before 25.04.2019 for the subject work. The online submission of quotations shall be closed at 15.00 hrs on 25.04.2019 and opened on the same day, online at 15.30 hrs.

1. GENERAL TERMS AND CONDITIONS:

- 1.1 Quotation offer should be valid for **30 days** from the due date of opening.
- 1.2 It is a precondition of this quotation enquiry letter that, in the event of finalization of a new contract regarding replacement of existing HVAC system during the completion period of the subject work, the contract awarded against the subject quotation enquiry letter shall be **short closed** to enable new contractor to commence the work.
- 1.3 Rates shall be quoted in **Annexure-D, Schedule-I, II & III** based on Technical Specifications contained in **Annexure-A, B & C**.
- 1.4 **Quotation offers shall be accepted from OEM (GD Midea Heating & Ventilation Equipment Co. LTD)/OEM authorized agent in India/OEM's JV/OEM Indian subsidiary or their authorized dealer/representatives who should be authorized /certified to procure and maintain the Midea made VRF equipment.**
- 1.5 Rates quoted shall be firm & inclusive of all taxes (GST etc.) and duties leviable. Rates shall also include transportation of material, transit insurance, e-way bill, loading, unloading, lifting/handling of material, insurance of material at site & workers, liaisoning with any other department, banker charges and other incidental charges. Firms are advised to inspect the site before they quote their rates for the work.

- 1.6 The Contractor shall fulfill the requirements of Clause no. 29 of Central Electricity Authority (Measures Relating to Safety and Electric Supply) Regulations, 2010.
- 1.7 The contractor/s shall handle Law, tax, and other applicable duties. DFCCIL shall bear no responsibilities for any loss to man and material belongs to the contractor. The Contract shall be governed by the laws in force in India.
- 1.8 Any damage to existing installations made during execution of work will have to be made good as before by the Contractor without any extra cost. Any claim by the contractor in this regard will not be entertained.
- 1.9 In case of any dispute DFCCILs decision shall be final and binding on the contractor. Contractor shall abide by the provisions of DFCCIL Works Manual with all correction slips up-to-date and to carry out the work according to the Technical Specifications as laid down by DFCCIL. In case DFCCIL Works Manual lacks the provisions, Indian Railways Standard General Conditions of Contract shall be referred.
- 1.10 Any minor work including necessary excavation, supporting, opening in ceiling/walls/partition/floor/terrace etc which is incidental for successful completion of the work for any item mentioned in Technical Specifications, Schedule of Rates, even though not mentioned specifically elsewhere in this letter but required for satisfactory completion of work, shall be deemed to be included in the scope of work & shall be quoted accordingly.
- 1.11 Work completion report shall be signed jointly with the Contractor and DFCCIL.
- 1.12 DFCCIL reserves the right to modify, expand, restrict, scrap and re-invite the quotation without assigning any reason/s.
- 1.13 While submitting the quotation, all the pages of the Quotation notice including drawing and attachments etc should be stamped and signed as a token of acceptance of terms& conditions therein.
- 1.14 **Period of Completion:**
- (a)** For Schedule I & II of Annexure-D i.e Repair of 9 Air Conditioning Circuits (288 HP) :**45days** from the date of issue of Letter of Acceptance.
- (b)** After completion of repair & commissioning work of each air-conditioning circuit, a completion certificate indicating date of completion of work & date of commencement of CAMC period for that circuit shall be issued.
- (c)** For Schedule-III of Annexure-D i.e CAMC of **704 HP VRF HVAC System: 01 (one) year** from the date of taking over after completion of repair works as per (b) above.

2.0 BID SECURITY:

- i) Each bidder shall furnish Bid Security as a part of his bid at the following rates:
 - a) Two percent of the estimated cost for works up to Rs. 20 crore (subject to a maximum of Rs. 30 lacs).
 - b) One and one-half percent of the estimated cost for works between Rs. 20 crore to Rs. 50 crore (subject to a maximum of Rs. 50 lacs).
 - c) One percent of the estimated cost for works above Rs. 50 crore.
- ii) The Bid Security shall be in favour of DFCCIL and may be in the following forms.
 - a) For work up to Rs. 50 crores Bankers Cheque/Demand Draft/FDR from Nationalised/Indian Scheduled Commercial Bank.
 - b) For work above Rs. 50 crores
 - i) FDR/Bankers Cheque/Demand Draft from Nationalised/Indian Scheduled Commercial Bank upto Rs. 2 crore.
 - ii) Bank Guarantee on approved format from Nationalised/Indian Scheduled Commercial Bank beyond Rs. 2 crore.
- iii) The bank guarantee shall be got confirmed from the bank preferably by sending a letter per bearer. The name of the bearer and the dates etc. should be clearly on record.
- iv) All such BGs and Bid Security received shall be maintained by the concerned Finance Officers in the Field or Corporate Office. It shall be the responsibility of the concerned Finance Officer to monitor the validity of the BGs (a register shall be maintained for this purpose) and ensure extension of the validity of the BGs in terms of the contract. Such BGs shall be released strictly in terms of the contract with the approval of the Competent Authority.
- v) Bank guarantees (and other instruments having fixed validity) issued as surety for the bid shall remain valid for 90 days beyond the validity of the bid.
- vi) The Bid Security may be forfeited:
 - i) if the bidder withdraws his bid during the period of bid validity;
 - ii) if, the bidder does not accept the correction of his bid price,
 - iii) In the case of a successful bidder, if he fails, within the specified time limit to Furnish the required performance security or Sign the Agreement.
- vii) Bid Security of the unsuccessful bidders should be discharged/ returned without interest as promptly as possible. The Bid Security of the successful bidder shall be converted to Retention Money when he has signed the Agreement and furnished the required performance security. Any Bid not accompanied by requisite Bid Security shall be summarily rejected as nonresponsive.

3.0 PERFORMANCE SECURITY:

- 3.1 The successful bidder shall be required to furnish to DFCCIL a performance security within 15 days of the receipt of Letter of Acceptance, in an amount

equivalent to 5% (five percent) of the contract price. The Performance Security to be provided by the successful bidder in the form of a bank guarantee as per prescribed format (**Annexure-E**) shall be issued from any Nationalized/ Indian Scheduled Commercial Bank. In case of Joint Venture (JV), the Bank Guarantee towards performance security shall be provided by JV.

- 3.2 The Bank Guarantee for performance security shall remain valid until a date 60 days (or as specified in the Contract) after expiry of Defect Liability Period.
- 3.3 The Bank Guarantee for performance security shall be submitted invariably in the format given in the Bidding Document.
- 3.4 The performance security shall be released 21 days after issue of performance certificate.

4.0 RETENTION MONEY

- 4.1 The Bid Security of successful bidder shall be retained by DFCCIL as part of Security for the faithful fulfillment of the contract by the contractor. In addition, a retention amount equal to 10% of each bill shall be retained till the total security available is 5% of contract amount.
- 4.2 The Bidder may, at his option, replace the retention amount with an unconditional bank guarantee from the bank acceptable to DFCCIL at the following stages:
 - a) After the amount reaches half the value of the limit of retention money
 - b) After the amount reaches the maximum limit of retention money.

One-half of the retention money (or bank guarantee, which replaced retention money) shall be released on the issue of Taking-over-Certificate; if the Taking-over Certificates are issued in parts, then in such proportions as the Engineer may determine, having regard to the value of such part or section. The other half of the retention money (or bank guarantee, which replaced retention money) shall be released upon expiry of Defect Liability Period or final payment whichever is earlier on certification by the Engineer. In the event of different Defect Liability Periods being applicable to different sections or parts, the expiration of Defect Liability Period shall be the latest of such periods

5.0 TERMS OF PAYMENT:

- 5.1 No Advance Payment shall be made. Payment of 'On Account' bills shall be as under:
- 5.2 **Payment for Annexure-D, Schedule-I, Labour Charges:**
 - (i) For item 'A', of SN.4, 5 & 7 : **80% payment** after successful repair, re-installation & pressure testing of each condenser coil in the air conditioning circuit at site.

- (ii) For item 'A', of SN.4, 5, & 7: balance 20% payment after successful completion of repair, Testing and Commissioning of each Air Conditioning Circuit as certified by the Engineer-in-Charge & issue of completion certificate.
 - (iii) For other items of Schedule-I 100% payment after successful completion of repair, Testing and Commissioning of each Air Conditioning Circuit as certified by the Engineer-in-Charge and issue of completion certificate.
- 5.3 **Payment for Annexure-D, Schedule-II, Supply of Spares parts:**
- (a) 80% of the accepted rate of supply of material shall be paid on receipt of material at site & due certification by Engineer-in-Charge.
 - (b) Balance 20% of the accepted rate of supply of material shall be paid on successful installation, testing & commissioning after completion of entire repair work & issue of completion certificate by DFCCIL.
- 5.4 **Payment for Annexure-D, Schedule-III, CAMC charges:**
- Payment for CAMC shall be made on quarterly basis after submission of service report & capacity (hp) of HVAC system remained in operation during the quarter jointly signed by the Contractor & Engineer-In-Charge/DFCCIL. The report shall be got approved by Contractor in DFCCIL format.
- 5.5 GST complied bill/ Invoice should be submitted in duplicate, duly signed and stamped by the Contractor. The contractor shall submit complete bank details/NEFT mandate form issued by their Bank, copy of PAN. Address of Vendor shall be same as registered under GST.
- 5.6 Tax deducted at source (e.g. income tax and other statutory deductions) will be deducted from the payment due to the contractor as per rules of the state/central government.
- 5.7 Variations in the quantities during execution of the works contract shall be dealt as per relevant provisions of DFCCIL Works Manual.

Encl:

- 1) Technical Specification for repair of the circuits, Annexure 'A'.
- 2) Detailed analysis on the repair for all the VRF HVAC Circuits of 4th & 5th Floor (excluding circuit no. 10/11/12), Annexure-'B'.
- 3) Technical specification for CAMC of 01 year, Annexure-'C'.
- 4) Schedule of Rate and Quantities, Annexure 'D'.
- 5) Format for Performance Security, Annexure-E.

(Dr. Sanjay Nayar)
GGM/EL/TS/DFCCIL

Technical Specification

Name of Work: Repair of 9 Air Conditioning Circuits (288 HP) of the existing VRF HVAC System at Corporate Office, DFCCIL, New Delhi.

Scope of Work:

1. At DFCCILs Corporate Office, New Delhi, Variable Refrigerant Flow air conditioning system, digital scroll, heat-pump type, was commissioned in 2008. Total installed HVAC capacity of 704hp is configured in combination of 16hp, 32hp and 48hp Air-conditioning circuits. At present, a total of 44 outdoor units (ODUs) are under operation, and form a part of 19 Nos Air Conditioning circuits. All outdoor units are installed on roof top of Pragati Maidan Metro Station Building Complex.
2. The subject work is for repair, testing and commissioning of 9 Air Conditioning Circuits comprising of 18 Out Door Units as under:

SN	Circuit Name	Air Conditioning Circuit comprising of ODU No:	Capacity	Area Served
1	Pink	33	16hp	4 th Floor
2	Black	34	16hp	4 th Floor
3	Black	26/27	32hp	4 th Floor
4	Orange	28/29	32 hp	4 th Floor
5	Sky Blue	16/17	32 hp	4 th Floor
6	Green	18	16hp	4 th Floor
7	Sky Blue	7/8/9	48 hp	5 th Floor
8	Orange	23/24/25	48 hp	5 th Floor
9	Black	30/31/32	48 hp	5 th Floor

3. Repair work shall be carried out as per the detailed analysis done by OEM, M/s Carrier Midea India Pvt. Ltd. reproduced in Annexure-B.
4. The repair work shall be carried out as per OEM recommended practices.
5. The details of spares indicated in Annexure-B & schedule of rates & quantities, Annexure-D, Schedule-II are tentative & may vary during actual execution of the work at site. Payment shall be made as per the final measurement.

6. The released material shall be the property of DFCCIL & shall be handed over in proper manner.
7. Payment for the repair work shall be made after as per payment terms contained in the quotation letter.
8. Any other minor value items/activities associated with proper functioning of outdoor unit and not specifically mentioned in Annexure-D is deemed to have been included in the scope of work. No extra payment shall be paid for that item/activity.
9. The Contractor shall provide required tool & plants, testing instruments for testing & commissioning of the air-conditioning system. No extra payment shall be made for tool & plant/testing instrument.
10. The Contractor shall deploy sufficient no. of experienced & competent manpower to ensure safe & timely completion of the work.
11. Commissioning tests shall be done on each circuit to check its performance. Details shall be approved from Engineer in-Charge DFCCIL.
12. Joint report of commissioning tests to be submitted to DFCCIL.

Annexure 'B'

Detailed analysis on the repair of all the VRF HVAC circuits at 4th & 5th floor (except 10/11/12)													Details of accessed spare parts required for commissioning of VRF HVAC circuits									
Floor	Circuit Color	ODU Nos	System Capacity	Condenser coil dismantling, taking out coil for refurbishment, transportation charge, loading, unloading charge, reinstallation after repairing	Gas Charging	Labour charges for Leak repairing & Nitrogen cost per system	Service Valves repair & refurbishment @ 3 in each ODU per system	Labour charges for Four way valve Fixing charges per system	PCB replacement and Fan Motor Replacement	Compressor Replacement Charges	Wiring Assembly Rectification and rewiring	Repairing of Control Box of ODU-43 with Contactor/Fan Motor/Relay/ Sensors, wiring etc	Digital Scroll Compressor	Fixed Scroll Compressor	4 Way Valve	Contactor	Fan Motor	Fan Blade	Main PCB	Relay	Communication PCB	
4th	Blue	43/44	32	√	√	√	√	√	√	√	√	√	2	4	4	6	2	2	2	3	1	
4th	Pink	33	16	×	√	√	√	×	×	×	×	×	0	0	0	0	0	0	0	0	0	
4th	Black	34	16	×	√	√	√	×	×	×	×	×	0	0	0	0	0	0	0	0	0	
4th	Black	26/27	32	×	√	√	√	×	×	×	×	×	0	0	0	0	0	0	0	0	0	
4th	Orange	28/29	32	√	√	√	√	×	×	×	×	×	0	0	0	0	0	0	0	0	0	
4th	Sky Blue	16/17	32	√	√	√	√	×	×	√	×	×	1	2	2	3	2	2	1	1	1	
4th	Green	18	16	×	√	√	√	×	×	×	√	×	0	0	0	0	0	0	0	0	0	
5th	Sky Blue	7/8/9	48	√	√	√	√	√	√	×	×	×	0	0	4	2		1	1	1	1	
5th	Orange	23/24/25	48	×	√	√	√	×	×	×	×	×	0	0	0	0	0	0	0	0	0	
5th	Black	30/31/32	48	×	√	√	√	√	√	√	×	×	1	2	1	3	0	0	1	1	0	
5th	Red	35/36/37	48	×	√	√	√	×	√	×	×	×	0	0	0	0	0	0	1	0	0	
5th	Blue	38/39	32	√	√	√	√	√	×	√	×	×	0	1	2	0	0	0	0	0	0	
Note	√	Repair reqd	× repair not reqd																			
	Note: 1) ODU no-43 will be tried to repair. If it is beyond repairable condition then will be brought to the notice of DFCCIL. If any additional part is required then may be procured as per the enclosed price list as mentioned in annexure. Prices are incl. of taxes.																					

Technical Specifications for Comprehensive Annual Maintenance Contract of 704hp HVAC system for 01 year at DFCCIL, Corporate Office, New Delhi

- 1 The Contractor shall execute the work, i.e “Comprehensive Maintenance of digital scroll, variable Refrigerant Flow (VRF) type of HVAC Air Conditioning System of 704 hp for 01 (One) year at DFCCIL Corporate Office, Pragati Maidan Metro Station Building Complex, New Delhi”.
- 1.1 The scope of comprehensive annual maintenance contract include running of complete air-conditioning system including all items related with comprehensive maintenance of the HVAC system as per OEM specified maintenance schedule. Repair & replacement of defective components, providing of spares and all other associated accessories which are not covered otherwise and attention of all types of defects, necessary for smooth operation of the HVAC system to the satisfaction of Engineer-in Charge/DFCCIL. The Contractor should also carry out any other schedule jointly decided by Engineer-in-charge/DFCCIL and the Contractor for any equipment of the HVAC system to ensure smooth and trouble free operation.
- 1.2 Tenderers are advised to visit the site & acquaint themselves with the existing VRF HVAC system and quote accordingly.

The contract for Operation of proposed HVAC system has already been awarded & Operation staff has been mobilized at site. The CAMC Contractor will interface with the existing operation team for attending schedule maintenance/breakdowns.
- 1.3 Contractor shall also provide tools & plants required by Maintenance staff at site.
- 1.4 The contractor shall maintain proper log sheets, circuit layouts & record of the complaints for analysis.

2.0 Comprehensive Maintenance:

- 2.1 The Contractor shall carry out Comprehensive, Preventive & Breakdown maintenance including Daily, Weekly, Monthly, Quarterly and Yearly maintenance of the VRF HVAC system at 3rd, 4th & 5th Floor of DFCCIL Corporate office in terms of OEM guidelines. The maintenance schedules and the work to be done in each schedule & report format shall be jointly decided by the Engineer-in-Charge/DFCCIL & the Contractor.

- 2.2** Comprehensive maintenance also includes repair of defective system with provision of spares as required. No extra payment will be made for supply/repair/replacement of spares.
- 2.3** Maintenance of complete HVAC system so that performance of the plant remains satisfactory.
- 2.4** The CAMC work will interalia include the following:
- (i)** Indoor Units (IDUs) of various type/size complete with electric/electronic components, wiring, power cord, remote & accessories.
 - (ii)** Regular cleaning of IDU filters (every 21 days) and replacement as prescribed by OEM. Record of filter cleaning to be maintained.
 - (iii)** Outdoor Units (ODUs) of various capacities complete with, compressors, piping, electric/electronic components, consumables, supports & any other associated work for proper & specified functioning of outdoor units.
 - (iv)** Refrigerant piping along with all joints etc. including detection/repairing of leakage, pressure testing, vacuum purging, gas recharging/ topping including supply of refrigerant.
 - (v)** The repair work shall be carried out in a professional manner. This shall also include restoration of insulation after repair. Any other associated work for proper & specified functioning of air conditioning system. The scope also includes supply & charging of refrigerant due to any unforeseen circumstances.
 - (vi)** Condensate drain water pipe cleaning, detection/repairing of pipes for any leakages, insulation etc. Any other associated work for proper functioning of drain water disposal system.
 - (vii)** All control & power wiring between indoor & outdoor units. Any other associated work for proper & specified functioning of air conditioning system.
 - (viii)** Maintenance & upkeep of sub-AC panels on the roof including switchgear, cabling from sub-AC panel up to outdoor units, feeder pillars, consumables etc (excluding incoming cables to sub-AC panels).
 - (ix)** Maintenance of HVAC monitoring system, including all CCM's, displays, hardware & software etc. (excluding computer system) including central remote control. Any other associated work for proper & specified functioning of complete HVAC monitoring/control system.
 - (x)** Any other item/activities associated with proper functioning of comprehensive maintenance complete air conditioning system deemed to have been included in the scope of work.
 - (xi)** In order to attend breakdown of the AC system, minor engineering works (eg. False ceiling, any kind of structural/masonry work, opening and closing) required if any, shall be in the scope of work.
- 2.5** **Deployment of CAMC staff:** The contractor will depute technically qualified, competent and experienced staff in adequate number separately for the

schedule maintenance. It may however be noted that normally scheduled maintenance should be carried out on Saturday & Sunday or any Gazetted Holidays for which the contractor will give at least 24 hours advice to the Engineer-in-Charge/DFCCIL.

- (i) Additional staff shall be deputed to reduce the downtime for attending major breakdowns as desired by DFCCIL.
- (ii) The work is to be carried out as per OEM guidelines/best industry practice and in such a manner that all premises always look Neat & Clean.
- (iii) The manpower deployed for maintenance shall be authorised by OEM with valid I-cards & well experienced.

2.6 Attending to complaints:

- (i) List of minimum spares to be available at site for smooth operation shall be prepared by the Contractor and Engineer-in-charge within 30 days of start of work and accordingly all spares shall be available within 30 days of start of Contract.
- (ii) After award of work, the Contractor shall submit list of authorised contact person in ascending order of hierarchy (Escalation Matrix) to whom complaints can be lodged.
- (iii) All defects and deficiencies should be rectified promptly after lodging of complaint. The complaint can be lodged through intercom, telephonic message or through complaint register kept in BMS Room. A Ticket would be raised for every complaint in which any/all/part of the HVAC system is defective. The ticket will be closed when complaint is resolved to the satisfaction of the Engineer-in-Charge.
- (iv) Response Time (Max) – 30 Minutes, to reach the site of complaint.
- (v) Rectification Time (Max.) - 03 Hrs. If Max. 03 IDU and ODU's (except leakage, compressor, condenser failure) are involved.
- (vi) Rectification Time (Max.) - 12 Hrs. If 04 to 10 IDU and ODU's (except leakage, compressor, condenser failure) are involved.
- (vii) Rectification Time (Max.) – 48hrs for Leakages in refrigerant circuit, defect in compressor, condenser and IDU/ODU.
- (viii) The quantum of work involved should be decoded within 30 minutes of the complaint received and recorded jointly with the representative of the Contractor and Engineer-in-charge/DFCCIL.
- (ix) Status of spares shall be jointly signed on every Friday at 17.00 hrs & timeline submitted for replenishment if required.
- (x) For expeditious disposal of complaints, the contractor shall maintain following spares & consumables at site. These spares shall be replenished as soon as the designated quantity will get used:

SN	Description	Quantity
1	Refrigerant 410A	4 cylinders
2	Nitrogen Gas	02 Cylinders
3	Condenser fan motor	05
4	Condenser fan blade	05
5	PCB – ODU	05
6	PCB – IDU	02 of each type
7	IDU Motor – Ductable	01 (each type)
8	Blower ductable	01 set each type
9	MCB 63A or as required	10
10	Contactor	05
11	Inverter/Digital compressor	02 each type
12	Compressor fixed	02
13	Water pump for IDU	02 each type
14	Water level sensor	02 each type
15	Capacitors ODU/IDU	05 each type
16	IDU motor (Cassette)	1% of the holding. 1 motor for each type
17	IDU display	02 each type
18	Terminal Block	02 nos
19	Thimbles	06 nos each type

(xi) The spares shall be of OEM/same make. Where the 'Make' of item is not identified/ defined, it shall be of reputed make with the approval of Engineer in-charge/DFCCIL.

(xii) In case the above spares (quantities) are not maintained at site, by the Contractor, the stores would be purchased by DFCCIL and the cost of purchase shall be deducted by DFCCIL while certifying the bills for payment to the Contractors.

2.7 Maintenance of Records

(i) The contractor shall maintain proper log sheets for recording of temperature/Relative Humidity at nominated places as decided by Engineer-in-Charge.

(ii) Separate log sheets shall be maintained for Routine/Preventive/Breakdown maintenance. Format shall be approved from Engineer-in-Charge/DFCCIL.

- (iii) Joint recording of temperature & Humidity shall be done every Monday, preferably 1500 hrs to check performance of the system.
- (iv) Joint recording of compressor currents & refrigerant temperatures shall be done on fortnightly basis to cover entire circuits in a month.
- (v) A record of tripping of safety devices should be maintained. The Contractor shall provide a report to the Engineer at the end of every week indicating the defect of the system and target date of rectification/replacement.
- (vi) Proper record of maintenance schedule to be maintained & should be available for check anytime.
- (vii) Payment for CAMC shall be made after submission of service report & capacity (hp) of HVAC system remained in operation during the quarter jointly signed by the Contractor & Engineer-In-Charge/DFCCIL. The report shall be got approved by Contractor in DFCCIL format.

2.8 Penalty for delay in Operation and Comprehensive Maintenance work:

- (i) As soon as any defect of technical nature is noticed by the Contractors staff, it shall be informed to the Engineer-in-Charge/DFCCIL in written with details, whether it is of minor or major fault and possible time of rectification.
- (ii) A penalty will be imposed in case any complaint remains unattended after the rectification time is over, as under:
 - (a) @ Rs. 500/- per IDU and ODU per 03 hrs., towards clause no.2.6(v).
 - (b) @ Rs. 2,500/- per 16 hp per 12 hrs., towards clause no.2.6(vi).
 - (c) @ Rs. 5,000/- per 16 hp per 24 hrs, towards clause no.2.6(vii).
- (iii) Payment to Contractor for CAMC shall be certified by the Engineer-in-Charge/DFCCIL on the basis of no. of capacity (in hp) of the HVAC system in operation beyond the prescribed rectification time given in Para 2.8 (a),(b) & (c).
- (iv) After report of failure, if maintenance personnel does not start work at site & advice the action plan to attend the failure, penalty @ Rs. 500/- per hour or part thereof shall be levied to ensure that proper cooling is maintained in the entire premise & there shall be no discomfort to the occupants.
- (v) After 7 days of non-rectification of a failure without any valid & justifiable reason, the cost of damage to HVAC system or DFCCIL property, if any due to failure of system will be sole responsibility of the contractor & the cost of damage of the same shall be borne by the contractor. After which, DFCCIL has right to carry out the work on risk & cost of contractor without further intimation.

SCHEDULE OF RATES

Name of Work: Repair of 9 Air Conditioning Circuits (288 HP) & CAMC for 01 year of the existing VRF HVAC System at Corporate Office, DFCCIL, New Delhi.

Quotation No.: HQ/EL/Maint/HVAC/Repairs/CAMC/288HP//2019-20/4

Schedule-I, Labour charges				
SN	Description	Unit	Qty	Total Amount (Rs.)
1	16 HP AC Circuit (Pink) comprising ODU No.33; 4th Floor:	NA	NA	NA
A	Condenser coil dismantling, taking out coil for refurbishment, transportation charge, loading, unloading charge, reinstallation after repairing	NA	NA	NA
B	Gas Charging	Lot	1	
C	Labour charges for Leak repairing & Nitrogen cost per system	Lot	1	
D	Service Valves repair & refurbishment @ 3 in each ODU per system	Lot	1	
	Total Amount (Rs.) for SN-1			
2	16 HP AC Circuit (Black) comprising ODU No.34; 4th Floor:	NA	NA	NA
A	Condenser coil dismantling, taking out coil for refurbishment, transportation charge, loading, unloading charge, reinstallation after repairing	NA	NA	NA
B	Gas Charging	Lot	1	
C	Labour charges for Leak repairing & Nitrogen cost per system	Lot	1	
D	Service Valves repair & refurbishment @ 3 in each ODU per system	Lot	1	
	Total Amount (Rs.) for SN-2			
3	32 HP AC Circuit (Black) comprising ODU No.26/27; 4th Floor:	NA	NA	NA
A	Condenser coil dismantling, taking out coil for refurbishment, transportation charge, loading, unloading charge, reinstallation after repairing	NA	NA	NA
B	Gas Charging	Lot	1	
C	Labour charges for Leak repairing & Nitrogen cost per system	Lot	1	
D	Service Valves repair & refurbishment @ 3 in each ODU per system	Lot	1	
	Total Amount (Rs.) for SN-3			
4	32 HP AC Circuit (Orange) comprising ODU No.28/29; 4th Floor:	NA	NA	NA
A	Condenser coil dismantling, taking out coil for refurbishment, transportation charge, loading, unloading charge, reinstallation after repairing	Lot	1	
B	Gas Charging	Lot	1	
C	Labour charges for Leak repairing & Nitrogen cost per system	Lot	1	

D	Service Valves repair & refurbishment @ 3 in each ODU per system	Lot	1	
	Total Amount (Rs.) for SN-4			
5	32 HP AC Circuit (Sky Blue) comprising ODU No.16/17; 4th Floor:	NA	NA	NA
A	Condenser coil dismantling, taking out coil for refurbishment, transportation charge, loading, unloading charge, reinstallation after repairing	Lot	1	
B	Gas Charging	Lot	1	
C	Labour charges for Leak repairing & Nitrogen cost per system	Lot	1	
D	Service Valves repair & refurbishment @ 3 in each ODU per system	Lot	1	
E	Comp replacement charges	Nos	3	
	Total Amount (Rs.) for SN-5			
6	16 HP AC Circuit (Green) comprising ODU No.18; 4th Floor:	NA	NA	NA
A	Condenser coil dismantling, taking out coil for refurbishment, transportation charge, loading, unloading charge, reinstallation after repairing	NA	NA	NA
B	Gas Charging	Lot	1	
C	Labour charges for Leak repairing & Nitrogen cost per system	Lot	1	
D	Service Valves repair & refurbishment @ 3 in each ODU per system	Lot	1	
E	Wiring assembly rectification & re-wiring	Lot	1	
	Total Amount (Rs.) for SN-6			
7	48 HP AC Circuit (Sky Blue) comprising ODU No.7/8/9; 5th Floor:	NA	NA	NA
A	Condenser coil dismantling, taking out coil for refurbishment, transportation charge, loading, unloading charge, reinstallation after repairing	Lot	1	
B	Gas Charging	Lot	1	
C	Labour charges for Leak repairing & Nitrogen cost per system	Lot	1	
D	Service Valves repair & refurbishment @ 3 in each ODU per system	Lot	1	
E	Labour charges for Four way valve Fixing charges per system	Lot	1	
F	PCB replacement and Fan Motor Replacement	Lot	1	
	Total Amount (Rs.) for SN-7			
8	48 HP AC Circuit (Orange) comprising ODU No.23/24/25; 5th Floor:	NA	NA	NA
A	Condenser coil dismantling, taking out coil for refurbishment, transportation charge, loading, unloading charge, reinstallation after repairing	NA	NA	NA
B	Gas Charging	Lot	1	
C	Labour charges for Leak repairing & Nitrogen cost per system	Lot	1	
D	Service Valves repair & refurbishment @ 3 in each ODU per system	Lot	1	
	Total Amount (Rs.) for SN-8			

9	48 HP AC Circuit (Black) comprising ODU No.30/31/32; 5th Floor:	NA	NA	NA
A	Condenser coil dismantling, taking out coil for refurbishment, transportation charge, loading, unloading charge, reinstallation after repairing	NA	NA	NA
B	Gas Charging	Lot	1	
C	Labour charges for Leak repairing & Nitrogen cost per system	Lot	1	
D	Service Valves repair & refurbishment @ 3 in each ODU per system	Lot	1	
E	Labour charges for Four way valve Fixing charges per system	Lot	1	
F	PCB replacement and Fan Motor Replacement	Lot	1	
G	Comp replacement charges	Nos	3	
	Total Amount (Rs.) for SN-9			
	Total Cost of Work (Rs.) (SN- 1+2+3+4+5+6+7+8+9)			
	GST @ 18% on Total Cost of Work (Rs.)			
	Total Cost of Work Including GST@18%			

Schedule-II Supply of Spare parts

SN	Description	Unit	Qty	Total Amount (Rs.)
1	32 HP AC Circuit (Sky Blue) comprising ODU No.16/17; 4th Floor:	NA	NA	NA
A	Digital scroll compressor	Nos	1	
B	Fixed Scroll Compressor	Nos	2	
C	4-Way Valve	Nos	2	
D	Contactor	Nos	3	
E	Fan Motor	Nos	2	
F	Fan Blade	Nos	2	
G	Main PCB	Nos	1	
H	Relay	Nos	1	
I	Communication PCB	Nos	1	
	Total Amount (Rs.) for SN-1			
2	48 HP AC Circuit (Sky Blue) comprising ODU No.7/8/9; 5th Floor:	NA	NA	NA
A	4-Way Valve	Nos	4	
B	Contactor	Nos	2	
C	Fan Blade	Nos	1	
D	Main PCB	Nos	1	
E	Relay	Nos	1	
F	Communication PCB	Nos	1	
	Total Amount (Rs.) for SN-2			
3	48 HP AC Circuit (Black) comprising ODU No.30/31/32; 5th Floor:	NA	NA	NA
A	Digital scroll compressor	Nos	1	
B	Fixed Scroll Compressor	Nos	2	
C	4-Way Valve	Nos	1	
D	Contactor	Nos	3	

E	Main PCB	Nos	1	
F	Relay	Nos	1	
	Total Amount (Rs.) for SN-3			
	Total Cost of Work (Rs.) (SN- 1+2+3)			
	Schedule-III CAMC Charges			
1	Description	Unit	Unit Rate	Quantity
	Comprehensive AMC of new VRF based HVAC system of capacity identified based on the technical specifications (Annexure-C) for one (01) years including accessories, consumable item like oil and Refrigerant etc..	HP		704
	Total Cost of Work (Schedule-I+Schedule-II+Schedule-III) in Rs.			

Note:

- 1 Rates shall be quoted based on Technical Specifications, Annexure-A, B& C.
- 2 Rates quoted shall be firm & inclusive of all taxes (GST etc.) and duties leviable. Rates shall also include transportation of material, transit insurance, e-way bill, loading, unloading, lifting/handling of material, insurance of material at site & workers, liaisoning with any other department, banker charges and other incidental charges. Firms are advised to inspect the site before they quote their rates for the work.

Format of Bank Guarantee for Performance Guarantee

Bank Guarantee No.:.....

Date

To,
Dedicated Freight Corridor Corporation of India Limited
Metro Station Building Complex 5th Floor,
Pragati Maidan, New Delhi

Reference: Contract Agreement No.: _____, awarded on _____.

This deed of Guarantee made this day of between (name of bank) having registered office at and branch office at (hereinafter referred to as 'Bank') of the one part and Dedicated Freight Corridor Corporation of India Limited (hereinafter called the 'Employer') of the other part.

Whereas Dedicated Freight Corridor Corporation of India limited has awarded the contract no. for (hereinafter called the 'Contract') to M/s its registered office at (hereinafter called "Contractor").

Whereas the contractor is bound by the said contract to submit to the Employer an irrevocable Performance Guarantee for a total amount of Rs. (Rs. in words)

Now, we the undersigned (name of Bank official), of the bank fully authorized to sign and to incur obligations for and on behalf of the Bank hereby declare that the said Bank will guarantee the employer the full amount of Rs. (Rs. in words) as stated above.

After the Contractor has signed the aforesaid contract with the Employer, the Bank further agree and promise to pay the amount due and payable under this guarantee without any demure merely on a demand from the Employer stating that the amount claimed is due by way of loss or damage cause to or would be caused or suffered by the Employer by reason of any breach by the said contractor of any of the terms or conditions contained in the said agreement or by reason of the contractor failure to perform the said agreement. Any such demand made on the Bank shall be conclusive as regards the amount due and payable by the Bank under this guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding Rs. (in words) only.

We (indicate the name of Bank), further undertake to pay to the Employer any money so demanded notwithstanding any dispute or dispute raised by the contractor in any suit or proceeding pending before any court or Tribunal relating to liability under this present being absolute and unequivocal.

The payment so made by us (name of Bank) under this bond shall be valid discharge of our liability for payment there under and the Contractor shall have no claim against us for making such payment.

We (indicate the name of bank), to further agree that the guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the said agreement and that it shall continue to be enforceable till all the dues of the Employer under or by virtue of the said agreement have been fully paid and its claims satisfied or discharged by (Designation & address of contract signing authority) on behalf of Employer certify that the terms and conditions of the said agreement have been fully carried out by the said contractor and accordingly discharges this guarantee.

Notwithstanding anything to the contrary contained herein the liability of the bank under this guarantee will remain in force and effect until such time as this guarantee is discharged in writing by the Employer or until (date of validity/extended validity) whichever is earlier and no claim shall be valid under the guarantee unless notice in writing thereof is given by the Employer within validity/extended validity period of guarantee from the date aforesaid.

Provided always that we (name of bank) unconditionally undertakes to renew this guarantee or to extend the period of guarantee from year to year before the expiry of the period or the extended period of guarantee, as the case may be on being called upon to do so by the Employer, if the guarantee is not renewed or the period extended on demand, we (name of bank) shall pay the Employer the full amount of the guarantee on demand without demur.

We (indicate the name of bank), to further agree with the Employer that the Employer shall have the fullest liberty without our consent and without effecting in any manner out of obligation hereunder to vary any of the terms and conditions of the said contract from time to time or to postpone for any time or from time to time any to power exercisable by the Employer against the said contractor and to forbear or enforce any of the terms and conditions of the said agreement and we shall not be relieved from our liabilities by reason of such variations, or extension being granted to the said contractor for any bearance act or omission on the part of the Employer or any indulgence by the Employer to the said contractor or by any such matter or thing whatsoever which under the law relating to sureties for the said reservation would relieve us form the liability.

The Guarantee hereinbefore contained shall not be affected by any change in the constitution of Bank or of the Contractor.

The expressions "the Employer", "the Bank" and "The Contractor" hereinbefore used shall include their respective successors and assigns.

We (Name of the Bank) lastly undertake not to revoke this guarantee during its currency except with the previous consent of the Employer in writing.

Notwithstanding anything to the contrary contained hereinbefore:

- i) Our liability under this Bank Guarantee shall not exceed and restricted to Rs. ... (in words).
- ii) This Bank Guarantee shall be valid up to, unless extended on demand by Employer,
- iii) The bank is liable to pay the guaranteed amount or any part thereof under this Bank Guarantee only if Employer serve a written claim or demand on or before

IN WITNESS WHEREOF we of the Bank have signed and stamped this guarantee on this day of being herewith duly authorized.

Bank Seal

Signature of Bank Authorize Official with seal.

Name:.....

Designation:

Address:

Witness:

1. Name:

Designation:

Address:

2. Name:

Designation:

Address: