### **MILITARY ENGINEER SERVICES**

NAME OF WORK : PROVIDING SERVICES FOR MANNING & OPERATION,

COMPREHENSIVE MAINTENANCE TO VARIOUS TYPE CENTRAL / VRF TYPE AC PLANTS, DG SET AND OTHER MISCELLENEOUS REPAIR WORKS ETC AT LRDE

**BANGALORE** 

NAME OF SELLER

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	Total Page :	Pages
	Drawings :	900
		Sheets

Signature of Seller Date:

AGE (Contracts) for Accepting Officer

Tele: 080 – 25242526

email: e8geirdwestbangalore@gmail.com

### MILITARY ENGINEER SERVICES

Garrison Engineer (I) R&D (West) Military Engineer Services DRDO Complex, CV Raman Nagar PO Bangalore – 560 093.

M/s	
<del></del>	

PROVIDING SERVICES FOR MANNING & OPERATION, COMPREHENSIVE MAINTENANCE TO VARIOUS TYPE CENTRAL / VRF TYPE AC PLANTS, DG SET AND OTHER MISCELLENEOUS REPAIR WORKS ETC AT LRDE BANGALORE

Dear Sir(s),

- 1. Tender documents in respect of above work are uploaded on the site <a href="www.gem.gov.in">www.gem.gov.in</a> . The tender is on single stage two cover system. The contents of Cover I and Cover II are specified in NOTICE OF TENDER.
- 2. Bids will be received online by Garrison Engineer (I) R&D (West), Bangalore upto the date and time mentioned in the **NOTICE INVITING TENDER (NIT).** No tender / bid will be received in physical form and any tender / bid received in such manner will be treated as non-bonafide tender / bid.
- 4. Your attention is also drawn to instruction on filling and submission of tender attached herewith. You may forward your points on tender documents and / or depute your technical representative for discussion on tender / drawings and to clarify doubts, if any, on or before 26 Oct 2023. You are requested not to write piece meal points and forward your points duly consolidated before due dated 26 Oct 2023.
- 5. Un-enlisted Sellers are required to submit the scanned copies (in pdf file) of documents required as per eligibility criteria mentioned in instructions for filling the tender documents and Appendix 'A' to NIT alongwith EARNEST MONEY DEPOSIT (EMD) on e-procurement portal and submit the physical documents in the office of Garrison Engineer (I) R&D (West), DRDO Complex, CV Raman Nagar Post, Bangalore 560 093 within the time limit specified in NIT. Inadequacy/ deficiency of documents shall make the bid liable for rejection resulting in disqualification for opening of finance bid.
- 6. Seller having not executed standing security bond and standing security deposit in any MES formation shall upload scanned copy of EARNEST MONEY DEPOSIT (EMD) mentioned in Notice of Tender and shall ensure receipt of hard copy of EMD in the office of tender issuing authority before date & time fixed for this purpose. In case of failure to abide by any of these two requirements, the finance bid will not be opened.

Contd.,

### Para 6 Contd.,

- 7. Enlisted Sellers of MES shall submit the scanned copies (pdf file) of enlistment letter, tender fee and such other documents as mentioned in Appx 'A' to NIT on e-procurement portal and submit physical documents in the office of Garrison Engineer (I) R&D (West), DRDO Complex, CV Raman Nagar Post, Bangalore 560 093 before date and time fixed for this purpose.
- 8. The Seller must ensure that the tender / bid on the proper form is uploaded in time as the Accepting Officer will take no cognizance of any quotations / offer received in any other electronic or physical form like e-mail / fax / by hand / through post from Seller / bidder even if they are received in time.
- In view of delays due to system failure or other communication related failures, it is suggested that the tender / bid be uploaded, if necessary, sufficiently in advance of the last due date and time fixed.
- 10. General Conditions of Contracts (IAFW-2249) (1989 Print) and errata and amendments thereto, Schedule of minimum fair wages and MES SSR (Part I and Part II) are not enclosed with these documents. These are available for perusal in this office.
- 11. ANY SELLER, WHICH PROPOSES ALTERATIONS TO ANY OF THE CONDITION, SPECIFICATIONS LAID DOWN IN THE TENDER DOCUMENTS OR ANY NEW CONDITION, WHATSOEVER, IS LIABLE TO BE REJECTED.

### **MILITARY ENGINEER SERVICES**

#### **NOTICE OF TENDER (NIT)**

- 1. A tender is invited for the work as mentioned in Appendix 'A' to this NOTICE INVITING TENDER (NIT).
- 2. The work is estimated to cost as indicated in aforesaid Appendix 'A'. This estimates however, is not a guarantee is and is merely given as a rough guide and if the work cost more or less, the Seller/bidder will have no claim on that account. The tender shall be based on as mentioned in aforesaid Appendix 'A'.
- 3. The work is to be completed within the period as indicated in aforesaid Appendix 'A' in accordance with the phasing, if any, indicated in the tender from the date of handing over site, which will be on or about two weeks after the date of Acceptance of tender.
- 4. Normally Sellers whose names are on the MES approved list for the area in which the work lies, and within whose financial category the estimated amount would fall, may tender/bid but in case of term contracts, Sellers in categories 'SS' to 'E' may tender/bid. Not more than one tender/bid shall be submitted/uploaded by one Seller or one firm of Sellers. Under no circumstances will a father and his son(s) or other close relations who have business dealing with one another be allowed to tender/bid for the same contract as separate competitors. A breach of this condition will tender the tenders/bids of both the parties liable for rejection.
- 5. This Office of "Garrison Engineer (I)(R&D) West, DRDO Complex, C V Raman Nagar Post, Bangalore 560 093 will be the Accepting Officer here-in-after referred to as such for purpose of the contract.
- 6. The Technical Bid and Financial Bid (Cover-1 and Cover-2) shall be uploaded by the Seller/bidder on or before the date & time mentioned in NIT. A scanned copy of DD with enlistment details/documents shall be uploaded as packet 1/cover-1 ('T' bid) of the tender/bid on e-tendering portal. DD is refundable in case T bid is not accepted resulting in non-opening of 'Q' bid. The applicant Seller shall bear the cost of bank charges for procuring and en-cashing the DD and shall not have any claim from Government whatsoever on this account.
- 6.1 Tender forms and conditions of contract and other necessary documents shall be available on <a href="https://www.gem.gov.in">www.gem.gov.in</a> site for download and shall form part of contract agreement in case the tender/bid is accepted.
- In case of Seller who has not executed the Standing Security Bond, the Cover-1 shall be accompanied with by Earnest Money of amount as mentioned in Appendix 'A' in the form of deposit at call receipt in favour of GE mentioned in the aforesaid Appendix 'A' by Scheduled Bank or in receipted treasury challan, the amount being credited to the revenue deposit of the Garrison Engineer (I)(R&D) West, Bangalore.
- 6.3 GE will return the earnest money wherever applicable to all un-successful Sellers/bidders by endorsing an authority to the deposit-at-call receipt for its refund, on production by the Seller, bidder a certificate of the Accepting Officer, that a bonafide tender/bid was received and documents were returned.
- 6.4 Copies of the drawings and other documents pertaining to the work signed for the purpose of identification by the Accepting Officer or his accredited representative, sample of materials and stores to be supplied by the Seller will also be available for inspection by the Seller/bidder at the office of Garrison Engineer (I)(R&D) West, Bangalore during office working hours.

### **NOTICE OF TENDER (Contd.....)**

- 7. The Sellers/bidders are advised to visit the site of work by making prior appointment who is also the executing agency of the work (see Appendix 'A'). The Sellers/bidders are deemed to have full knowledge of all relevant documents, samples, site etc, whether they have inspected them or not.
- 8. Any tender/bid which proposes any alteration to any of the conditions laid down or which proposes any other condition or prescription whatsoever, is liable to be rejected.
- 9. The uploading of bid implies that bidder has read this notice and the conditions of contract and has made himself aware of the scope and specifications of work to be done and of the conditions and rates at which stores, tools and plants etc, will be issued to him and local conditions and other factors having bearing on the execution of the work.
- 10. Sellers/bidders must be in possession of copy of MES Standard Schedule of Rates (see appendix Á') including errata /amendments thereto.
- 11. The Accepting Officer reserves the right to accept a tender submitted by a Public Undertaking, giving a price preference over other Tender(s)/bids which may be lower, as are admissible under the Government Policy. No claim for any compensation or otherwise shall be admissible from such Seller/bidder whose tender/bid is rejected.
- 12. The Accepting Officer does not bind himself to accept the lowest or any tender/bid or to give any reason for not doing so.
- 13. This Notice Inviting Tender (NIT) including Appendix Á' shall form part of the contract.
- 14. Court of place from where tender has been issued shall alone have jurisdiction to decide any dispute out of or in respect of this tender. After acceptance of tender, Condition 72 (IAFW-2249) Jurisdiction of Courts shall be applicable.
- 15. This document shall be read in conjunction with the Service Level and BoQ uploaded with this bid. Details of items of work to be executed have been uploaded against the entry "Quantifiable Specification / Standards of The Service/ BOQ". The Service Provider is required to guote total amount against each item of work in the bunch bid. Service Providers may note that item no 1 to 3 being items related to manpower outsourcing have been provided with a minimum value based on minimum fair wages prevalent at the time of uploading of this bid. For SI No 1 & 3(Semi Skilled) the Minimum Fair wages have been considered to be Rs 832, EPF (Employer's contribution) Rs 75.00 (incl Adm Charges), ESIC (Employer's contribution) Rs 27.04, & Bonus Rs 5.46 whereas for SI No 2, (Unskilled) the Minimum Fair wages have been considered to be Rs 751, EPF (Employer's contribution) Rs 75 (incl Adm Charges), ESIC (Employer's contribution) Rs 24.41, and Bonus Rs 4.93. The provisions of General Conditions of Contract IAFW-2249 shall be a part of the agreement along with amendments 1 to 48 and errata 1 to 20. Any Service Provider not conversant with contents of IAFW 2249 shall obtain a copy from online sources/ authorized publisher or may also go through the same at the office of Garrison Engineer (I) R&D (West) Bangalore after taking prior appointment from Garrison Engineer. Once a Service Provider quotes his bid, he shall be deemed to be conversant with all provisions of IAFW-2249. For purpose of calculation of amount of performance guarantee total guoted amount shall be considered.

# **APPENDIX 'A' TO NOTICE INVITING TENDER**

1.	Name of Work	PROVIDING SERVICES FOR MANNING & OPERATION, COMPREHENSIVE MAINTENANCE TO VARIOUS TYPE CENTRAL / VRF TYPE AC PLANTS, DG SET AND OTHER MISCELLENEOUS REPAIR WORKS ETC AT LRDE BANGALORE
2.	Estimated Cost	₹43.00 Lakhs (At par market)
3.	Period of Completion	<b>330</b> days
4.	Cost of Tender documents	Nil
5.	Website / portal address	www.gem.gov.in
6.	Type of Contract	The tender shall be based on IAFW-1779A and General Conditions of Contracts (IAFW-2249) with Schedule 'A' (list of items of work) to be priced by Seller. The Seller is required to quote their rates against items of Schedule 'A'.
7.	Timeline details :-	Refer gem e-portal www.gem.gov.in
8.	Eligibility Criteria	
	A) For MES enlisted Sellers	Sellers shall be enlisted with MES in Class 'D' under Category c (i) & d(v) and above and subject to satisfactory remarks wrt performance in respect of works in hand as reflected in Work load return (WLR) or any other report circulated by competent engineer authority.
	B) For Sellers not enlisted with MES	(i) Sellers not enlisted with MES should meet the enlistment criteria of Class 'D' and under Category c (i) & d(v), Seller with regards to satisfactorily completion of requisite value works with Central / State Govt / Central / State PSUs / AWHO / AFNHB / CGEWHO / DG MAP, annual turnover,
		Bank Solvency, working capital, and other requirements given in Para 1.4 and 1.5 of Section 1 of MES Manual on Contracts - 2020 as available in all MES Formations as well as MES website ( <a href="https://www.gem.gov.in">www.gem.gov.in</a> )
		(ii) Not carrying adverse remarks in Work Load Report (WLR) or any other similar report circulated by any Competent Authority if already working in MES.
		(ii) Not carrying adverse remarks in Work Load Report (WLR) or any other similar report circulated by any Competent Authority if already working in MES. (iii) Not suspended / debarred / blacklisted (either permanently or temporarily) from participating in any bid or for business dealings by any Central / State Government Department or any Central / State PSUs or any Autonomous Body under Central / State Government or any Local Body as on the bid submission end date.

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9	Tender issuing and Accepting Officer	Name : Garrison Engineer (I) (R&D) West Bangalore Address : Garrison Engineer (I) (R&D) West Bangalore, DRDO Complex, C V Raman Nagar – Post, Bangalore – 560 093.
		Contact Details of Concerned Officer : 080 – 25242526 email : e8geirdwestbangalore@gmail.com
10	Executing agency	GE(I) (R&D) West, Bangalore
11	Earnest Money	₹ 86,000.00 in favour of <b>GE(I)</b> (R&D) West, Bangalore in the form of Deposit at call receipt, FDR not acceptable

#### NOTES:

- In case after opening of Cover 1, the number of MES enlisted Sellers of eligible class as well as eligible un-enlisted Sellers, if any, fulfilling the other eligibility criteria given in NIT is less than 7 (seven), applications in respect of MES Sellers of one class or two classes (in case of remote and difficult areas to be decided as per list circulated by CE Command / ADG) below the eligible class shall also be considered subject to fulfillment of other eligibility criteria given in the NIT. Therefore, MES Seller's one class below (two classes below in case of remote and difficult area) may also bid for this tender. Such Sellers (Sellers of one/two classes below the eligible class) shall not be considered in case their present residual work in hand is more than FIVE TIMES their present tendering limit. However, in case such Sellers fulfill the criteria of up-gradation to the stipulated eligible class based on past experience of completed works (individual work experience and / or average annual turnover, as applicable) and financial soundness (solvency/financial soundness and working capital), the ceiling of present residual work will not apply and they will be considered for issue of tender. Such bidders shall upload in their Cover-1, bid details related to residual work in hand like details of works in hand showing names of work, names of Accepting Officers, Contract Amounts, dates of commencement and completion (stipulated) and progress as on bid submission date. Such Sellers, if claim to fulfill the criteria of up-gradation shall also upload the requisite information / documents in support of up-gradation. These details shall be verified by the Tender Issuing Authority from concerned formations in case bids of such Sellers are considered for evaluation
- 2. In case after opening of Cover-1, the number of MES enlisted Sellers of eligible Class as well as unenlisted Sellers, if any, fulfilling the other eligibility criteria given in NIT, are 7 (SEVEN) or more, applications of only those one class below the eligible class bidders shall be considered, who have previously complete similar works satisfactorily and are meeting the criteria of upgradation in respect of past experience of completed works (individual work experience and / or average turnover as applicable) and financial soundness (solvency / financial soundness and working capital) as per details given in Manual of Contracts. Therefore, such Sellers shall upload the requisite information / documents in the Cover 1.
- 3. Un-enlisted Seller shall be considered provided he meets the Criteria. Foreign Firms shall not be eligible for this tender. However, Indian Firms having foreign national / Indian nationals staying abroad / Indian National having taken foreign citizenship, as Director (s) shall be considered subject to security clearance from the concerned authorities.
- 4. Sellers enlisted with MES will upload following documents in Cover 1, for checking eligibility:
  - a) Application for tender on Firm's letter head.
  - b) Enlistment letter issued by the Registering Authority duly renewed for the cyclic period in vogue,
  - c) Scanned copy of DD / Bankers Cheque towards cost of tender and EMD instrument in case SSD Bond is not signed at the time of Registration.
  - d) A valid OEM license from any reputed AC manufacturer.
  - e) Any other document required as described in this Appendix

### **APPENDIX 'A' TO NOTICE INVITING TENDER (Contd.,)**

- 5. Sellers not enlisted with MES will be required to upload following documents in Cover 1 for checking eligibility:
  - a) Application for tender on Firm's letter head,
  - b) Scanned copy of DD / Bankers Cheque towards cost of tender and EMD instrument.
  - c) Copy of Police Verification Report / Police Clearance Certificate / Character Certificate from the Police Authority of the area where the registered office of the firm is located / notarized copy of valid Pass Port of Proprietor / each Partner / each Director.
  - d) All documents required for enlistment in MES for the Class mentioned in Para 8 (b) above as follows:
    - i) Affidavit for constitution of firm.
    - ii) List of works executed during last five years including copies of Work Orders/Work allotment letters, Copies of completion certificates and Form 16 A.

SI	CA No. & Name of Work	Amount of Contract	Formation viz CE, CWE, GE or Office of other Deptt. Including their Complete Postal Address, Fax No. and email ID	Date of Commencement	Original / Scheduled Date of Completion	Actual Date of Completion	Whether invoked Arbitration /Litigation. If yes the outcome of the same	Remarks
1	2	3	4	5	6	7	8	9

- iii) Annual turnover certificate duly supported with audited balance sheet.
- iv) Audited balance sheet of last five years in case of Limited companies
- v) Solvency certificate from scheduled bank as per following specimen: -
- vi) A valid OEM license from any reputed AC manufacturer.

### **APPENDIX 'A' TO NOTICE INVITING TENDER (Contd.,)**

Bank Address and Code No.

# FORM OF SOLVENCY CERTIFICATE FROM THE NATIONALISED / SCHEDULED BANK

This is certified that to the best of	our knowledge	and information Shri/S	Smthaving
address, a customer	of our bank ar	re/is respectable and	can be considered
solvent upto ₹	(Rupees	/financially	sound for any
engagement upto ₹	(Rupees	). This o	certificate is issued
without any guarantee or responsil	bility on the banl	k or any of the officer(s	).

(Signature)
Name, Designation and Personal
Code No of Signatory& Seal of bank
Complete Postal Address,
Telephone No, e-mail ID of Branch

vi) Working Capital certificate from scheduled bank as per following specimen :-

# FORM OF WORKING CAPITAL CERTIFICATE FROM NATIONALIZED/ SCHEDULED BANK

This	is certifi	ed that	Shri/Smt		having	address		has /have
been	maintain	ing a Sa	aving Bank	Account /Curre	ent Accou	int/ Fixed De	eposit Accor	unt with this
Brand	ch of ban	k since.		and the fir	m is havi	ng working (	capital of ap	proximately
₹			. and/ or the	e firm is enjoyir	ng overdra	aft/credit fac	ilities upto li	mit of
₹			. This certi	ficate is issued	d without	any guaran	tee or respond	onsibility on
the b	ank of an	y or the	officer(s).					_

(Signature)
Name, Designation and Personal
Code No of signatory& seal of bank

Note: In case of partnership firm, certificate shall include names of all partners as recorded with the bank.

- vii) Affidavit from Seller that there is no Government dues/ recovery outstanding against him. If there is any Government dues/ recovery outstanding from the Seller, enlistment/ upgradation shall not be carried out.
- vii) Affidavit from Seller giving brief details of arbitration / litigation cases he was involved in. Registering Authority will critically examine such details and if Seller is considered habitual litigant, his enlistment/ up-gradation shall not be carried out. Seller shall be deemed to be a habitual litigant if he moves the court more than once ignoring arbitration clause and court does not uphold his view.

viii) Two self-attested photographs of Proprietor/Partners/ Directors of firm for verification of character and antecedents from the police authorities. Places where online police verification process is available, the Seller will carry out police verification of the Proprietor/Partners/Directors and submit the verification reports for cross verification by the Department. Alternatively the Seller may submit a copy of valid passport issued by Govt of India.

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- (ix) Copy of partnership deed in case of partnership firm.
- (x) Memorandum and Articles of Association in case of Limited Companies.
- (xi) Copy of Registration Certificate of firm with Registrar of Companies.
- (xii) Affidavit that no near relative(s) of the Seller or his/their employees/agents is/ are working as Gazetted/ Commissioned Officer(s) in MES/ Corps of Engineers/ Ministry of Defence. If the near relative(s) is/are working in such capacity in any formation upto Zonal CE/CCE, he/ they shall furnish details. The Seller shall not be entitled to tender for the works in entire area of CE Zone/CCE.
- (xiii) Affidavit that no near relative(s) of the Seller or his/their employees/ agents is/ are working as Junior Engineer(s) in MES/Corps of Engineers. If his near relative(s) is/are working in such capacity in any formation upto CWE/ GE(I) office, the Seller shall furnish details. The Seller shall not be entitled to tender for the works in entire area of that CWE/GE(I).
- (xiv) Copy of power of attorney/Resolution of the Board in favour of any Partner/Director of the firm.
- (xv) Copy of immediate last Income Tax Return.
- (xvi) A separate sheet containing specimen signatures (signed in black ink) and affixed with photographs of Proprietor/Partners/Directors (to be used as Appendix B of enlistment letter).
- xvii) Certified true copy of PAN of Proprietor, Partners, Directors and the firm/ Company. Notes:-
  - (a) All the documents submitted by the Seller shall be signed by Proprietor/all Partners/all Directors unless specifically authorised to a Partner/Director through POA or Resolution of the Board.
  - (b)Photocopies of documents shall be self-attested. Registering Authority shall ask production of original documents to verify the photocopies.
  - (c) All affidavits shall be given on non-judicial stamp paper of appropriate value duly signed by the Seller and attested by the Magistrate/Notary public.
- e) Details of works being executed in MES, if any,
- f) Any other documents required as described in this Appendix,

**SERIAL PAGE NO: 11** 

- 6. Tenders not accompanied by scanned copies of earnest money (as applicable) or undertaking in Cover 1 shall not be considered for validation of 'T' bid and their Financial Bid will not be opened.
- 7. Sellers should ensure that their original physical DDs and Earnest Money Deposit (EMD) instruments (as applicable) reach the office of Accepting Officer within 05 (FIVE) days of bid submission ends date, failing which following action shall be taken:-
  - (a) In case of tenders from enlisted Sellers of MES, where scanned copies has been uploaded in Cover 1, but physical copies are not received within the stipulated period, their finance bids (Cover 2) will be opened. However, non-submission of physical copies shall be considered as willful negligence of the Seller with ulterior motives and such Seller shall be banned from bidding for a period of six months commencing from the date of opening of Financial Bbid (Cover 2).
  - (b) In case of Sellers from un-enlisted Seller, where scanned copies have been uploaded in Cover 1, but physical copies are not received within the stipulated period, their Financial Bids (Cover 2) will not be opened. Name of such Sellers alongwith complete address shall be circulated for not opening of their bids for a period of six months commencing from the date of opening of Financial Bid (Cover 2).
  - (c) In case of tenders from enlisted and un-enlisted Sellers, where scanned copies of instruments for Earnest Money Deposit (as applicable) have been uploaded in Cover 1, but the same are not received in physical form within stipulated period, such tenders shall not qualify for opening of Financial Bid (Cover 2).
- 8. Seller will not be allowed to execute the work by subletting or through power of attorney to a third party / another firm on his behalf. However a Seller can execute the work through power of attorney to sons / daughters / spouse of Proprietor / Partner / Director and firm's own employees, Director, Project Manager provided they are not having a separate enlisted firm in MES in their name as Proprietor / Partner / Director.
- 9. After opening of Cover 1 and during its technical evaluation, in case any deficiency is noticed, in the documents required to be uploaded by the Sellers as per NIT, a communication in the form of e-mail/SMS/Speed Post etc. shall be sent to the Seller to rectify the deficiency within a period of 7 days from date of communication failing which their Financial Bid (Cover 2) shall not be opened and Seller shall not have any claim on the same.
- 10. Invitation for e-tender does not constitute any guarantee for validation of Technical Bid and subsequent opening of Financial Bid of any applicant/bidder, merely by virtue of enclosing DD. Accepting Officer reserves the right to reject the Technical bid and not to open the Financial Bid of any applicant/bidder. Technical bid validation shall be decided by the Accepting Officer based on, eligibility of the firm as per criteria given in this Appendix. The Seller / bidder will be informed regarding non-validation of his Technical Bid assigning reasons thereof through tender evaluation report which shall be uploaded on the website. Such Seller, if desires may appeal to the next higher Engineer authority viz Chief Engineer R&D Secunderabad on e-mail: e8cerdsecbad@gmail.com with copy to the Accepting Officer on email before the scheduled date of opening of Cover 2. Next Higher Engineer Authority (NHEA) shall decide the matter within a period of seven working days from the date of receipt of appeal. The decision of the NHEA shall be final and binding. The Seller / bidder shall not be entitled for any compensation whatsoever for rejection of his bid.

- 11. In case an un-enlisted Seller is already executing works in MES, he shall not be considered eligible for the subject tender if the total value of such works is more than twice the tendering limit of the MES Class of Seller for which it is eligible. For this purpose, details of the works being executed by such a Seller shall be uploaded in the Cover 1 of the bid and shall be checked / verified by the Accepting Officer.
- 12. In case the BOQ is revised through the Corrigendum and the bidder has failed to quote on the Revised BOQ (i.e., he has quoted on pre revised BOQ), such bid shall be treated as willful negligence by the bidder and his quotation shall be considered as non-bonafide. In such cases the lowest tender shall be determined from amongst the valid / bonafide bids only. Accepting Officer may decide whether to re-tender or consider the lowest bonafide tender for acceptance.
- 13. Revoking the Offer or revising the rates upward or offering voluntary reduction by the lowest Seller after opening of Cover 2 shall be considered as a willful default. For this default a Earnest Money deposited by him shall be forfeited. In case of MES enlisted Seller having deposited the Standing Security Bond, an amount equal to the earnest money stipulated in the NIT shall be notified to the Seller for depositing through MRO and consideration of such Seller in tender evaluation for future works shall remain suspended till the aforementioned amount is deposited in the Government Treasury. No other disciplinary / administrative action shall be taken against such Sellers. In such a situation, the next lowest offer shall not be considered for acceptance. Instead, retendering shall be resorted to in a transparent and fair manner and the defaulting Seller and his related firm if any, shall not be eligible for this tender in second call or subsequent calls.
- 14. Tender to related firms shall not be issued simultaneously. Firms shall be termed as related if Proprietor / one or more Partners / Directors are common. Decision of Accepting Officer on issue / deny the tender to any of the related firms shall be final and binding

Signature of Seller Date:

AGE (Contracts) for Accepting Officer

**SERIAL PAGE NO: 12** 

File No. 8225 /02 / E8

dated 20 Oct 2023

### **Address of Accepting Officer:**

Garrison Engineer (I) (R&D) West, DRDO Complex, C V Raman Nagar – Post, Bangalore – 560 093. Contact details of the Concerned Officer

Shri E. Srinivasa Rao, AE (QS&C),

AGE (Contracts)

Phone: 080 - 25242526

Email: e8geirdwestbangalore@gmail.com

### **INSTRUCTIONS ON FILLING AND SUBMISSION OF TENDER**

### 1. **EARNEST MONEY DEPOSIT:**

Seller(s) who are not enlisted with MES / who are enlisted, but have not executed the Standing Security Bond shall submit Earnest Money Deposit as detailed in Notice of Tender in any one of the following forms, along with their tender / bid :-

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- (a) Deposit at Call Receipt from a scheduled bank in favour of GE (I) R&D (WEST) Bangalore 560 093
- (b) Receipted Treasury Challan for the amount being credited to the Revenue Deposit of GE (I) R&D (WEST) Bangalore 560 093

It is advisable that Earnest Money is deposited in the form of deposit call receipt from an approved Schedule Bank for easy refund. In case the Seller / bidder wants to lodge 'EARNEST MONEY DEPOSIT' in any other form allowed by MES, a confirmation about its acceptability will be obtained from the Accepting Officer well in advance of the bid submission end date and time. Earnest Money Deposit shall be submitted in the name of the **GE (I) R&D (WEST), Bangalore.** 

<u>Notes</u>: - Earnest Money Deposit (EMD) in the form of Cheque / Bank Guarantee etc will not be accepted. NON-SUBMISSION OF EARNEST MONEY DEPOSIT (EMD) (scanned copy alongwith Technical Bid & hard copy before the date and time fixed for opening of BOQ) WILL RENDER THE BID DISQUALIFIED FOR OPENING OF COVER II (FINANCE BID).

- 1.2 All bidders are exempted from submission of EMD except those who become ineligible from such exempted as mentioned in Para 1.3 here-in-after.
- 1.3 Bidders if withdraw or modify bids during the period of validity, or if awarded the Contract (s) and on being called upon to submit the Performance Security Deposit / Security Deposit, fail to submit the Performance Security / Security Deposit before the deadline defined in the request for bid documents / Notice inviting Tender, shall be debarred from exemption of submitting Bid Security / Earnest Money Deposit for a period of 06 (Six) months, from the date declared disqualified from exemption from submission of Earnest Money Deposit / Security Deposit, for all tender issued by MES during this period.
- 1.4 All bidders shall be required to sign the Bid Security Declaration as below "-

"I / We here by understand and accept that if I/We withdraw or modify my / our bids during the period or validity, or if I / We are awarded the contracts and on being called upon to submit the Performance Security / Security Deposit, fail to submit the Performance Security Deposit before the deadline defined in the request for bid documents / Notice Inviting Tender, I/We shall be debarred from exemption of submitting Bid Security / Earnest Money Deposit for a period of 06 (Six) months, from the date I / We are declared disqualified from exemption from submission of Earnest Money Deposit / Security Deposit, for all tender issued by MES during this period."

### 2. **GENERAL INSTRUCTIONS FOR COMPLIANCE:**

- 2.1 The bids received only in electronic form will be considered. All bids shall be submitted on <a href="www.gem.gov.in">www.gem.gov.in</a> portal. Documents should be scanned and forwarded in "pdf" form or "xls" form as indicated.
- 2.2 Tenders/bids (quoted Bid of BOQs) shall be uploaded on 'defproc.gov.in' portal on or before the bid closing date mentioned in the tender. No tender/bid in any other electronic or physical form like e-mail / fax / by hand / through post will be considered.

### **INSTRUCTIONS ON FILLING AND SUBMISSION OF TENDER (Contd.,)**

**SERIAL PAGE NO: 14** 

- 2.3 Bid should be DIGITALLY signed using valid DSC. All pages of tender documents, corrections / alterations shall be signed / initialed by the lowest bidder after acceptance.
- 2.4 Drawings, if issued in physical form, must be returned duly initialed by the Seller / bidder in separate envelope indicating his name and address.
- 2.5 The tender shall be signed, dated and witnessed at all places provided for in the documents after acceptance. All corrections shall be initialed. The Seller shall initial every page of tender and shall sign all drawings forming part of the tender. Any tender / bid, which proposes alterations to any of the conditions whatsoever, is liable to be rejected.
- 2.6 In the technical bid, a scanned copy of Power of Attorney in favour of the person uploading the bid using his /her DSC shall be uploaded. In case the digital signatory himself is the sole proprietor, scanned copy of an affidavit on stamp paper of appropriate value to this effect stating that he has authority to bind the firm in all matters pertaining to contract including the Arbitration Clause, shall be attached in 'pdf' form. In case of partnership concern or a limited company, digital signatory of the bid/tender shall ensure that he is competent to bind the Seller (through partnership deed, general power of attorney or Memorandum and Articles of Association of the Company) in all the matters pertaining to the Contracts with Union of India including arbitration clause. A scanned copy of the documents conforming of such authority shall be attached with the tender/bid in 'pdf' form, if not submitted earlier. The person uploading the bid on behalf of another partner(s) or on behalf of a firm or company using his DSC shall upload with the tender / bid a scanned copy (in 'pdf' form)of Power of Attorney duly executed in his favour by such other or all other Partner(s) or in accordance with constitution of the company in case of company, stating that he has authority to bind such other person of the firm or the Company, as the case may be, in all matters pertaining to the contract including the Arbitration Clause.
- 2.7 Even in case of firms or companies which have already given power of attorney to an individual authorizing him to sign tender and in pursuance of which tender documents are being signed by such person as a routine, fresh power of attorney duly executed in his favourstating specifically that the said person has authority to bind such partner(s) of the firm, or the company as the case may be, including the condition relating to Arbitration clause, should be uploaded in 'pdf' form with the tender/bid unless such authority has already been given to him by the firm or the Company. It shall be ensured that the power of attorney shall be executed in accordance with the Constitution of Company as laid down in Memorandum and Articles of Association.
- 2.8 Hard copies of all above documents shall be sent by the Seller to the Tender issuing authority well in advance to be received before the date & time fixed for the same.
- 2.9 Bids (Cover 1 & 2) shall be uploaded online well in time.
- 2.10 The Seller shall employ only Indian Nationals after verifying their-antecedents and loyalty. Attention is also drawn to Special Condition 3 and also conditions 24 and 25 of IAFW-2249 (General conditions of contracts).
- 2.11 Sellers / bidders who uploaded their priced tender / bids and are desirous of being present at the time of opening of the tenders/bids, may do so at the appointed time.
- 2.12 The Seller/bidder shall quote his rate on the BOQ file only. No alteration to the format will be accepted, else the bid will be disqualified and summarily rejected.

### INSTRUCTIONS ON FILLING AND SUBMISSION OF TENDER (Contd.,)

- 2.13 In case the Seller/bidder has to revise / modify the rates quoted in the BOQ (excel sheet)or he can do so only in the BOQ, through "www.gem.gov.in" site only before the bids closing time and date.
- 3.0 <u>REVOCATION / REVISION OF OFFER UPWARD / OFFERING VOLUNATARY REDUCTION, AFTER OPENING OF FINANCIAL BIDS BY LOWEST BIDDER:</u>

In the event of lowest Seller revoking his offer or revising his rates upwards / offering voluntary reduction, after closing of bid submission date and time, his offer will be treated is revoked and the Earnest Money deposited by him shall be forfeited. In case of MES enlisted Sellers, the amount equal to the Earnest Money stipulated in the Notice of Tender, shall be notified to the Seller for depositing the amount through MRO. Bids of such Seller / bidder shall not be opened till the aforesaid amount equal to the earnest money deposit is deposited by him in Govt treasury. In addition, such Seller/bidder and his related firm shall not be opened in second call or subsequent calls. Reduction offered by the Seller on freak high rates referred for review shall not be treated as voluntary reduction.

Signature of Seller Date:

AGE (Contracts) for Accepting Officer

**SERIAL PAGE NO: 15** 

(In lieu of IAFW 1779-A Revised (1955)

(TO BE READ IN CONJUNCTION WITH GENERAL CONDITIONS OF CONTRACT IAFW – 2249)

Telephone: 080 – 25242526

email:e8geirdwestbangalore@gmail.com

Garrison Engineer (I) R&D (WEST) Military Engineer Services,

DRDO Complex, CV Raman Nagar PO Bangalore – 560093

8225 / 02 / E8 20 Oct 2023

### **MILITARY ENGINEER SERVICES**

### ITEM RATE TENDER AND CONTRACT FOR WORKS REQUIRED IN THE EXECUTION OF

PROVIDING SERVICES FOR MANNING & OPERATION, COMPREHENSIVE MAINTENANCE TO VARIOUS TYPE CENTRAL / VRF TYPE AC PLANTS, DG SET AND OTHER MISCELLENEOUS REPAIR WORKS ETC AT LRDE BANGALORE

1.	M/s	of	is / are	hereby
autho	rised to tender for the above work. The tende	r is to be uploaded in the "	www.gem.gov.in	" site
before	e 1800 hours on <b>20 Oct 2023.</b>			
	Any correspondence concerning this tende	r should be addressed qu	uoting the refere	nce to
Garri	son Engineer (I) R&D (West) Bangalor	e - 560 093and marked	as CA NO .GE(	I) R&D
(WES	T) / BAN /TOKEN / 72 OF 2023- 2024.			
THE	PRESIDENT OF INDIA DOES NOT BIND	HIMSELF TO ACCEPT TI	HE LOWEST OF	R ANY
TEND	ER.			
Signa	ture of Seller	Signature of Office		
Date:		Issuing the Docu <u>Appt</u> : AGE (Conf for Garrison Engi (WEST) Bangalo	tracts) ineer (I) R&D	

Dated: 20 Oct 2023

(In lieu of IAFW – 1779A (Revised 1955))

#### **SCHEDULE** A'

- 1. The entire work covered under this contract shall be completed within a period of 330 days from date of commencement of the work as shown in WO No I
- 2. For Schedule of items refer BOQ sheet in Excel format.
- 3. The quantities shown in schedule (BOQ sheet) in column 3 are approximate and are inserted as a guide only. They do not constitute any guarantee of the ultimate quantities which will be ordered on the Seller. They shall not however be varied beyond the limit laid down in condition 7 of IAFW- 2249 (General conditions of contract).
- 4. The Seller shall enter the unit rate in column 3 of BOQ.
- 5. Unless otherwise specifically stated in the description of the items, the unit rates quoted shall be deemed to include for all materials and labour complete required for executing the respective items of works.
- 6. (a) The unit rate quoted by the Seller against respective items of schedule 'A' shall be deemed to include all minor details of construction of work, not specifically mentioned in description of schedule 'A' items and/or in the particular specifications/ drawing and which are fairly and obviously intended/essential for the execution of work in a workmen like manner and sound construction.
  - (b) In case of difference of opinion between the Seller and the GE as to, whether or not certain items of work constitute "Minor constructions details' which is deemed to have been included in the Seller's quoted rates, the decision of the Accepting Officer shall be final, conclusive and binding.
- 7. The description of Schedule 'A' items in BOQ sheet (Excel format) are brief. These shall be read in conjunction with particular specifications, special conditions, method of measurements, preambles contained in MES schedule and General conditions of contracts IAFW- 2249.
- 8. The Seller's quotation shall be deemed to include all taxes, statutory levies/duties, such as GST, Labour welfare tax, EPF, ESIC, etc., as levied by the Central & State Government payable under respective statues as applicable from time to time. Any other conditions stipulated by the Service Provider on taxes/duties will not be considered and such tender shall be liable for rejection. The taxes liable to be paid as per statutory shall be considered by the Service Provider while quoting their rates for this work and no claim of Service Provider, in this regard, shall be entertained at a later date. The Service Provider shall note this point and any condition to this effect will be treated as the CONDITIONAL TENDER and the tender thus quoted and submitted shall be rejected.
- 9. The Sellers are advised to visit the site with prior information to GE, to ascertain the conditions of working at site. The Seller shall be deemed to have satisfied himself as to the nature of works, local facilities including type and nature of approach available to various locations of works and different mode of conveyance of materials, T&P etc., which will be involved in the subject tender, and all matters affecting the execution and entire completion of work. The rates quoted shall be deemed to include considering all these site conditions and nature of works involved in the subject tender. No extra charges due to misunderstanding or otherwise what so ever shall be allowed.

- 10. Seller's further attention is invited to note the following and shall quote their rates accordingly. No claim whatsoever shall be admissible on this account.
  - a) Seller shall take all precautionary measures to avoid any inconvenience to the users. The site of work shall be left clean and tidy after day's work. No obstruction to passage shall be made by dumping materials during progress of work.

**SERIAL PAGE NO: 18** 

- b) Any damage caused to any existing structure, etc., due to bad workmanship/ negligence of his workers, the same shall be rectified/ replaced by the Seller at his own expenses to match with the existing surfaces. Decision of GE in this regard shall be final and binding.
- 11. Total amount of BOQ is not firm but will be treated as the "Contract Sum" referred to in IAFW-2249. Seller has to visit the BOQ pages of tender for quoting the rates of each items of the Schedule.
- 12. Cost of all minor constructional details which are not specifically shown or given in the particular specifications and are essential to the execution of work and services in workman like manner and sound Engineering Practice/ Construction Principles is deemed to be catered for in the rate quoted by the Seller.
- 13. The descriptions inserted in BOQ are in brief. The unit rate quoted shall be deemed to include inter-alia the description given in particular specification read together with Schedule of works.
- 14. The rates quoted shall also include for all provision of labour regulation status promulgated by Central Govt/State Govt.
- The Seller shall reimburse the cost as decided by the Accepting Officer of contract for damage occurred due to negligence by the personnel employed by him.
- 16. The operating personnel shall have thorough knowledge of precautions during emergency cases and also be conversant with state electricity rules/regulations.
- 17. The personnel shall limit their movements for the particular building / place and shall not tress-pass to surrounding building(s) on any reason. They shall not be under influence of alcoholic drinks while on duty.
- 18. The Seller will be responsible for safety of the personnel employed by him for repair / maintenance works and installations and any compensation arising on account of accident shall be borne by the Seller and insurance cover for this purpose shall be arranged by the Seller. Proper first aid arrangement shall also be maintained by the Seller at site.
- 19. The Seller shall have to pay the wages to the various categories of workers not less than prevailing minimum fair wage. Recovery for absence of person without replacement shall be recovered at twice the minimum fair wages rate.
- Seller shall provide proper uniform and safety tools, safety aprons etc. to his work men while on duty.
- 21. All statutory provisions such as Contract Labour (Regulation & Abolition ) Act 1970, Minimum Act 1948 and Fair Wages Act, The Employees Provident Funds & Miscellaneous Provisions (EPF & MP) Act 1952, The Building and other Construction Workers Welfare CESS Act 1996, Payment of Wages Act 1936 etc. shall be strictly complied with.

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- Vis-à-vis the Government, the Seller shall be primarily liable for all payments to be made under, and for observance of the Regulations aforesaid. The GE shall have the right to deduct from the payment due to the Seller, any sum required or estimated to be required for making good the loss suffered by a worker or workers by reason of non-fulfillment of the conditions of the contract for the benefit of the workers, non-payment of wages or deductions made from his or their wages, which are not justified by the terms of the contract or non-observance of the regulations.
- The Seller shall be solely responsible for the redressal of grievances/ problems/ resolution of disputes related to persons employed by them for the subject work. The Department in no way shall be held responsible for mediation/ settlement of any disputes/ issues whatsoever.
- No Seller shall be permitted to take advantage of ignorance of above provisions.
- 25. <u>LEAVE RESERVE ON HOLIDAY</u>: The number of personnel required for each category of is as specified in BOQ. MES will not sanction any leave etc, for the employees employed by the Seller. It is the responsibility of the Seller to provide necessary leave/holiday reserve at his own arrangement. The rates quoted by the Seller for the respective item in BOQ shall deemed to be included for such leave/holiday/reserve at no extra cost to government/Department. The Seller shall ensure that number of tradesmen/helpers etc., as per BOQ items shall be made available during the duty/shift hours. The rate quoted is deemed to include all tools and plants required for smooth operation of lift/installations.
- 26. The providing services, operation and maintenance shall be provided **excluding Sundays and Government Holidays** as detailed here in before, BOQ and as directed by the Engineer-in-charge.
- 27. Please refer condition 64 of IAFW-2249. Running Account Receipt payment shall only be made at intervals of 30 days & Final Bill shall be submitted only after completion.
- 28. Penalty charges wherever indicated in tender documents shall be subjected to maximum of 10% of the contract value but these penalties shall be in addition to provision made in condition 50 of IAFW -2249.
- 29. The successful Seller shall himself or employ site supervisor with mobile phone to coordinate with department on daily basis and ensure smooth functioning of services and rates quoted are deemed to be included for the above provision.
- 30. The rates quoted by the Seller / firm shall not be less than minimum wages as notified by Govt Of India / State Govt / Local body whichever is higher.
- 31. Seller's attention is invited to Labour Wages Act with regards to payment of wages to the individuals engaged under this work. Seller shall make the payments to their staff / employees by Cheque or through NEFT in their Bank Account, and the particulars of same shall be submitted to the department while claiming any payment. No payments will be made, unless proof of payment of wages through bank account is submitted by the Seller/firm while claiming bills.
- 32. The Seller shall submit copy of valid Labour License from the Labour Commissioner within 15 days of commencement of work.
- 33. Govt reserves the right to foreclose the contract at any stage with one month notice to Seller. The Seller will have no claim what so ever on account. The Govt may enhance the period of completion for 2 months (As special case) due to non-finalization of the contract for next cyclic period & the Seller shall be paid as per the rates quoted against the contract.

- 34. During the surprise checks by the representatives of department, if any of the personnel is found missing during working hours or unattended to the work a penalty of twice the rate quoted for the particular personnel for the missing period(s) as per CA shall be derived out and recovered from the payment due to the Seller in addition to cost of any damages which shall also be recovered from the Seller. Regarding penal recovery the decision of Accepting officer shall be final and binding.
- 35. Unless otherwise executed under the rule of Indian Electricity Rules the electrical works shall be carried out under the supervision of a person holding a certificate of competency issued by the recognized authority. The workmen shall also hold certificate of company good workmanship as an essential requirement for compliance with these specifications.
- 36. While claiming payments, Service Provider shall submit a Statement, as under alongwith supporting documents of proof of payment:-

SI	Name of	Gross	Bonu	Deduc	tion as Deduction		Net	Mode of	Rema	
No	employee	Paymen	S			paym	payment	rks		
		t		contribution		Employer		ent		
						Contribution				
				EPF	ESIC	EPF	ESIC			
1	2	3	4	5	6	7	8	9	10	11

It is confirmed that necessary payment to the employee has been not less than the minimum fair wages

Signature of Service Provider

- 37. In case it comes to notice of Department that Service Provider pays wages / Contributions to EPF, EDLI, ESIC & Bonus, etc., less than their quotes, and fails to substantiate proof of less payments, necessary recovery shall be worked out by Engineer-in-Charge and will be effected from the payments due to the Service Provider and Service Provider will not have any claim in this regards. The decision of Accepting Officer shall be final and binding in this regards.
- 38. Irrespective of whether Service Provider claims bills for payment form Department, Service Provider shall pay wages to personnel employed by him, EPF, ESIC, GST etc., as applicable at appropriate time. Any violations in payment of wages, EPF, ESIC, GST, etc., the Service Provider shall be solely responsible for any consequences thereof.
- 39. The unit rate quoted in respect of items of Sch `A' i.e. "PROVIDING SERVICES FOR MANNING & OPERATION, COMPREHENSIVE MAINTENANCE TO VARIOUS TYPE CENTRAL / VRF TYPE AC PLANTS, DG SET AND OTHER MISCELLENEOUS REPAIR WORKS ETC AT LRDE BANGALORE" and all other paintable equipment which requires painting once in the contract period
- 40. One shift' shall mean 8 working hours for the purpose of this contract. Minimum amount mentioned (for reference) against SI Item Nos 1 to 10 are Basic Wage + EPF + ESIC + EDLI + Bonus and is excluding Service Provider's Overheads & Profits, GST, LWCT & any other applicable taxes/CESS.

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- 41. Consequent upon the provision of Section 51 of the Goods and Service Tax Act coming into force w.e.f. 01 Oct 2018 circulated vide E-in-C's Branch letter No. 66546/Manual/GST/168/E8 dt 26 Sep 2018, 2% GST shall be deducted at source as notified/specified in the Government Of India, Ministry Of Finance, Department of Revenue letter No F. No. S. 31011/11/2018-ST-I-DoR dt. 14 Sep 2018.
- 42. Service Provider's further attention is invited to note the following:
  - a) Service Provider shall take all precautionary measures to avoid any inconvenience to the users. The site of work shall be left clean and tidy after day's work. No obstruction to passage shall be made by dumping materials during progress of work.
  - b) Any damage caused to any existing structure, etc., due to bad workmanship/ negligence of his workers shall be rectified/ replaced by the Service Provider at his own expenses to match with the existing surfaces. Decision of GE in this regard shall be final and binding.
- 43. The AC Plant Operator (Semi-skilled) and Helper (Unskilled) shall have a minimum of 5 and 3 years' experience respectively in similar field i.e. running of AC installation. AC Technician (Skilled) shall be qualified, holder of Certificate from Industrial Training Institute of any state in Electrical Engineering, with 3 years of work experience and License issue by recognized authority. AC Plant operator shall be suitably qualified in AC and refrigeration with 5 years' experience and Helper (Unskilled) shall be 10<sup>th</sup> Pass with 3 years of practical experience in the relevant trade. The The Service Provider shall produce certificates including certificates of experience to Engineer-in-Charge. The above certificate shall be produced on demand to the Accepting Officer for verification. The Accepting Officer may reject any person employed by the Service Provider for operation of substation if he is not satisfied with performance of duty without assigning any reasons and the Service Provider shall not be reimbursed or paid extra on this account.
- 44. The bidder must possess a valid OEM license from any reputed AC manufacturer

# SCHEDULE OF WORKS ( BOQ )

SI. No.	Item Description	Quantity	Units
1	2	3	4
	Works to be carried out		
1	Manning and Operation of various type Central type air conditioning plants and VRF plants of various capacities for the period of 11 Months located at various locations in the LRDE as mentioned in (a) to (e) here-in-after for smooth and efficient performance as required to achieve optimum / desired room temperature conditions by employing Semi skilled AC technicians - 02 Nos and Helper - 02 Nos in One shift from 0830 hours to 1730 hours per day (One hour lunch break) excluding sundays and holidays (As per LRDE establishment list) all as specified and as directed by Engineer-in-charge.		
	(a) Central type air conditioning plants 80 HP - 03 units (Each 80 HP unit consisting of 28 HP +28 HP + 24 HP = 80 HP) of Make - Bluestar, each 80 HP unit consisting of compressors (Make & model - ANB78FVAMT, Gas cooling R410a), Air handling unit / Evaporative coil - Cooling coils, Blower fan, Fan motor (Make- Crompton), Air filter (Type of filter - Box type pre filter), Mother boards, PCBs, Duct factory fabricated galvanised iron sheet Aluminium grills, insulation - Nitrite rubber, LT Panel board complete in all respects of the plant all as per installed on site i.e near Admin bldg AC plant installation (02 Nos) and Teletorium bldg AC plant installation (01 No) at LRDE. The plant usage is One plant using for Admin bldg Ground Floor, Second plant using for Admin Bldg First Floor and Third plant for Teletorium building. Note - All Three plants are operating simultaneously.		
	(b) Central type air conditioning plants VRF 12 HP - 02 units of Make - Bluestar, each 12 HP unit consisting of compressors (Make & model - ANB78FVAMT, Gas cooling R410a), Air handling unit / Evaporative coil - Cooling coils, Blower fan, Fan motor (Make- Crompton BHP - 5 HP), Air filter (Type of filter - Box type pre filter), Mother boards, PCBs, Duct factory fabricated galvanised iron sheet, Aluminium grills, insulation - Nitrite rubber, LT Panel board complete in all respects of the plant as per site installed near MED Bldg AC installation at LRDE. Note - Both Plants are operating simultaneously for CNC workshop of MED building).		
	(c) 1 X 22 TR Air-cooled scroll chiller 02 Nos compressors operated on R-407 C Refrigerant with pumps, electrical panel, Aluminium ducting MS piping cabling complete in all respects as per site installed at SNFM using for Ground floor testing chamber.		
	electrical panel, Aluminium ducting MS piping cabling complete in all respects as per site installed at SNFM		

SI. No.	Item Description	Quantity	Units
1	2	3	4
1 contd	(d) 1 X 22 TR Aircooled scroll chiller 02 Nos compressors operated on R-407 C Refrigerant with pumps, electrical panel, aluminium ducting MS piping cabling complete in all respects as per site installed at SNFM using for First floor control cabin.		
	(e) 2 x 22 TR Air-cooled scroll chiller 02 Nos scroll compressor operated on R 407 C Refrigerant with pumps electrical panels aluminium ducting MS piping cabling complete in all respects as per site installed at GM PROGRAMME AC Plant installation (Both Plants are using simultaneously One plant for RADAR Bldg GF Room No. 115 and Second plant for RADAR Bldg 1st floor Room No. 209 & 211).		Per Shift of One AC Plant Operator (Semi-
	Rate for AC Plant Operator (Semi Skilled) per Shift for manning and operation of AC plants/equipment listed under Item 1 (a) to (e) above.	532	skilled)
2	All as per item 1 above but Rate for Helper (Unskilled) per Shift	532	Per Shift of one Helper (Unskilled)
3	Manning and Operation of DG set capacity 380 KVA located at DRC Sub station, LRDE consisting of :- DG set of capacity 380 KVA, Engine Make - CUMMINS, Alternator Make - STAMFORD with AMF panel, change over switche, LT panel board etc at LRDE for smooth and efficient running by employing technically competent DG set Semi-skilled operators - 03 Nos per day in three shifts (01 No in each shift) from 0800 hours to 1600 hours, 1600 hours to 2400 hours and 2400 hours to 0800 hours including sundays and holidays complete all as directed by Engineer-in-charge. Note - (i) The contractor and his operators are responsible to ensure uninterrupted EB or DG suuply 24 x 7 to DRC building strictly, if in the absence of EB supply more than 6 hours continuously, 1st six hours DRC 380 KVA DG set will provide stand by supply to DRC building on auto mode from AMF panel and afterwards 30 minutes rest will be given to DRC DG set cap 380 KVA and switch ON alternate DG set supply source from 500 KVA A3MTDC and ensure supply as existing on the ground through change over switch etc (ii) The contractor and his operators are responsible to check both DG sets are available to the DRC building @ 8.30 AM on daily basis and render a completion report to DRC building In charge officer. (iii) The operators are mandatorily seated in DRC substation round the clock. If any operator found absent from location, strict action, as deemed fit, will be initiated.	990	Per Shift of One DG Set Operator
	Rate for DG set Operator (Semi skilled)	990	(Semi- skilled)

SI.	Item Description	Quantity	Units
No.	2	3	4
4	Comprehensive maintenance of Centralised air conditioning plant VRF 80 HP capacity (Consisting of 28 HP +28 HP + 24 HP = 80 HP) of Make - Bluestar as per site installed at Admin AC installation LRDE for using Admin bldg Ground floor requirements, plant consisting of compressors (Make & model - ANB78FVAMT, Gas cooling R410a), Air handling unit / Evaporative coil - Cooling coils, Blower fan, Fan motor (Make- Crompton), Air filter (Type of filter - Box type pre filter), Duct factory fabricated galvanised iron sheet, Aluminium grills, insulation - Nitrite rubber, LT Panel boards, carrying out day to day maintenance checks, repairs and preventive maintenance checks & repairs all as per site requirement in compliance to manufacturer's instructions, including replacement of all worn out / defective parts consumables and components, gas filling as required for smooth and efficient functioning of AC plant in all respects to achieve desired cooling conditions, complete all as directed by Engineer-in-charge.  Location: Admin AC Installation LRDE (Plant used for Admin bldg Ground Floor).	11 Months	Per Month
5	Comprehensive maintenance of Centralised air conditioning plant VRF 80 HP capacity (Consisting of 28 HP +28 HP + 24 HP = 80 HP) of Make - Bluestar as per site installed at Admin AC installation LRDE for using Admin bldg First floor requirements, plant consisting of compressors (Make & model - ANB78FVAMT, Gas cooling R410a), Air handling unit / Evaporative coil - Cooling coils, Blower fan, Fan motor (Make- Crompton BHP - 20 HP), Air filter (Type of filter - Box type pre filter), Duct factory fabricated galvanised iron sheet, Aluminium grills, insulation - Nitrite rubber, LT Panel boards, carrying out day to day maintenance checks, repairs and preventive maintenance checks & repairs all as per site requirement and manufacturer's instructions, Including replacement of all worn out / defective parts consumables and components, gas filling all as required for smooth and efficient functioning of AC plant in all respects to achieve desired cooling conditions complete all as directed by Engineer-in-Charge.  Location: Admin AC Installation LRDE (Plant used for Admin bldg First Floor).	11 Months	Per Month
6	Comprehensive maintenance of Centralised air conditioning plant VRF 80 HP capacity (Consisting of 28 HP +28 HP + 24 HP = 80 HP) of Make - Bluestar as per site installed at Teletorium AC installation LRDE for using Teletorium requirements, plant consisting of compressors (Make & model - ANB78FVAMT, Gas cooling R410a), Air handling unit / Evaporative coil - Cooling coils, Blower fan, Fan motor (Make- Crompton), Air filter (Type of filter - Box type pre filter), Duct factory fabricated galvanised iron sheet, Aluminium grills, insulation - Nitrite rubber, LT Panel boards, carrying out day to day maintenance checks, repairs and preventive maintenance checks & repairs all as per site requirement and as per manufacturer's instructions Including replacement of all worn out / defective parts consumables and components, gas filling all as required for smooth and efficient functioning of AC plant in all respects to achieve desired cooling conditions complete all as directed by Engineer-in-Charge.  Location: Teletorium AC Installation LRDE (Plant used for Teletorium).	11 Months	Per Month

SI. No.	Item Description	Quantity	Units
1	2	3	4
7	Comprehensive maintenance of Centralised air conditioning plan VRF 12 HP - 02 units of Make - Bluestar, each 12 HP unit consisting of compressors (Make & model - ANB78FVAMT, Gas cooling R410a), Air handling unit / Evaporative coil - Cooling coils, Blower fan, Fan motor (Make- Crompton BHP - 5 HP), Air filter (Type of filter - Box type pre filter), Duct factory fabricated galvanised iron sheet, Aluminium grills, insulation - Nitrite rubber, LT Panel boards carrying out day to day maintenance checks, repairs and preventive maintenance checks & repairs as per site requirement, manufacturer's instructions, including replacement of all worn out / defective parts consumables and components, gas filling all as required for smooth and efficient functioning of AC plant in all respects to achieve desired cooling conditions complete all as directed by Engineer-in-charge  Location: MED bldg AC Installation at LRDE (Both Plants are used simultaneously for CNC workshop).	11 Months	Per Month
	Location . MLD blug AC installation at LNDL (Both Flants are used simultaneously for CNC Workshop).		
8	Comprehensive maintenance of Centralised air conditioning plan 2 X 22 TR Air-cooled scroll chiller 02 Nos compressors operated on R-407 C Refrigerant with pumps, electrical panel, Aluminium ducting MS piping cabling complete in all respects as per site installed at SNFM using for Ground floor testing chamber and First floor control cabin, LT Panel boards carrying out the complete day to day maintenance checks, repairs and preventive maintenance checks, repairs all as per site, manufacturer's instructions to entire AC plant Including replacement of all worn out / defective parts consumables and components, gas filling all as required for smooth and efficient functioning of AC plant in all respects to achieve desired cooling conditions complete all as directed by Engr -in charge Location: SNFM AC Installation at LRDE (One Plant using for Ground floor Testing chamber and Second plant using for First Floor floor control cabin).	11 Months	Per Month
9	Comprehensive maintenance of Centralised air conditioning plan 2 x 22 TR Air-cooled scroll chiller 02 Nos scroll compressor operated on R 407 C Refrigerant with pumps electrical panels aluminium ducting MS piping cabling complete in all respects as per site installed at GM PROGRAMME AC Plant installation (Both Plants are using simultaneously One plant for RADAR Bldg GF Room No. 115 and Second plant for RADAR Bldg 1st floor Room No. 209 & 211), LT Panel boards carrying out the complete day to day maintenance checks, repairs and preventive maintenance checks, repairs all as per site, manufacturer's instructions to entire AC plant Including replacement of all worn out / defective parts consumables and components, gas filling all as required for smooth and efficient functioning of AC plant in all respects to achieve desired cooling conditions complete all as directed by Engr -in charge Location: GM PROGRAMME AC Plant installation (Both Plants are using simultaneously One plant for RADAR Bldg GF Room No. 115 and Second plant for RADAR Bldg 1st floor Room No. 209 & 211)	11 Months	Per Month

SI. No.	Item Description	Quantity	Units
1	2	3	4
10	Material and labour for Carrying out servicing to cassette/ split type AC's of cap 3.0 /2.0 / 1.5 Ton of any type and make in position, comprising of cleaning to free from dust, cleaning the evaporator, air filters, condenser coil with cleaning agent and water, tightening all electrical contacts, bolts, nuts etc., greasing / oiling blower motor, testing the serviceability, replacement of worn out air filters rubber bushes, connector, clips, bolts, nuts, washers etc complete all all as directed.by Engineer-in-charge.	150	Each Job
11	Removing the cassette/ split type AC's 3.0 /2.0 / 1.5 capacity working on 440 Volts 3 phase/ 230 Volts, single phase complete from the existing location including taking down indoor and out door units kept a side and reinstall at any other place (with in the LRDE area) at height up to 10 mtr above from floor level including connecting with existing power socket and testing the unit for smooth functioning including making good disturbed surfaces to match with adjoining surfaces complete all as directed by Engineer-in-charge	06	Each Job
12	Removing the cassette/ split type AC's 3.0 /2.0 / 1.5 capacity working on 440 Volts, 3 phase 230 Volts, single phase complete from the existing location including taking down indoor and outdoor units control cable refrigerant pipe etc kept a side and reinstall in the same location testing the unit for smooth functioning complete all as directed by Engineer-in-charge. Note for SI No. 11 & 12: Spares, pipe, cable, Gas charging if necessary shall be measured and paid separately under relevant items of this BOQ and Items which are not included in the schedule but required at site for smooth running of ACs shall be provided and the cost is deemed to be included in the quoted rates.	06	Each Job
13	Supply and fix PVC insulated copper cable of size 2.5 sq mm 4 core as per site requirements complete as directed by Engineer-in-charge.	100	Running Metre
14	Supply and fix refrigerant R-22/R-140/R-134A etc for cassette/ split type AC's etc cap 3.0 /2.0 / 1.5 of any model as per site requirements complete as directed by Engineer-in-charge.	150	Kilogram
15	Supply and fix single pole contactor single-phase 230 Volts 25 Amps for split / cassette type AC cap 1.5 to 2.0 TR of any type, model complete all as directed by Engineer-in-charge.	6	Each
16	Supply and fix double pole contactor up to 40 Amps for split / cassette type AC cap 3.0 TR AC of any type, model complete all as directed by Engineer-in-charge.	4	Each

SI. No.	Item Description	Quantity	Units
1	2	3	4
17	Supply and fix Fan motor capacitor 4 / 6 Mfd, 230 Volts, AC, 50 Hz suitable for cap 1.5/2/ 3 TR AC of any type, model complete all as directed by Engineer-in-charge.	12	Each
18	Supply and fix Capillary and drier filter suitable for cap 1.5/2/3 TR AC of any type, model complete all as directed by Engineer-in-charge.	12	Each
19	Supply and fix Suction and discharge valves suitable for cap 1.5/2/3 TR AC of any type, model complete all as directed by Engineer-in-charge.	10	Each
20	Supply and fix Copper condenser coil suitable for outdoor unit of cap 1.5/2 TR AC of any type, model complete all as directed by Engineer-in-charge.	4	Each
21	Supply and fix polyethylene foam insulation 20 mm suitable for cap 1.5/2/ 3 TR AC of any type, model complete all as directed by Engineer-in-charge.	100	Running Metre
22	Supply and fix copper tube 5/8 inch suitable for cap 1.5/2/3 TR AC of any type, model complete all as directed by Engineer-in-charge.	50	Running Metre
23	Supply and fix copper tube 3/8 inch suitable for cap 1.5/2/3 TR AC of any type, model complete all as directed by Engineer-in-charge.	50	Running Metre
24	Supply and fix copper tube 1/4 inch suitable for cap 1.5/2/ 3 TR AC of any type, model complete all as directed by Engineer-in-charge.	50	Running Metre
25	Supply and fix copper tube 1/2inch suitable for cap 1.5/2/3 TR AC of any type, model complete all as directed by Engineer-in-charge.	50	Running Metre
26	Supply and fix PVC drain pipe 20 mm suitable for cap 1.5/2/ 3 TR AC of any type, model complete all as directed by Engineer-in-charge.	50	Running Metre
27	Supply and fix PCB assembly suitable for indoor unit of cap 1.5/2.0/3 TR AC of any type, model complete all as directed by Engineer-in-charge.	2	Each
28	Supply and fix PCB assembly suitable for outdoor unit of cap 1.5 / 2.0/4 TR inverter AC of any type, model complete all as directed by Engineer-in-charge.	2	Each

SI. No.	Item Description	Quantity	Units
1	2	3	4
29	Material and labour for rectification and repairing works to indoor and out door PCB units errors suitable for site requirements for proper functioning of AC cap 1.5 / 2.0 TR of any type, model complete all as directed by Engineer-in-charge.	4	Each Job
30	Supply and fix out door Condenser fan motor suitable for cap 1,5/2.0 TR inverter 3 phase AC of any type, model complete all as directed by Engineer-in-charge.	4	Each Job
31	Supply and fix indoor blower motor suitable for indoor unit of cap 1.5/2.0 TR inverter AC of any type, model complete all as directed by Engineer-in-charge.	4	Each Job
32	Supply and fix out door condenser fan blade suitable for 1.5/2/ 3 TR capacity Air conditioners complete all as directed by Engineer-in-charge.	4	Each
33	Supply and fix manufacturer's Scroll compressor suitable for any type AC of 3 ton capacity 3 phase as per existing on ground make and model complete all as directed by Engineer-in-charge.	2	Each
34	Supply and fix manufacturer's Rotary compressor suitable for any type AC of 2 ton capacity inverter type Single phase as per existing on ground make and model complete all as directed by Engineer-in-charge.	4	Each
35	Supply and fix manufacturer's Rotary compressor suitable for split type AC of 1.5 ton capacity inverter type Single phase as per existing on ground make and model complete all as directed by Engineer-in-charge.  Note for sl item No. 33 to 35 - 1) Refrigerant gas as applicable shall be measured and paid separately under relevant item of this BOQ.	4	Each
36	Supply and fix Running capacitor 36 Mfd, 440 Volts, AC, 50 Hz. suitable for 1.5/2/3 TR capacity Air conditioners complete all as directed by Engineer-in-charge.	12	Each
37	Supply and fix Running capacitor 45 Mfd, 440 Volts, AC, 50 Hz. suitable for 1.5/2/3 TR capacity Air conditioners complete all as directed by Engineer-in-charge.	12	Each
38	Supply and fix sensor Thermostat suitable for 1.5/2/ 3 TR capacity Air conditioners complete all as directed by Engineer-in-charge.	4	Each

# SCHEDULE OF WORKS ( BOQ ) CONTD....

SI. No.	Item Description	Quantity	Units
1	2	3	4
39	Supply and fix voltage stabilizer for automatic operation single phase naturally air cooled indoor type & designed for input variation between 170 V to 250V with output voltage stabilized at 230 V with accuracy of ± 2.5% and of capacity 5 KVA complete all as directed by Engineer-in-charge.	4	Each
40	Supply and fix water flow switch unit suitable for cassette Air conditioners of any type, cap model complete all as directed by Engineer-in-charge.	5	Each
41	Supply and fix AC load manager for Two ACs unit suitable for 1.5/2 TR capacity Air conditioners of any type, model complete all as directed by Engineer-in-charge	10	Each
	Note:- The bidders are required to visit the site to ascertain the required maintenance, servicing and operation of the AC units before quoting the rates.		

Signature Of Service Provider Date

AGE (Contracts)
For Accepting Officer

## SCHEDULE OF CREDIT

**SERIAL PAGE NO: 30** 

# CREDIT FOR UNSERVICEABLE MATERIALS RETRIEVED

### **AFTER REPLACING DEFECTIVE ONES**

- The unserviceable materials retrieved after replacement of defective / damaged items will be sold to the Service Provider as per rates fixed by Govt as under. The credit assessed by the department is only rough indication and the Service Provider shall have no claim what so ever against the Government, irrespective of the condition of the materials obtained from site and if the actual cost of the salvaged materials turnout to be different from the amount assessed by the department.
- The items in this Schedule shall not be reused/ incorporated in the work and it shall be removed out of site after getting permission of Engineer-in-Charge in writing.
- The materials listed in this Schedule with quantity actually obtained shall be recorded in the Measurement Book and abstracted and this amount shall be deducted from the value of work done under Schedule 'A'. The Service Provider will not be allowed to remove the materials listed in this Schedule till such time the value of work done by him is more than the value of credit for such materials.
- Any serviceable materials obtained other than those mentioned in Schedule of credit shall become property of Govt and shall be removed to store yard to GE (I) by the Service Provider without any extra cost.

SI	Brief Specification of items	Unit	Rate
No 1	2	3	4
	_	_	
1	Old defective / unserviceable PVC insulated copper cable of size 2.5 sq mm 4 core	RM	4.00
2	Old defective / unserviceable single pole contactor single-phase 230 Volts 25 Amps for split / cassette type AC cap 1.5 to 2.0 TR	Each	4.00
3	Old defective / unserviceable Double pole contactor up to 40 Amps for split / cassette type AC cap 3.0 TR AC	Each	6.00
4	Old defective / unserviceable Fan motor capacitor 4 / 6 Mfd, 230 Volts, AC, 50 Hz suitable for cap 1.5/2/ 3 TR AC	Each	2.00
7	Old defective / unserviceable Capillary and drier filter suitable for cap 1.5/2 TR AC	Each	5.00
8	Old defective / unserviceable Suction and discharge valves suitable for cap 1.5/2 TR AC	Each	5.00
9	Old defective / unserviceable outdoor Copper condenser coil	Each	400.00
10	Old defective / unserviceable copper tube 5/8 inch	RM	16.00
11	Old defective / unserviceable copper tube 3/8 inch	RM	14.00
12	Old defective / unserviceable copper tube 1/4/ / 1/2 inch	RM	12.00
13	Old defective / unserviceable PVC drain pipe 20 mm	RM	2.00
14	Old defective / unserviceable PCB assembly suitable for indoor unit.	Each	200.00
15	Old defective / unserviceable PCB assembly suitable for outdoor unit	Each	200.00
16	Old defective / unserviceable out door Condenser fan motor	Each	50.00

# CA NO. GE(I) R&D (WEST) / BAN / TOKEN / 72 0F 2023 - 2024

### **SERIAL PAGE NO: 31**

# **SCHEDULE OF CREDIT (CONTD...)**

SI No	Brief Specification of items	Unit	Rate
1	2	3	4
17	Old defective / unserviceable indoor blower motor.	Each	50.00
18	Old defective / unserviceable out door condenser fan blade	Each	20.00
19	Old defective / unserviceable Scroll compressor suitable for any type AC of 3 ton capacity	Each	800.00
20	Old defective / unserviceable Rotary compressor suitable for any type AC of 2 ton capacity	Each	600.00
21	Old defective / unserviceable Rotary compressor suitable for split type AC of 1.5 ton capacity	Each	400.00
22	Old defective / unserviceable Running capacitor 36 Mfd,	Each	5.00
23	Old defective / unserviceable Running capacitor 45 Mfd,	Each	5.00
24	Old defective / unserviceable sensor Thermostat suitable for 1.5/2/ 3 TR capacity Air conditioners complete all as directed by Engineer-in-charge.	Each	5.00
25	Old defective / unserviceable voltage stabilizer any type .	Each	100.00
26	Old defective / unserviceable water flow switch unit	Each	5.00
27	Old defective / unserviceable AC load manager for Two ACs unit	Each	15.00
28	Old unserviceable parts obtained from service/maintenance of ACs under item 4 to 9 of BOQ	Per Month	150.00
29	Old unserviceable parts obtained from service/maintenance of ACs under item 10 to 12 of BOQ	Per Month	25.00

Signature Of Service Provider Date

AGE (Contracts)
For Accepting Officer

### **SCHEDULE 'B'**

### **ISSUE OF MATERIALS TO THE SERVICE PROVIDER**

### (REF CONDITION 10 OF IAFW – 2249)

Ser No Particulars		Service		aterials will be issued to the ervice Provider		Domorko		
		Unit	Rate		(by name)	Remarks		
		Offic	Rs.	ps.				
1	2	3		4	5	6		
	NIL							

### **SCHEDULE 'C'**

### LIST OF TOOLS AND PLANTS OTHER THAN TRANSPORT WHICH WILL BE HIRED TO THE SERVICE PROVIDER (See conditions 15, 34 and 35 of IAFW-2249)

Ser No	Quantity	Particulars	Details of MES crew supplied	Hire charges per unit of working day	Stand by charges per unit per off day	Place of issue (by name)	
1	2	3	4	5	6	7	
NIL							

### **SCHEDULE 'D'** TRANSPORT TO BE HIRED TO THE SERVICE PROVIDER (See conditions 16 and 35 of IAFW-2249)

SER NO	QUANTITY	PARTICULARS	RATE PER UNIT PER WORKING DAY	PLACE OF ISSUE (BY NAME)	REMARKS			
1	2	3	4	5	6			
	NIL							

(In lieu of IAFW 1779-A (Rev 1955))

### **TENDER**

### To THE PRESIDENT OF INDIA

Having examined and perused the following documents:-

- Specifications signed by Assistant Garrison Engineer (Contracts), GE (I) R&D (West), Bangalore – 560 093
- 2. Drawings detailed in the specifications.
- 3. Schedule 'A', 'B', 'C' and 'D' attached hereto.
- 4. MES Standard Schedule of Rates 2009, Part I (Specifications) and Part II (Rates) of 2020 (hereinafter and in IAFW 2249 referred to as the MES Schedule) together with Amendment No. 01 to 03 for Part I as applicable to the above said Schedule.
- 5. General conditions of contracts, IAFW-2249 (1989 Print) together with amendment Nos 1 to 48 and errata Nos 1 to 20.
- 6. Water: Condition 31 of IAFW 2249: General Conditions of Contracts.
- 6.1. Water will not be supplied by MES. Service Provider shall his own arrangements for water.
- 7. SHOULD THIS TENDER BE ACCEPTED

#### I / We agree

- (a) That the sum ₹ 86,000.00 (Rupees Eighty six thousand only) forwarded as earnest money shall either be retained as a part on account of the Performance Security (5% of Contract Sum) or shall be repaid by the Government on receipt of the full amount of Performance Security within the time specified in Condition 19 of IAFW-2249.
- (b) To execute all the work referred to in the said documents upon the terms and conditions contained or referred to therein at the item rates contained in the aforesaid Sch 'A' or at such other rates as may be fixed under the provision of conditions 62 and to carryout such deviations as may be ordered vide condition 7 of IAFW 2249 upto a maximum of 10% (TEN) percent and further agree to refer all disputes, as required by the condition 70 of IAFW-2249 to the sole Arbitration of a serving officer having degree in Engineering or Equivalent of having passed final/ Direct final examination of sub division II of Institution of Surveyor's(India) recognized by the Govt of India to be appointed by Chief Engineer R&D Secunderabad or in his absence the Officer officiating as Chief Engineer R&D Secunderabad, if specifically delegated in writing by the Chief Engineer R&D Secunderabad, whose decision shall be final, conclusive and binding.

(In lieu of IAFW-1779-A (Revised 1955))

# TENDER (Contd...)

Signature:( In the capacity of	With Name in Block L	etters)	norised to s	sign the tender for and
		runy duti	_(In block	
on bonan or		Date :	`	
Witness :		Postal Address:		
Witness :		Pusiai Address.		······
Address :				
		Telegraphic Address		
		9		
		Telephone: (Office)		
		(Res)		
		(Mobile)		·
	<u>A</u> (	CCEPTANCE		
alteration have	e been made in this	document and as evide	nce that tl	hese alterations were
		reement they have been		
	· ·	e hereby authorised to s	•	
documents forming part	of this contract.			
The tender was accept	عد مد برط الم	of the Duncidout of India	a4 4b a 14 a	m Datas santained in
·	•	of the President of India	at the ite	m Rates contained in
Schedule `A' on the	day of	2023		
		(Biswajit Mandal)		
		Lt Col		
	Appointment:	Garrison Engineer (I)	•	•
		DRDO Complex, CV Bangalore-560 093	ivalliali Ne	agai i O
		(For and on behalf of	f the Presid	dent of India)
		Dated this	day of	2023

### **GENERAL CONDITIONS OF CONTRACTS (IAFW-2249) 1989 PRINT**

### **FOR MEASUREMENT CONTRACTS (IAFW-1779-A)**

1. It is hereby agreed by me/us that the General Conditions of Contract including Conditions 70 pertaining to the settlement of disputes by arbitrator (IAFW-2249 - 1989 Print) containing 33 pages (Serial Page Nos. 35 to 67) with errata Nos 01 to 20 and amendment Nos 01 to 48 there to (Serial Page Nos. 68 to 96) form an integral part of the tender documents.

2. This tender submitted by me/us \* is subject to the aforesaid General Conditions of Contracts IAFW-2249 an amended copy of which has been supplied to me/us \* and is in my/our possession and which I /we\* have read and fully understood before submission of the tender.

3. My/Our \* signature there under is in token of my/our \* having accepted the aforesaid General Conditions of Contracts together with errata and amendments (IAFW-2249, 1989 Print) and the clause relating to arbitration forming an integral part of this tender.

4. It is agreed that in the event of any discrepancy in the English and Hindi version of IAFW-2249, the contents in English will prevail.

\* Delete which is not applicable.

AGE (Contracts) for Accepting Officer

Signature of Service Provider Date:

### **SCHEDULE OF MINIMUM FAIR WAGES**

- 1. It is an express condition of contract that the schedule of Minimum fair wages form part of this contract and Service Provider is liable to pay minimum wages to labour/worker engaged under the contract as per notification issued by Central/State Government whichever is high.
- 2. It is also an agreed condition of this contract that the Minimum wages Act and provisions catered there-in form part of this contract agreement.

AGE (Contracts) for Accepting Officer

Signature of Service Provider Date:

**SERIAL PAGE NO: 107** 

# 1. **GENERAL**

- 1.1 The following Special Conditions shall be read in conjunction with General Conditions of Contracts (IAFW 2249) 1989 Print including amendments and errata thereto. If provisions in these special conditions are at variance with the provisions in the aforesaid documents, the provisions in these special conditions shall be deemed to take precedence there over.
- 1.2 The work under this Contract shall be carried out in accordance with Schedule "A", the particular specifications, drawings and other provisions in MES Schedule.
- 1.3 The term General specifications referred to here as well as referred to in IAFW 2249 (General conditions of contracts) shall mean the specifications contained in MES Schedule.

# 2. MES SCHEDULE

2.1 Service Provider's special attention is invited to the fact that this tender is based on MES Schedule mentioned on tender page including Errata / Amendments there to as applicable.

# 3. **GENERAL CONDITIONS OF CONTRACTS IAFW – 2249 (1989 PRINT)**

- 3.1 Wherever "IAFW–2249" is mentioned it means General conditions of contracts IAFW–2249 (1989 Print) including Errata/Amendments as applicable.
- 3.2 Wherever the letters "C.W.E." (Commander Works Engineers) have been referred to in General Conditions of Contracts IAFW 2249, (1989 Print), the same shall be amended to read as "CE" (Chief Engineer).

# 4. <u>SECURITY OF CLASSIFIED DOCUMENTS (REFER CONDITION 2A AND 3 OF IAFW – 2249.</u>

4.1 Service Provider's special attention is drawn to conditions 2A and 3 of General Conditions of Contracts (IAFW – 2249) and also to the Indian Official Secret Act – 1923 (Particularly Section 5). The Service Provider is bound by the provisions of the Act. The Service Provider shall not communicate any classified information regarding works either to sub-Service Provider(s) or others without prior approval of Engineer-in-Charge. The Service Provider shall also not make copies of the design/drawings and other documents furnished to him in respect of works and shall return all the documents on completion of the work or on earlier determination of the contract. The Service Provider shall along with final bill attach receipt from Engineer-in-Charge in respect of his having returned the classified documents as per condition 3 of the General Conditions of Contracts (IAFW – 2249).

# 4.2 **OFFICIAL SECRET ACT**

4.2.1 The Service Provider shall be bound by the official secret act and particularly Section 5 thereof.

# 5. <u>INSPECTION OF SITE AND RELEVATNT DOCUMENTS (REFER CONDITION 4 OF IAFW</u> – 2249)

5.1 The Service Provider is required to visit the site of works and make himself thoroughly acquainted with the working conditions and/or the approaches/accessibility to site availability

of materials and all other relevant conditions affecting the completion of entire work. He is required

**SERIAL PAGE NO: 108** 

make himself fully acquainted with the nature and scope of the work before tendering. For the purpose of inspection of relevant documents other than those sent herewith, the Service Provider is required to contact the Garrison Engineer who will give reasonable facilities. The Service Provider shall be deemed to have visited the site before submitting the tender whether he does it or not.

# 6. MATERIALS AND SAMPLES (REFER CONDITION 10 OF IAFW - 2249)

- 6.1 The Service Provider is advised to inspect samples of the local building materials maintained by the GE before submitting his tender. He will be deemed to have full knowledge of these materials whether he inspects them or not the materials to be provided by the Service Provider shall conform to/ shall be superior to the standard of samples displayed in the office of Garrison Engineer in the matter of quality unless otherwise specified.
- 6.2 Items conforming to Indian Standard Specification shall be accepted only when ISI marked materials are not manufactured. Material such as glazed tiles, AC sheets, AC rain water pipes, paint, bib taps and pillar taps, sanitary fittings etc., which are considered superior to IS specifications by the GE may be used without any extra cost to Government. However before incorporating such materials / Items, the Service Provider shall produce necessary test certificates as required by the GE.
- 6.3 The Service Provider shall produce samples of materials for incorporation direct to the GE with copy to the Accepting Officer and get them approved in writing by the GE before commencement of work. All approvals of materials shall be in writing from GE to Service Provider. The materials, articles etc., as approved shall be labelled accordingly and shall be signed by GE and Service Provider and kept and displayed at the site of works.

# 7 CO-OPERATION WITH OTHER AGENCIES

- 7.1 The Service Provider shall permit free access and generally afford reasonable facilities to other agencies of specialist nature of departmental workmen engaged by Government to carryout their part of the works, if any, under separate arrangements.
- 7.2 The Service Provider's price shall be deemed to cater for all the above contingencies and nothing extra shall be admissible on this account.

# 8 DAMAGE TO EXISTING STRUCTURE/BUILDING

8.1 Any, damage done to the existing structure during the execution of work shall be made good by the Service Provider at his own cost and the site of work left clean and tidy on completion. Rectification/reinstatement/making good etc., shall conform to the standard materials originally used in the work and finished work shall match with existing work in all respects to the entire satisfaction of the GE. In case of any dispute on this account, the matter shall be referred to the Accepting Officer whose decision in writing shall be final conclusive and binding.

# 9 CONTRACT LABOUR (REGULATION AND ABOLITION) ACT 1970

9.1 The Service Provider when required to employ more than ten workmen on the works under this contract shall be bound by the Contract Labour (regulation and abolition) Act 1970 and rules framed there under. No Service Provider can undertake or execute his work without a license issued by a Licensing Officer.

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## 10. MINIMUM WAGES: PAYMENT TO LABOUR (CONDITION 58 OF IAFW-2249)

- 10.1 Refer condition 58 of IAFW 2249. The Service Provider shall not pay wages lower than minimum wages for labour as fixed by the Govt. of India / State Govt./ Union territory whichever is higher.
- 10.2 Service Provider's attention is also drawn, amongst other things to the 'explanations' to the schedule of minimum wages referred to above.
- 10.3 The fair wages referred to in condition 58 of IAFW 2249 shall be deemed to be the same as the minimum wages payable as referred to above upto date from time to time.
- 10.4 Schedule of minimum wages are not enclosed alongwith tender documents. However, Service Provider shall be deemed to have verified the minimum fair wages payable as on the last due date of receipt of tender.
- 10.5 The Service Provider shall have no claim whatsoever if on account of local factor and/or regulations or otherwise he is required to pay the wages in excess of minimum wages as described above during the execution of work.

# 11 <u>SERVICE PROVIDER'S AGENTS, REPRESENTATIVES AND WORKMEN (REFER CONDITION 25 OF IAFW – 2249)</u>

- 11.1 The Service Provider shall employ only Indian Nationals as his representatives, servants, and workmen and verifying their antecedents and loyalty before employing them in works. He shall ensure that no person of doubtful antecedents and nationality is in any way associated with the work. If for reasons of technical collaboration or other considerations, the employment of any foreign nationals is unavoidable the Service Provider shall furnish full particulars to this effect to the Accepting Officer at the time of submission of the tender. As a proof that the Service Provider has employed only Indian Nationals, he shall render a certificate to GE(I) within one month from the date of acceptance of tender to this effect. In case the GE(I) desires Service Provider will have the police verification done for personnel employed by him.
- 11.2 The GE shall have full powers and without giving any reasons to order the Service Provider to immediately cease the employ in connection with this contract any Representatives, Agent, Servant and Workmen or employee whose continued employment is in his opinion undesirable. The Service Provider shall not be allowed any compensation on this account.
- 11.3 The Service Provider's attention is also drawn to Condition 25 of IAFW 2249 in this connection.

# 12 **ELECTRIC SUPPLY**

12.1 Electricity will not be supplied by the department. Service Provider shall have to make their own arrangement.

# 13 **GUARANTEE BOND / RETENTION MONEY**:

13.1 On acceptance of the tender, the Government may accept a Guarantee Bond or a Fixed Deposit Receipt from State Bank of India and its subsidiaries, Nationalised banks or Scheduled banks for Performance Security Deposit/ Retention Money. The Bank Guarantee shall be in the prescribed form which is available in the office of the Garrison Engineer (I) R&D (West) Bangalore - 560093 for Service Providers perusal. The period of validity of the Bank Guarantee Bond against Performance Security shall be initially valid upto the stipulated date of expiry of Defects Liability Period plus minimum 60 days beyond that.

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# 14 RELEASE OF PERFORMANCE SECURITY (REFER CONDITION 19 AND 68 OF IAFW – 2249)

- 14.1 The Performance Security Deposit mentioned in Condition 19 of IAFW-2249 may be refunded to the Service Provider after expiration of the defects liability period (vide Condition 46 of IAFW-2249) by the GE provided always that the Service Provider shall first have been paid the final bill and have rendered a No-Demand Certificate (IAFW-451).
- 14.2 Defects liability period for the subject work is **Twelve months from the certified date of completion of work**.

# 15. **ROYALTIES**

15.1 Reference condition of 14 of General Condition of Contracts (IAFW –2249) No Quarries on Defence Land are available.

# 16. PERIOD OF KEEPING THE TENDER OPEN

16.1 The tender shall remain open for the acceptance for a period of *60 (SIXTY)* days from the date on which the tender is due to be submitted.

# 17 **NETWORK ANALYSIS**:

- 17.1 The time and progress chart to be prepared as per Condition 11 of General Conditions of Contracts IAFW-2249 shall consist of detailed network analysis and a time schedule. The critical path network will be drawn jointly by the GE and the Service Provider soon after acceptance of tender. The time schedule of the activities will be done by the Service Provider so as to finish the work within the stipulated time. On completion of the time schedule, a firm calendar date schedule will be prepared and submitted by the Service Provider to the GE who will approve it after due scrutiny. The schedule will be submitted in four copies within two weeks from the date of handing over the site.
- 17.2 During the currency of the work, the Service Provider is expected to adhere to the time schedule and this adherence will be a part of the Service Provider's performance under the Contract. During the execution of the work, the Service Provider is expected to participate in the reviews and updating of the network undertaken by the GE. These reviews may be undertaken at the discretion of the GE, either as a periodical appraisal measure or when the quantum of work ordered on the Service Provider is substantially changed through deviation order or amendments.
- 17.3 Any revision of the time schedule as a result of the review will be submitted by the Service Provider to the GE within a week for his approval after due scrutiny.
- 17.4 The Service Provider shall adhere to the revised time schedule thereafter. In case of Service Provider disagreeing with revised schedule, the same will be referred to the Accepting Officer, whose decision shall be final, conclusive and binding. CE's approval to the revised schedule resulting in a completion date beyond the stipulated date of completion shall not automatically amount to a grant of extension of time. Extension of time shall be considered and decided by the appropriate authority mentioned in Condition 11 of IAFW- 2249 and separately regulated.
- 17.5 Service Provider shall mobilise and employ sufficient resources to achieve the detailed schedule within the broad frame work of the accepted method of working and safety. No additional payment will be made to Service Provider for any multiple shift work or other intensive methods contemplated by him in his schedule, even though the time schedule is approved by the department.

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# 18. SITE CLEARANCE (Refer condition 49 of IAFW – 2249, General Conditions of Contracts)

- 18.1 The Service Provider shall remove from the site all unused stores and huts and the like belonging to the Service Provider provided for the execution of work under this contract and the site of works shall be cleared off all rubbish and waste materials by the Service Provider and the site of works delivered in clean and tidy manner to the satisfaction of the Engineer-in-Charge on or before the date of completion. Nothing extra whatsoever will be paid to the Service Provider for such clearance of site.
- 18.2 The Service Provider shall clean all floors, remove cement lime / paint drops etc., clean the joinery, glass panes etc., touch up all painting work in connection with and leave the whole premises clean and tidy to the entire satisfaction of the Engineer-in-Charge before handing over the buildings.

#### 19 STANDARD OF WORKMANSHIP AND FINISHES

- 19.1 To determine the acceptable, standard of materials and workmanship / final finishes and layout of fittings etc., the Service Provider shall execute stages of work viz., excavation, foundation concrete, walling up to plinth / lintel / roof levels, roofing, flooring, joinery, built-in items, finishes and the like and services i.e., internal electrification, water supply, plumbing, sanitary fittings at one location as directed and shall get it completed within the stipulated time under close supervision of Engineer-in-Charge and shall get it approved by the GE. The workmanship of various trades and finishes of the sample items shall serve as guiding samples for the remaining work.
- 19.2 Approval of the stages and workmanship of sample items shall be separately entered and approved in stage passing register giving reference block and quarter numbers for easy identification even at a later date.

# 20 **OUT OF POCKET EXPENSES**

20.1 Out of pocket expenses incurred by the Service Provider in submitting this tender will not be reimbursed whether tender is accepted or not.

# 21 <u>AVAILABILITY OF LAND FOR STORAGE OF MATERIALS / ACCOMMODATION FOR LABOUR</u>

- 21.2 The Service Provider shall be permitted to store his materials including erecting temporary sheds and also erect his temporary workshops for storage materials and for fabrication at the area of land marked for this purpose on the site plan free of rent if it is on class "A-1 land. For other types of land he shall be charged a license fee of Rs.1/- per year or part the rest is each & every separate area of land allotted to him. No defence land is available for accommodation of Labour for which the Service Provider shall make his own arrangement at his own expenses.

# 22. WORKING HOURS / DAYS

22.1 The Service Provider or his workmen shall not be permitted to work on Saturdays, Sundays, holidays or after normal working hours without prior written permission of the GE.

# 23. WATER (REFER CONDITION 31 OF IAFW – 2249)

23.1 Water will not be supplied by MES.

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# 24 **SIGNING OF TENDER**

24.1 The person signing the tender on behalf of another partner or on behalf of a firm shall attach with the tender a proper power of attorney duly executed in his favour by such other person or by all the partners, stating that he has authority to bind such other person(s) or the firm as the case may be in all matters pertaining to the contract including arbitration clause.

# 25 CONDITIONS OF WORKING IN RESTRICTED AREA

- 25.1 VISIT TO THE SITE BEFORE TENDERING:- Permission to enter the restricted area at the time of submission of tenders can be obtained through the Garrison Engineer. Service Providers are advised to send prior intimation to the GE about the particulars of their agents, representatives etc., if any, dates and time of their proposed visits so that necessary arrangements may be made by GE to secure admission. Whether a Service Provider visits the site or not he shall be deemed to have full knowledge of the restrictions on entering into/exit/from and working within the Restricted Area.
- 25.2 **ENTRY / EXIT**:- The Service Provider, his agent(s), representatives, workmen etc., and his materials, carts, trucks or other means of transport etc., will be allowed to enter through and leave from only from such gate or gates and such times as the GE or authorities in-charges of the Restricted Areas may at their sole discretion permit to be used. The Service Provider's authorized representative is required to be present at the place of entry and exit for the purpose of identifying his carts, trucks etc., to the personnel in charge of the security of Restricted Area.
- 25.3 <u>IDENTITY CARDS OR PASSES</u>: The Service Provider, his agents and representatives are required individually to be in possession of an identify card or pass duly verified by the Security Department of the restricted area. The identify card or pass will be examined the security staff at the time of entry into or exit from the Restricted Area and also at time or any number of times inside the Restricted Area.
- 25.4 <u>IDENTITY OF WORKMEN</u>: Every workman shall be in possession of an identity card. The identity card will be issued after thorough investigation of the antecedents of the workmen by the Service Providers and attested by the Officer in charge of the unit concerned in accordance with the standing rules and regulations of the units. Service Provider shall be responsible for the conduct and action of his workmen, agents and representative.
- 25.5 **SEARCH**: Thorough search of all persons and transport shall be carried out at each gate and for as many times as a gate is used for entry or exit and may also be carried out at any time or any number of times at the work site within the Restricted Area.
- 25.6 **FEMALE SEARCHER**: If the Service Provider desires to employ female labour on works to be carried out inside the area of Factory, Depot, Park etc., and a female searcher is not borne on the authorized strength of the Factory, Depot, park etc., at the time of submission of the tender, he shall be deemed to have allowed in his tender for, pay and allowances etc., for a female searcher (Class IV Servant/Group "D" servant) calculated for the period female labour is employed by him inside that area. If more than one Service Provider employees female labour during any month and female searcher has/have to be employed in addition to the authorized strength of the Factory, Depot, Part etc., the salary and allowances paid to the additional female searcher(s) shall be distributed on an equitable basis between the Service Providers employing female labour taking into consideration the values and periods of completion of their contracts. The GE's decision in regard to the amount recoverable on this account from any Service Provider shall be final and binding.

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## 25.7 **WORKING HOURS**

- 25.7.1 The units controlling restricted area, usually, work during **six days** in the week and remain closed on the 7<sup>th</sup> day. The working hours available to Service Provider's labour and staff may however appreciably reduced because of the time taken in security checks carried at the time of entry, exit and during working hours.
- 25.7.2 The exact working hours of the working days and non-working days observed for the restricted area, where works are to be carried out shall be deemed to have been ascertained by the Service Provider before submitting his tender. Service Provider's attention is invited to the fact that the total number of working hours for a unit is prescribed in regulations and they cannot be increased by the Garrison Engineer. The Service Provider has to produce police verification report of his supervisory staff and labour before commencement of work to the security section of unit controlling the area through GE.
- 25.7.3 Service Provider's materials, transport, etc., will normally be permitted to go out of the area between 8 AM to 6 PM only.
- 25.7.4 The work shall be executed entirely in the restricted area. Normal working hours are from 0900 hours to 1700 hrs on working days.
- 25.8 **WORK ON HOLIDAYS**: The Service Provider shall not carry out any work on gazetted holidays, weekly holidays and other non-working days except when he is specially authorized in writing to do so by the GE. The GE may at his sole discretion declare any day as holiday or non-working day without assigning any reason for such declaration.

# 26 <u>RE-IMBURSEMENT / REFUND ON VARIATION IN "TAXES DIRECTLY RELATED TOCONTRACT VALUE":</u>

- (a) The rates quoted by the Service Provider shall be deemed to be inclusive of all Taxes (including GST on works contract / GST on materials, Turnover Tax, labour welfare cess / tax etc.), EPF, ESI & other levies / taxes payable under the respective statutes (Central & State). No reimbursement / refund for variation in rates of taxes, duties, Royalties, Octroi& other levies, and / or imposition / abolition of any new / existing taxes, duties Royalties, Octroi& other levies shall be made except tax provided in sub para (b) here-in-below.
- (b) (i) The taxes which, are levied by Govt. at certain percentage rates of Contract Sum / Amount shall be termed as "taxes directly related to Contract value" such as GST on works contracts, Turnover Tax, Labour Welfare Cess / tax, EPF, ESI or any other taxes / levies (by Central & State Govt) and like but excluding Income Tax.. The tendered rates shall be deemed to be inclusive of all "taxes directly related to Contract value" with existing percentage rates as prevailing on last due date for receipt of tenders. Any increase in percentage rates of "taxes directly related to Contract value" with reference to prevailing rates on last due date for receipt of tenders shall be reimbursed to the Service Provider and any decrease in percentage rates of "taxes directly related to Contract value" with reference to prevailing rates on last due to for receipt of tenders shall be refunded by the Service Provider to the Govt. / deducted by the Govt. from any payments due to the contract. Similarly imposition of any receipt of tenders shall be reimbursed to the Service Provider and abolition of any "taxes directly related to Contract value" prevailing on last due date for receipt of tenders shall be refunded by the Service Provider.
  - (ii) The Service Provider shall, within a reasonable time of his becoming aware of variation in percentage rates and / or imposition of any further "taxes directly related to Contract value", give written notice thereof to the GE stating that the same is given pursuant to this Special

Condition, together with all information relating thee to which he may be in position to supply. The Service Providers shall submit the other documentary proof / information as the GE may require

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(iii)The Service Provider shall, for the purpose of this condition keep such books of account and other documents as necessary and shall allow inspection of the same by a duly authorized representative of Govt. and shall further, at the request of the GE furnish, verified in such a manner as the GE may require, any documents so kept and such other information as the GE may require.

(iv)Reimbursement for increase in percentage rates/imposition of "taxes directly related to Contract Value" shall be made only if the Service Provider necessary & properly pays additional "taxes directly related to Contract Value" to the Govt. without getting the same adjusted against any other tax liability or without getting the same refunded from the concerned Govt. Authority and submits documentary proof for the same as the GE may require".

# 27 ADVANCE ON ACCOUNT OF MATERIALS WHICH DON'T LOSE INDENTITY

#### 27.1 BLANK

#### 28. RECORD OF MATERIALS AND PURCHASE VOUCHERS

- (a) The quantity of materials which cannot be checked after incorporation in the works shall be recorded in measurement book and signed by the Service Provider and the Engineer-in-Charge as check to ensure that the required quantity has been brought to site for incorporation in the work. Materials brought to site shall be stored as directed by the Engineer-in-Charge and those already recorded in Measurement Book shall be suitably marked for identification.
- (b) Service Provider shall produce vouchers/ invoice from the manufactures and/or their authorized agents for the full quantity of the following materials, as applicable as a pre-requisite before submitting claims for payment for advances on account of the work done and /or materials collected in accordance with Condition 64 of General Conditions of Contract IAFW-2249.
- (c) The Service Provider shall, on demand, produce to the GE, original receipted vouchers/ invoice in respect of the materials other than as stated in sub-para (b) Voucher/ invoices so produced and verified shall be stamped by Engineer-in-Charge indicating contract number. The Service Provider shall ensure that the materials are brought to site, in original sealed, container/packing, bearing manufactures marking except in the case of the requirement of materials (s) being less than smallest packing.
- (d) The vouchers/invoice will clearly indicate the contract number and the S No specific alternative to which the materials conforms in case of various alternative in IS.

# 29 **FOREIGN EXCHANGE**

- 29.1 Particular attention of the Service Provider is drawn to the fact that all materials, machinery, plants, spares components etc. required to be supplied under this contract shall be from ready stocks or such as would be available within India except for such items of plant and equipment which are not of indigenous manufacture and are not otherwise totally banned for import by the Ministry of Commerce and Industry. No import license will be obtained by the department as such item will have to be arranged by the Service Provider against their own import quota.
- 29.2 All equipment and materials to be used in the work shall be new and of the best of their respective kind.

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29.3. No foreign exchange shall be provided for by MES for any equipment / materials.

#### 30. **RECORD OF CONSUMPTION OF CEMENT**

30.1 The Service Provider shall maintain a bound register with serially numbered pages with all pages initiated by Engineer-in-Charge against numbering showing quantities of cement procured, received at site used in work and balance at the end of each day. The form of record shall be as approved by Engineer-in-Charge. The register shall be daily by representative of MES and the Service Provider in token of verification of its correctness and will be checked by Engineer-in-Charge at lese once a week and on the days cement is consumed by the Service Provider. The register shall be kept at site in safe custody of the Service Provider representative during the progress of the work and on demand be produced for verification to the inspecting officer (s). On completion of the work the Service Provider shall deposit the cement register with the Engineer-in-Charge for record.

# 31.00 **CONCILIATION**

### 31.1 SCOPE OF CONCILIATION

- 31.1.1 The scope of conciliation shall be restricted to the following types of disputes with financial limits as indicated therein:-
  - (a) Disputes relating to levy of compensation for delay in completion Actual amount of compensation.
  - (b) Disputes relating to technical examination of works.
  - (c) Disputes relating to interpretation of the provisions of the contract with reference to their application to parties.
  - (d) Disputes relating to non-return of schedule 'B' stores over-issued to Service Provider.
  - (e) Any other disputes having fair chances of being resolved by conciliation and considered fit to be referred to conciliation by the parties.

For item (b), (c), (d) and (e) each as stated above the financial limit shall be Rupees two Lakh or one percent of the contract amount whichever is less.

# 31.2 **COMMENCEMENT OF CONCILIATION PROCEEDINGS**

- 31.2.1 The party initiating conciliation shall send to the other party written invitation to conciliate, briefly identifying the subject of the dispute.
- 31.2.2 Conciliation proceedings shall commence when the other party accepts in writing the invitation to conciliate.
- 31.2.3 If the other party rejects the invitation, there will be no conciliation proceedings. If the party initiating conciliation does not receive a reply within 30 days from the date on which he sends or within such other periods of time as specified in the invitation, he may elect to treat this as a rejection of the invitation to conciliate and if he so elects, he shall inform in writing the other party accordingly.

# 31.3 NUMBER OF CONCILIATORS

31.3.1 There shall be a Sole conciliator.

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## 31.4 STATUS OF EFFECT OF SETTLEMENT AGREEMENT

31.4.1 The settlement agreement signed by the parties as a result of conciliation proceedings shall have the same status and effect as it is an arbitral award on agreed terms.

#### 32.0 HANDING OVER OF SITE

32.1 Site for execution of work will be available as soon as the work is awarded. In case it is not possible to make the entire site available on the award of work, the Service Provider will have to arrange his working program accordingly. No claim whatsoever, for not giving entire site on award of work and for giving site gradually, will be tenable

## 33. **PERFORMANCE SECURITY**

- 33.1 Within 28 days of receipt of the letter of Acceptance, the successful Service Provider shall deliver to the Accepting Officer a performance Security in any of the forms given below for an amount equivalent to 5 % of the contract sum. (a) A Bank Guarantee in the prescribed form. (b) Government Securities, FDR or any other Government instruments stipulated by the Accepting Officer.
- 33.2 If the performance Security is provided by the successful Service Provider in the form of a Bank Guarantee, it shall be issued by Nationalized/Scheduled Indian Bank but its confirmation shall be done only from the Head Office of the Bank.
- 33.3 Failure of the successful Service Provider to comply with the requirement of clause 33.1 here-inbefore shall constitute sufficient grounds for cancellation of the award of work and forfeiture of the Earnest Money. In case of MES enlisted Service Provider, amount equal to the Earnest Money stipulated in the Notice Inviting Tender, shall be notified to the Service Provider for depositing the amount through MRO. Issue of tender to such Service Providers shall remain suspended till the aforesaid amount equal to the Earnest Money is deposited in Govt Treasury.
- 33.4 (i) All compensation or other sums of money payable by the Service Provider to the Government under the terms of this contract or under any other contract with Government may be deducted from, or paid by the sale of a sufficient part of the Performance Security or from the interest arising there from or from any sums which may be due or become due to the Service Provider by the Government on any account whatsoever and in the event of his Performance Security being reduced by reason of any such deduction, or sale as aforesaid, the Service Provider shall within ten days thereafter make good in cash or securities, endorsed as aforesaid, any sum of sums which may have been deducted from or realized by the sale of his Performance Security or any part thereof.
  - (ii) Government shall not be responsible for any loss of securities or any depreciation in the value of securities while in their charge nor for loss of interest thereon.
- 33.5 In the event of contract being cancelled, under condition 52, 53 & 54 of General Conditions of contract, the Performance Security shall be forfeited in full and shall be credited into Consolidated Fund of India".

# 34. BANK GUARANTEE BOND AGAINST PERFORMANCE SECURITY (REFER PARA 33 HERE-INBEFORE)

34.1 Condition 19.1 of IAFW-2249 provides for submission of Performance Security by the successful Service Provider in the form of Bank Guarantee Bonds or Govt Securities, FDR or any other form of deposit stipulated by the Accepting Officer.

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- 34.2 The Performance Security shall be in favour of Accepting Officer and shall be in any of the forms mentioned above. Work Order No 1 shall be placed only after submission of Performance Security of adequate value by the Service Provider. In case a fixed deposit receipt of any Bank is furnished by the Service Provider to the Government as part of the Performance Guarantee and the Bank is unable to make payment against the said fixed deposit receipt, the loss caused thereby shall fall on the Service Provider and the Service Provider shall forthwith on demand furnish additional security to the Government to make good the deficit.
- 34.3 If the Performance Security is provided by the successful Service Provider in the form of a Bank Guarantee, it shall be issued by Nationalized / Scheduled Indian Bank but its confirmation shall be done only from the Head office of the Bank.
- 34.4 Form for Bank Guarantee Bond against Performance Security Deposit shall be same as Appendix 2.1 of MES Manual on Contracts 2020 with "security deposit" in Para 1, line 4 replaced by "Performance Security Deposit".
- 34.5 The period of validity of the Bank Guarantee Bond against Performance Security shall be initially valid upto the stipulated date of expiry of Defects Liability Period plus minimum 60 days beyond that. In case final bill is not paid during this period, the Service Provider shall get the validity of Performance Guarantee extended to cover such enlarged time required for payment of final bill.
- 34.6 The original Bank Guarantee Bond against Performance Security alongwith necessary certified copies shall be sent to the PCDA / CDA by the Accepting Officer for verification and then returning the original to the Accepting Officer and the certified true copies to the GE (I) & AAO. The original BGB shall be kept in the custody of the Accepting Officer.
- 34.7 The Accepting Officer shall evolve a procedure to ensure that timely action is initiated to have the validity date of the Bond extended by the Service Provider, or to have it encashed before the same expires. For this purpose, a suitable register shall be maintained by the Accepting Officer.
- 34.8 In case at a later stage, on account of delay in completion of work or due to any other reason, it is considered that the validity date stipulated in the Bank Guarantee against Performance Security should be extended, then the Service Provider shall be directed by the Accepting Officer of the contract to have the validity extended before the date of validity expires. If the Service Provider fails to do so, the Bank Guarantee shall be encashed before expiry. The encashment notice shall be similar to the format given in Appendix of MES Manual on Contracts 2020 with "in lieu retention money" in Para 1, line 2 replaced by "against Performance Security".
- 34.9 In case the BGB is not encashed by the concerned Bank, the matter shall be referred to the Central Office of RBI in Delhi and Mumbai at the following address or any latest address which can be found from internet: -

(a) Jt Chief Officer Deptt of Banking and Operations Reserve Bank of India Parliament Street New Delhi-110 011 (b) Reserve Bank of India Central Office Department of Banking Operations & Development Centre-1 World Trade Centre Cuffe Parade, Colaba Mumbai-400 005

34.10 Bank Guarantee Bond in lieu of Performance Security is due for discharge on expiry of Defect Liability Period provided always that the Service Provider has been paid the final bill and Service Provider has rendered the No Demand Certificate (IAFW-451). Immediately after expiry of Defects Liability period. GE concerned shall check and ascertain the position of final bill.

In case final bill has been paid, Service Provider shall be asked to submit the No Demand Certificate (IAFW 451), if not already submitted by him. After submission of No Demand Certificate (IAFW – 451), GE will intimate this fact to the Accepting Officer within a week who shall release the Bond duly discharge to the Service Provider. Accepting Officer will ensure that no delay occurs in releasing the Bank Guarantee Bond.

In case final bill has not paid, the status thereof shall be ascertained by Accepting Officer and efforts will be made to get it cleared within one month of expiry of Defects Liability period. After clearance and payment of final bill Service Provider shall be asked to submit the No Demand Certificate (IAFW-451), if not already submitted by him. After submission of No Demand Certificate (IAFW-451) to GE and on receipt of the same, Accepting Officer shall release the Bond duly discharged to the Service Provider without any delay.

If any recovery is outstanding against the Service Provider, release of Bank Guarantee will be subject to compliance of the procedure for effecting the recovery / with-holding the due amount as stipulated in Condition 67 (as amended) of General Conditions of Contract.

Signature of Service Provider Date:

AGE (Contracts) for Accepting Officer

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# 1. **GENERAL**:

- 1.1 The work under this contract comprises MANNING & OPERATION, COMPREHENSIVE MAINTENANCE TO VARIOUS TYPE CENTRAL / VRF TYPE AC PLANTS, DG SET AND OTHER MISCELLENEOUS REPAIR WORKS ETC AT LRDE as mentioned in Sch `A'. The Sch `A' lists the items in brief and further amplified in succeeding paras for efficient, smooth functioning of the system to meet the end use of satisfactory maintenance of desired inside conditions.
- 1.2 The Service Provider shall be solely responsible for all personnel deputed for the job and all transport required for conveyance of equipment for repairs at his workshop with proper gate passes and proper repair action.
- 1.3 The representative of the department shall be notified the place of repairs being undertaken and shall have/provide access to ascertain smooth handling and proper repair action.
- 1.4 The personnel employed shall be provided with protective uniform clothing and shall wear them while on the job. In case of any accident / injury, resulting fatal in or partial disability, the Service Provider shall be solely responsible for settling all claims / compensation. Department will have a right to recover any sum indicated / claimed by Labour Commissioner/Court directive from the Service Provider. Engr -in-Charge will however ensure that the Service Provider has provided all adequate and required means to the workman. Service Provider shall get his personnel insured at his expense. Proper first aid arrangement shall also be maintained by the Service Provider at site.
- 1.5 The work under this contract shall be carried out all as per Sch`A' and as specified to the entire satisfaction of GE/Engineer-in-Charge. The work of maintenance of ACs shall be got executed through approved firm having valid OEM license from reputed AC manufacturers.
- 1.6 The staff employed shall be suitably qualified and having adequate experience in the trade as specified in Schedule 'A' notes and shall be able to maintain all documents and read and record readings. Service Provider shall submit details of qualifications and experience before commencement of the work for approval by Engineer-in-Charge. Being Defence installation the Service Provider shall ensure the antecedents of personnel as well.

# 2. **MAINTENANCE**:

- 2.1 The Service Provider shall be fully conversant with the daily, weekly, monthly, quarterly, half yearly checks/maintenance needed and Manufacturers specific maintenance schedule on various equipment installed.
  - (a) Inspection of the air conditioning units once a fortnight by qualified and suitable trained engineer.
  - (b) Cleaning of the units checking of all controls, relays pipes etc., to the satisfactory functioning of the machine by qualified and trained mechanics and carrying out other adjustments as required once in a fortnight.
- 2.2 The maintenance staff shall maintain the following documents neatly:-
  - (a) Daily Log Sheet all as directed by the Engineer-in-Charge.
  - (b) A Register of Record of Periodical Maintenance carried out date wise shall be maintained and the same will be signed both by the Service Provider and the Engineer-in-Charge.

(c) Necessary daily Log Register and Periodical Register shall be provided by the Service Provider without additional cost and Sch`A' item is deemed to include for the same and registers will be properly maintained and duly signed by Engineer-in-Charge and Service Provider.

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- (d) The monthly check and routine plant maintenance shall be all as directed by the Engineer-in-Charge.
- 2.3 The Service Provider will attend on the same day any defect due to fair wear and tear beyond the control of operator / department within 03 hours from the time of receipt of complaint.
- 2.4 The shut down period of the plant, if required, for carrying out repairs, replacement / renewal of AC plant will be jointly decided by both the parties with user's consultation well in advance.
- 2.5 The Service Provider shall ensure that the refrigerant gas is not wasted through leakages and will ensure regular checks duly using appropriate leak detectors. The operator should be conversant to take remedial action to stop such leakages.
- 2.6 Charging / Changing of Refrigerant and lubricating oil in the system is the responsibility of the Service Provider. The Service Provider shall keep the required quantity of refrigerant gas / oil at plant room. In no circumstances, the operation of the plant is allowed to be affected for want of refrigerant gas / oil.
- 2.7 The Service Provider shall submit police verification as required by the security staff of lab / complex and the name and address of the workers to be employed for maintenance of the plant for providing security passes after necessary scrutiny / check by the security agency. In case photo passes are the requirement, Service Provider shall get the same and no extra is payable on this account.
- 2.8 On receipt of intimation from department regarding improper functioning of any air conditioning unit, the Service Provider shall arrange to attend the plant immediately on the same day without fail and the unit is put back into operation at the earliest.
- 2.9 The inspection, maintenance servicing and repairs shall normally be carried out on working days between 0830 hours to 1630 hours. In case of urgency, the Service Provider shall be permitted to carryout the jobs on holidays/Sundays for which special permission of the users is required to be obtained in advance. However the Service Provider shall have no extra claim on account of carrying out jobs on holidays/Sundays.
- 2.10 In case of any of the item is lost or damaged while under the custody of the Service Provider during the period of carrying out repairs/servicing the same shall be made good by the Service Provider by replacing with new items strictly conforming to the specifications/nature of item lost/damaged at his own cost.
- 2.11 In case the Service Provider fails to make good by replacing with new items, the Accepting Officer reserves the right to get replacement to damaged/lost strictly in conformity with the damaged/lost one through other agency at the entire risk and cost of the Service Provider

# 3. **OPERATION**

3.1 The AC plant room with an inventory of various items, equipment and electrical / sanitary fittings will be handed over for proper accounting and upkeep. The taking over on expiry of contract shall be all as per proper inventory and any damage / loss shall be made good by the Service Provider before payment of final bill. GE's decision will be final and binding on this account.

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- 3.2 The installations Standing Orders issued by the authority and orders of GE / Engineer-in-Charge will be strictly adhered to. Any violation by the staff will be severely dealt with including handing over them to police custody especially if any individual is found in intoxicated condition. Service Provider shall strictly warn the individual on this account. Service Provider shall have a qualified supervisor in order to over-see the personnel and take proper instructions from Engineer-in-Charge / GE. Service Provider or his supervisor shall visit Engineer-in-Charge office once a week for any remedial measure contemplated.
- 3.3 The installation room is totally under the control of Service Provider with adequate space for stores, spares and T&P required for operation and maintenance. Both plant room and AHU rooms shall be kept clean, neat and tidy duly clearing the dust on ceiling fan, electric fittings and window glass panes. All walls and floor shall be kept clean and staff should be advised not to put hand prints etc on walls, the lighting in plant room shall be fully functional and Service Provider shall ensure replacement immediately at an extra cost to department.
- 3.4 The installation shall be frequently visited by inspecting officers of MES and needs no emphasis for proper upkeep in a presentable state all the time. Surrounding areas in the fenced area or up to 500 meters all-round plant rooms shall be cleaned of and bushes/shrubs and grass to give a neat appearance of the area under Service Provider's control.

# 4. RENEWAL RECOVERY ACTION

- 4.1 In the event of failure to achieve specified condition in the conditioned space due to nonoperation of the plant or other reasons the Service Provider shall be penalized at TWICE the quoted rates as penalty per day for such failures / lapses to be worked out as per quoted rates.
- 4.2 In case of failure of Service Provider regarding fulfilling requirement of stores/ refrigerant, the Service Provider shall be liable for penal recovery as directed by the Engineer-in-Charge.

#### 5. **DOs and DONT's**

5.1 For the benefit of efficient functioning of the system DO's and DON'TS are to be displayed at the installations and Service Provider shall ensure adherence to these by his operators and supervisory staff.

# 6. **GENERAL**

- 6.1 This contract will be in operation for 11 months from the date indicated in work order. Department will have a right to extend the contract in case of any contingency of non-finalization of subsequent contract period.
- 7. Service Provider may at his discretion provide relief staff as well as extra labour / man power in order to suit the requirement at site of work for Comprehensive Maintenance including operation of central and package type AC installations without any extra cost to the Government.

# 8. MISCELLANEOUS REQUIREMENTS

8.1 Local fire orders as approved by the Garrison Engineer will be strictly followed and all fire points will be maintained properly. Requisite stores for replacement of fire extinguishers will be issued by the department. No temporary or loose connections will be allowed in any of the installations as a precaution against fire.

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- 8.2 Service Provider shall furnish details of operating staff employed by him with commensurate to contract provisions. He shall obtain necessary passes for staff entry and exit from LRDE with photos of personnel in consultation with Engineer-in-Charge.
- 8.3 The Accepting Officer may reject persons employed by Service Providers if he is not satisfied with performance of duty or without assigning reasons and the Service Provider shall not be reimbursed or paid extra on this account.
- 8.4 The personnel employed by Service Provider shall limit their movement for the particular complaint and shall not trespass to the surrounding building(s) on any reasons. He shall not be under the influence of alcoholic drinks during duty / after effects during the working hours. He should be polite in behavior while dealing with / attending to Users complaints.
- 8.5 The Service Provider required to employ the persons on all days as specified in Sch 'A'.
- 8.6 The Service Provider shall reimburse the cost to the department as decided by Accepting Officer of the contracts due to the damages occurred to the existing fitting / fixture due to negligence of persons employed by him.
- 8.7 All hand tools and plants required for providing services will be supplied by Service Provider to labours and cost is deemed to have been included in the Quoted rate.
- 8.8 Any additional requirement of items like bamboo ladders (Perishable) shall be the responsibility of the Service Provider.
- 8.9 Service Provider's workmen shall not create law and order problems while dealing with users in attending to their complaints.
- 8.10 Service Providers workman shall carry badges / name tags to facilitate easy recognition of their name and identity by User.
- 8.11 To ensure that whole premises of installations are kept clean and tidy, area shall be cleaned on all days.
- 8.12 To ensure that high level of satisfaction is achieved and maintained throughout the currency of the contract with regard to maintenance and operation of installations and manning of service centre and attending day to day complaints of various users.
- 8.13 To keep all details required for maintenance of documents as referred above.
- 8.14 Service Provider's workmen shall possess power identity cards issued by the user units. The Service Provider shall approach Engineer-in-Charge who will assist them in obtaining the Identity cards from users.
- 8.15. Inventory of all accessories / equipment shall be handed over to Service Provider before commencement of work and shall be taken over by the Engineer- in- Charge after completion of work and these documents shall be duly signed by both parties.
- 8.16 The Service Provider shall provide materials such as cotton waste, brushes and kerosene, oil etc, which is required for carrying out the routine cleaning of assets shown in Sch 'A' and necessary greasing, oiling, tightening of screws, nuts, bolts etc shall be carried out by the Service Provider for satisfactory performance.

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- 8.17. The Service Provider shall ensure not to cause any damage by the personnel employed for operation of the installations etc., while operating them. In case any damage occurs due to the fault of the operating staff, the same shall be made good by the Service Provider at his own expenses. The decision of Garrison Engineer in this regard as to whether the damage/breakage etc is due to the fault of the operating staff or due to any other reasons shall be final and binding and no claim shall be entertained on this account. Occurrence of any such damage/breakage to installations during the currency of contract will be immediately reported to the Engineer-incharge who will report the matter to Garrison Engineer for his decision. The rate quoted in the relevant Sch `A' items shall include for such contingencies also. The damage shall be made good by the Service Provider by employing additional personal in any number of shifts. Nothing extra shall be admissible on this account
- 8.18. Any repair or rectification work to be carried out not due to the fault of operation staff as stated above, the same shall deemed to be out of scope of the contract. If any fault/breakages and electrical failure are as observed by the operation staff the same shall be immediately reported to Engineer-in-Charge for necessary action and carry out rectifications as orders by him.

# 9 **STATIONERIES**

9.1 All the stationeries required during the currency of the contract including Registers / Complaint slips / Log sheets / meter reading reports are also covered under the scope of work. The item rate quoted shall be deemed to include the cost of stationeries also.

# 10. ACCIDENTS ETC CAUSED TO THE PERSONS EMPLOYED BY THE SERVICE PROVIDER

10.1 While working in the defence installations, if any of the persons employed by the Service Provider meets with an accident causing/minor/grave/fatal injuries, etc no workmen compensations will be provided by the department. First aid treatment facility available at the installations will be provided by the department as one time measure. It is the responsibility of the Service Provider to pay any compensation due to the individual. Insurance cover for the workers shall be provided by the Service Provider. Replenishing the first aid requirements during the currency of the contract is the responsibility of the Service Provider.

# 11. THEFT/DAMAGE TO INSTALLATIONS

11.1 In case of any theft, damage to installations / defence property, due to negligence, intentions on the part of the individuals employed by the Service Provider, a board of officers appointed by the Accepting Officer to investigate the matter and pin point the responsibility. If the board of officers identify the persons employed by the Service Provider, he (the Service Provider) is liable to pay such compensation as decided by the Accepting Officer. The decision of the Accepting Officer in this regard shall be final and Service Provider shall have no claim on this account.

# 12. **PENALTY CLAUSE**:-

12.1 Penalty for not attending complaints within stipulated time frame will be Rs 500/day per complaint till the complaint is rectified /completed. If installation is found un-manned or any personnel found absent at the work place during working hours in any period of the contract, a penalty at twice the CA rates of the absent personnel will be imposed and recovered from the payments due to the service provider.. The Service Provider will make necessary alternate arrangement on priority

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# 13. ADHERENCE TO STATUTORY LABOUR LAW:-

13.1 The provision of statutory laws relating to minimum wages, EPF, ESI payments shall be strictly adhered to by the Service Provider. If Service Provider fails to meet the above obligations, the contract will be

cancelled and liable for the losses. The Service Provider or his supervisor shall report to the Engineer in Charge daily and maintain attendance register of all tradesmen employed.

#### 14. MAINTENANCE OF DOCUMENTS :-

14.1 All the documents such as complaint register, complaint slips, breakdown register, earth test register, periodical maintenance register, log sheets, attendance register and any other additional documents as required by the dept will be maintained upto date and put up to the AGE /GE or any dept inspecting or visiting officers. Service Provider / his rep will be present during inspection of the installation by officers of higher HQ.

# 15. **TESTING**

- 15.1 Testing of AC's shall be carried out during once in a contract period by authorised agents/dealers and submit original test certificate.
- 15.2 Various maintenance schedules to be carried out during the currency of the contract apart from the day to day maintenance schedule, as per the manufacturer's instructions are appended below:-

# (A) **DAILY MAINTENANCE SCHEDULE**

- (a) Check for any abnormal noise in system.
- (b) Check for any gas leaks.
- (c) Check for pump water leaks and chilled water leaks.
- (d) Check cooling tower and motor connections.
- (e) Check for oil leaks in compressors.
- (f) Check for any arsenic noise in compressors.
- (g) Check for any loose connections in panel board.

# (B) MONTHLY MAINTENANCE SCHEDULE

- (a) Topping/ changes of Refrigerant R- 134A/R-22 suitable for Air cooled chilled unit monthly as and when required.
- (b) Greasing of AHU bearing, AHU motor bearings, Air cooled condenser fan motors, Condenser Pump & Motor.
- (c) Monthly Checking and correcting leakages though gaskets in ducting.
- (d) Replacement of unserviceable HRC fuses and power contactor with auxiliary contact.
- (e) Replacement of unserviceable accessories of AHU and motor that has bearing, V belt, primary and secondary air filters, ball bearing and impeller blades etc.
- (f) Replacement of unserviceable accessories of chilled water pumps that has CI fan blade and lubricating oil etc.
- (g) Replacement of unserviceable accessories of Air cooled condenser fan motor that has bearings, PVC fan blade, motor terminal, motor winding, discharge valve and suction relief valve.
- (h) Replacement of unserviceable accessories of Air cooled condenser fan motor that has bearings, PVC fan blade, motor terminal, motor winding, discharge valve and suction relief valve.
- (i) Replacement of unserviceable accessories of water pipe line that as pressure gauge, temp gauge, cast iron butterfly valve, water temp control switch and water flow switch.

(j) Cleaning materials like cotton waste, Brush, thinner etc required of cleaning of GI air filter of AHU, chilled water coil in chilled unit, chilled unit, Air cooled condenser outdoor unit, AHU valves and dampers, Y Strainers etc.

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- (k) Replacement/ repair unserviceable accessories of microprocessor control unit to each compressor unit that as relays and PC board circuit.
- (I) Replacement of all spares and consumables are deemed to include in quoted rates.
- (m) However replacement of compressor unit is not included in the scope of work only repairs to be carried out as directed by Engr-in-Charge.

# (C) YEARLY SCHEDULE (TO BE CARRIED OUT ONCE IN CONTRACT PERIOD)

- (a) Change of compressor oil once in contract period.
- (b) Cleaning of condenser unit once in a year by using cleaning solution, HCI, Sulphuric acid, softener chemical, circulating pump, decaling brush shoe, hand gloves, flange gasket, rubber insertion gasket etc.
- 16. SCOPE OF WORK FOR REPAIRS / REPLACEMENT OF SPARES: Following Item wise spare parts, which can be made usable by repair / replacement, shall be deemed to be included in the rate quoted by the Service Provider. The Accepting officer shall decide the serviceability of spare parts by joint inspection with Service Provider. The Accepting Officer's decision shall be binding in this regard. The list of items replaced for each item along with purchase vouchers shall be produced on demand while claiming payment through RAR or Final bill.

#### 16.1 CHILLER UNIT 22 TR

- (a) Compressor Unit 02 Nos Accessories
- (i) Paper Oil filter
- (ii) Suction Filter
- (iii) Compressor Oil (18 Ltr Each unit)
- (iv) Refrigerant 407 C (17 Kg Each Unit)

# (b) Compressor Motor 37 KW

- (i) Motor Winding
- (ii) V Belt No C-118 (04 Nos for each Motor)
- (iii) Grease required for Greasing of AHU bearings 04 Nos (for 02 AHU), AHU Motor bearings 04 Nos (for 1 AHU), Condenser Pump & Motor 5 HP 02 Set, Chiller pump and motor -02 set.
- (iv) Descaling of condenser unit 02 Nos once in a year by using cleaning solution, HCl, softener chemical, circulating pump, descaling brush shoe, hand glove, flange gasket, rubber insertion gasket etc

# 16.2 CHILLER UNIT 22 TR x2 NO's

- (a) Compressor Unit 02 Nos Accessories
- (i) Paper Oil filter
- (ii) Suction Filter
- (iii) Compressor Oil (18 Ltr Each unit)
- (iv) Refrigerant 407 C (17 Kg Each Unit)

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## (b) Compressor Motor 37 KW

- (i) Motor Winding
- (ii) V Belt No C-118 (04 Nos for each Motor)
- (iii) Grease required for Greasing of AHU bearings 04 Nos (for 02 AHU), AHU Motor bearings 04 Nos (for 1 AHU), Condenser Pump & Motor 5 HP- 02 Set, Chiller pump and motor -02 set.
- (iv) Descaling of condenser unit 02 Nos once in a year by using cleaning solution, HCl softener chemical, circulating pump, descaling brush shoe, hand glove, flange gasket, rubber insertion gasket etc

#### 16.3 CHILLER UNIT 2 x 22 TR

# (a) Compressor Unit - 02 Nos Accessories

- (i) Paper Oil filter
- (ii) Suction Filter
- (iii) Compressor Oil (18 Ltr Each unit)
- (iv) Refrigerant 407C (17 Kg Each Unit)
- (b) Compressor Motor 37 KW
- (i) Motor Winding
- (ii) V Belt No C-118 (04 Nos for each Motor)
- (iii)Grease required for Greasing of AHU bearings 04 Nos (for 02 AHU), AHU Motor bearings 04 Nos (for 1 AHU), Condenser Pump & Motor 5 HP 02 Set, Chiller pump and motor -02 set,
- (iv) Descaling of condenser unit 02 Nos once in a year by using cleaning solution, HCl softener chemical, circulating pump, descaling brush shoe, hand glove, flange gasket, rubber insertion gasket etc.

#### 16.4 SEMINAR HALL AC PLANT 29 TR x2 NO's

# (a) Compressor Unit model No A/C 470 make Kirloskar - 02 Nos Accessories

- (i) Paper Oil filter
- (ii) Suction Filter
- (iii) Compressor Oil (25 Ltr Each unit)
- (iv) Refrigerant R-22 (35 Kg Each Unit)
- (b) Compressor Motor 40 HP Make Siemens 02 Nos
- (i) Motor Winding
- (ii) V Belt No C-118 (04 Nos for each Motor)
- (c) Cooling Tower
- (i) Cooling Tower fins
- (ii) Cooling tower Motor Bearing No 6206
- (iii)Cleaning material required to clean Cooling tower-01 Nos once in 15 days by using HCL or caustic soda, removing dust, de-scaling etc
- (iv) Grease required for greasing of AHU bearings 04 Nos (for 02 AHU), AHU Motor bearings -04 Nos (for 02 AHU), Condenser Pump & Motor 5 HP 02 Set , Chiller pump and motor -02 set, water cooled condenser fan motors 01 Nos

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(v) Descaling of condenser unit 02 Nos once in a year by using cleaning solution, HCl softener chemical, circulating pump, descaling brush shoe , hand glove , flange gasket , rubber insertion gasket etc

# 16.5 PCB AC PLANT 12 TR x 3 NO's

## (a) Compressor Unit 12 TR model No SMC 465 make Accel- 03 Nos Accessories

- (i) Paper Oil filter
- (ii) Suction Filter
- (iii) Shaft seal 01 set
- (iv) Compressor Oil (16 Ltr Each Unit)
- (v) Refrigerant R-22 (15 Kg Each Unit )

# (b) Compressor Motor 15 HP Make- GEC 03 Nos

- (i) Bearing No 6309
- (ii) V Belt No B-74 (04 nos in Each)
- (c) Gauges and others
- (i) Oil Cut out MP -55 make -Denfos
- (ii) Compressor Loading Solenoid Coil
- (d) Chillers Pump & Motor 3 HP Make Kirloskar 02 Nos
- (i) Motor Winding
- (ii) Motor Terminal
- (iii) Shaft Remetaling and lath work

# (e) Cooling Tower

- (i) Cooling Tower fins
- (ii) Cleaning material required to clean Cooling tower-01 Nos once in 15 days by using HCl or caustic soda, removing dust, de-scaling etc
- (iii) Grease required for greasing of AHU bearings 04 Nos (for 02 AHU), AHU Motor bearings 04 Nos (for 02 AHU), Condenser Pump & Motor 5 HP- 02 Set, Chiller pump and motor -02 set, water cooled condenser fan motors 01 No.
- (iv)Descaling of condenser unit 02 Nos once in a year by using cleaning solution, HCl softener chemical, circulating pump, descaling brush shoe, hand glove, flange gasket, rubber insertion gasket etc.,

#### **16.6 MOTOR SLIDING GATE**

- (a) For Motor 1 HP 3 phase 02 Nos
- (i) Bearing No 6306
- (ii) Capacitor 4 MFD
- (iii) Stop Switch
- (iv) Contactor
- (v) Relay 0.5 Amps
- (vi) Grease require for greasing

#### 17. LIST OF MANUFACTURERS.

17.1 The make of various items of materials are as under. The Service Provider shall ensure that the items of these makes only are incorporated in the work which confirms to the relevant specifications/requirement/stipulations in the contract.

17.2. Other products which are equivalent in the specification having IS certificate shall be permitted in the work if approved by GE.

SI No	DESCRIPTION OF ITEM	NAME OF MANUFACTURER
(a)	PVC CABLE FOR WIRING	FINOLEX / HAVELLS / PLAZA / ANCHOR / POLYCAB / STANDARD
(b)	MCB, MCCB, MCB DB'S, ISOLATOR	Schneider / L&T / Havells / Indoasian / Legrand / HPL / Standard / C&S / V-GUARD / BENTEC/ SIEMENS / ORIENT ELECTRIC
(c)	PVC CONDUITS AND FITTINGS	FINOLEX / MODI / MERCURY / AVON PLAST/ PRECISION / ELEPHANT / SUDHAKAR / PRESTO PLAST
(d)	SYNTHETIC ENAMEL PAINT	LUXOL from BERGER.SUPERLAC from SHALIMAR, APCOLITE from ASIAN, BROLAC from JENSON & NICHOLSON.
(e)	CONDENSER MOTOR	BLUE STAR /LG/ VOLTAS (AS PER MAKE AND MODEL EXISTING AT SITE)
(f)	CONDENSER COIL	BLUE STAR /LG / VOLTAS
(g)	CAPACITOR	TOTAL LINE / CARRIER / KIEL / STAR
(h)	RELAY	TOTAL LINE / CARRIER / KIEL / STAR
(j)	CONTACTOR	TOTAL LINE / CARRIER /KIEL / STAR
(k)	STABILIZER	V GUARD / VOLTAS /ITL
(1)	FAN MOTOR	BLUE STAR / LG/ VOLTAS(AS PER MAKE AND MODEL EXISTING AT SITE)
(m)	COMPRESSOR	KIRLOSKAR/ HITACHI/ GMCC/ PANASONIC
(n)	HIGH EFFICIENCY FILTERS	DYNA / THERMODYNE / ATHELETE / SPECTRUM

Signature of Service Provider Date:

AGE (Contracts) for Accepting Officer