TENDER FOR OPERATION AND MAINTENANCE OF AC PLANT INSTALLED AT NSIC EXHIBITION COMPLEX OKHLA INDUSTRIAL ESTATE NEW DELHI -110020



ISO 9001:2008

THE NATIONAL SMALL INDUSTRIES CORPORATION LTD.

(A Government of India Enterprise) Okhla Industrial Estate New Delhi-110020

Website: http://www.nsic.co.in

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Tender notice for Operation and Maintenance of AC Plant installed at NSIC Exhibition Complex New Delhi -110020

Notice No:-SIC/HO/EXB (LUM)/AC Plant/2012 Dt: September 05, 2014 M/s.

Sub: OPERATION AND MAINTENANCE OF AC PLANT INSTALLED AT NSIC EXHIBITION COMPLEX, OKHLA, NEW DELHI.

Sir,

Tender documents in respect of the above mentioned works containing 36 Nos. of pages as detailed on page 4 (Index) are forwarded herewith. *Please note that tender is to be delivered in the office of the CGM (Works/Estate), NSIC Ltd., NSIC Bhawan, Okhla Industrial Estate, Ph-IIi, New Delhi- 110020 up to 15.00 PM on 15/09/2014.*

The Tender should be signed on each page, dated and witnessed in all places provided for in the documents; all other papers should be initialed.

The tender should be accompanied by Earnest Money Deposit in the form of demand draft as mentioned in Appendix. Tenders without earnest money deposit shall be summarily rejected. The Technical bid of the bidders will be opened at 16.00 P.M. on 15/09/2014 and financial bid of the technically qualified bidders only will be opened on a later date. All technically qualified bidders will be intimated accordingly for the same.

The person, signing the tender on behalf of company/firm or on behalf of another person shall attach with tender a certified copy of power of attorney/proper authority on a non-judicial stamp paper of requisite value duly executed in his favour by such person, company/firm and must state specifically that he has authority to sign such tenders for and on behalf of such person or company/firm as the case may be, and in all matters pertaining to the contract.

The above letter shall form part of the <u>"CONTRACT"</u> and must be signed and returned along with the tender documents.

Yours truly,

CGM (Works/Estate)

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NOTICE INVITING TENDER

NSIC, Okhla, New Delhi invites sealed tender in Two bid system (Technical & Financial bid in two separate envelopes) from reputed manufacturers or experience agencies/authorized service providers for Operation and Maintenance of AC plants of 180 TR consisting of Chiller Units of 60 TR, Air Handling units-05 Nos and allied equipments & accessories installed at NSIC Exhibition Complex, at Okhla Industrial Estate, New Delhi".

The details are as summarized below:-

a)	Name of Work:	Operation and Maintenance of AC Plant installed at NSIC Exhibition Complex, Okhla Phase-III, New Delhi.
c)	Pre-Qualification requirement (PQR) of bidders	 Eligibility criteria for the issue of the Tender document are as under: - a) Manufacturers of the Semi hermetic screw compressors or their authorized service providers for providing AMCs for central AC plants / manufacturers of Open type reciprocating compressors or their authorized Service providers for providing AMCs for central AC plants. b) Should have well established servicing facility in Delhi. c) Experience of successfully carried out similar kind of Central Air Conditioning AMC works during last years. NSIC reserve the right to call for documentary proof, if required. Refer to the Annexure-B for details about PQR & documents to be attached with Technical

d)	Sale of tender document	The blank tender document can be collected in person from the office of Chief General Manager (Works/Estate), NSIC Ltd., NSIC Bhawan, Okhla Industrial Estate, Ph-III, New Delhi- 110020 from 5 th September 2014 to 15 th September 2014 (except Saturday & Sunday & public holidays) between 10.30 am to 4.30 pm. Alternatively the tender form can be downloaded from our web site <u>www.nsic.co.in</u> from 5 th September 2014 to 15 th September 2014 up to 3.00 pm.
e)	Cost of Tender Document	The tender document can be collected against payment Rs. 500/- (Rupees Five Hundred only) (Non refundable) by way of demand draft/Banker's cheque, in favor of <u>"</u> National Small Industries Corporation Ltd. <u>"</u> payable at New Delhi. In case the tender is down-loaded from website, the tender fee of Rs. 500/- in form of demand draft/bankers cheque from any nationalized Bank/scheduled Bank in India drawn in favor of "National Small Industries Corporation Ltd", payable at New Delhi shall be enclosed with the Technical bid of the tender while submitting their tender by Tenderer.
f)	Earnest Money Deposit along with tender	Rs.6, 000/- (Rupees Six Thousand only) in the form of demand draft in favor of "National Small Industries Corporation Ltd." payable at New Delhi shall be submitted along with Technical Bid of the tender while submitting the tender.
g)	Last date of submission of tender	The complete tender in a bigger envelope, containing two small envelopes, in which one envelope containing Technical bid having PQR documents & EMD and Second envelope

		containing –Financial bid, shall be submitted by 15 th September 2014 up to 15:00 hours at the office of Chief General Manager (Works/Estate), NSIC-LTD, NSIC Bhawan, Okhla Industrial Estate, Ph-III, New Delhi- 110020.
h)	Date of opening of Technical Bid (envelope-1)	The first envelope containing PQR documents and EMD will be opened on 15 th September 2014 at 16:00 hours at the office of CGM (Works/Estate), NSIC-LTD, NSIC Bhawan, Okhla Industrial Estate, Ph-III, New Delhi.
g)	Date of opening of Financial Bid (envelope-2)	The date for opening of second envelope containing financial bid will be intimated to the qualified bidders.

Note:

- 1. Work of similar nature means operation & maintenance Works of central Air Conditioning Plants comprising of operation of the AC plants by the qualified operators and preventive & breakdown maintenance of water cooled Screw/reciprocating type Chillers, AHUs, Pumps, Piping Works, ducting work etc. Documentary evidence for each similar work should contain performance certificate from client clearly indicating full details of nature of work, work order no. and date, client address, value of work as per work order and as per actual carried out, period of AMC work as per work order and as per actual.
- 2. The Tenderer should have experience of similar work in maintaining AC plants of minimum capacity 60TR or above (Semi-sealed compressor type). Photocopies of the completion certificates/award letters should be submitted along with the tender. Completion certificate issued by the reputed organization / MNC shall also be accepted. In case of certificates issued by the private party, copies of TDS should also be enclosed.

- 3. While applying for the tender document, the intending tenderers shall furnish proof of, experience certificates, works completed/awarded, valid work contract tax /service tax/ sales tax/ VAT/TIN as applicable.
- 4. Technical bids without Earnest Money will be summarily rejected. Earnest Money Deposit of the unsuccessful bidders will be returned to them after completion of the tendering process. Parties registered with MSME/NSIC under the Govt. Purchase Scheme, shall be exempted for deposition the EMD.
- 5. In case any further details are required, the same can be collected from the office of CGM (Works/Estate), NSIC-LTD, NSIC Bhawan, Okhla Industrial Estate, Ph-III, New Delhi from 5th September 2014 to 15th September 2014 (except Saturday/Sunday & holidays) between 10.30 am to 4.30 pm.

CGM (Works/Estate)

INSTRUCTION TO THE TENDERERS

The Tender shall be submitted in accordance with these instructions and any tender not confirming to the instructions as under is liable to be rejected.

These instructions shall form part of the tender and contract.

- 1. The existing AC Plant is newly constructed and comes into operation since August 2011 and was under the defect liability period till August 2012. Presently, AC plant smoothly running and performance of AC Plant is satisfactory. The components/accessories of air conditioner plant are working condition and reputed/branded make.
- 2. The intending Tenderer, in case of authorized Distributor / Dealer shall possess valid authorized Distributorship / Dealership license from manufacturers. He shall enclose the copy of the same along with the tender in Technical bid.
- 3. The AMC is for preventive as well as for breakdown maintenance of equipments and accessories fitted with air conditioner plant installed at NSIC Exhibition Centre, Okhla, New Delhi.
- 4. Preventive maintenance service would be carried out by the Service provider regularly to keep the equipment running in a trouble free condition during the period of contract. All the faults will be attended at site of Corporation. In case of a major fault, if the machine is required to be taken to the company workshop, as per site requirement the company shall provide a replacement unit till the time the AC equipments/accessories sent for repairs are positioned back. (This is applicable only during the exhibition periods which is generally held for 50 days during the year.)

5. The tender must be placed in a properly sealed bigger envelope addressed to Chief General Manager (Works/Estate), NSIC-LTD, NSIC Bhawan, Okhla Industrial Estate, Ph-III, New Delhi and the said bigger envelope shall contain two sealed envelopes containing Technical & Financial bids.

6. Scope of Work as detailed in Annexure-'A' & 'B':

- Scope of work for repairing, maintenance, overhauling and operation and running maintenance of AC Plant of capacity 180 TR installed at NSIC Exhibition Complex, Okhla, New Delhi.
- ii) The first overhauling job is to be completed within a period of 45 Days from the date of award the work.

7. Eligibility criteria for undertaking the job:

- a. The service provider must be a firm/company engaged in maintenance of Air- Conditioning plants.
- b. The service provider must have an experience in maintenance & operation of Air-conditioning plant and must have executed similar work and should provide documentary evidence in this regard.
- c. Service providers should furnish PAN, Service provider must have Service Tax Registration, VAT Registration & other statuary requirements if any as applicable.
- d. Self attested copy of documentary proof as required above must be furnished along with technical bid Part-I and in case the required information and documents with the technical bid are not furnished, the tender shall be rejected.
- 8. The Tender is consisting of two parts:

PART I- TECHNICAL BID PART II- FINANCIAL BID

- 9. The technical bids will be opened first. In selecting technically suitable parties, the decision of NSIC will be final and binding. Financial bids of only those tenderers who qualify in the technical bid will be opened. Intimation will be sent to those tenderers who qualify in the technical bid. No correspondence in this regard will be entertained.
- 10. Bids prepared by the tenderer shall contain all requisite information along with self attested supporting documents as per details in Technical Bid–Part I.
- 11. The bigger envelope must be super scribed "*Tender for Operation and Maintenance of AC Plant*". The two envelopes inside the bigger envelope must be super scribed as:
- i. TENDERER'S NAME & SIGNATURE WITH SEAL
- ii. Envelope No-1: The said envelope is for technical bid & shall be super scribed as "**Tender for Operation & Maintenance of AC Plant"– Technical Bid"**.
- iii. Envelope No-2: The said envelope is for Financial bid & shall be super scribed as "**Tender for Operation and Maintenance** of AC Plant"– Financial Bid ".

The tender should reach the office of CGM (Works/Estate), NSIC-LTD, NSIC Bhawan, Okhla Industrial Estate, Ph-III, New Delhi by 15th September 2014 up to 15.00 hours.

- 12. The tenders (Technical Bid only) will be opened at NSIC Bhawan on 15th September 2014 at 16:00 Hours (4.00 p.m). The Tenderer or their authorized representative (One person only) may be present at the time of opening of the tender.
- 13. The tender shall be completed in all respect and should be signed by the Authorized Signatory of Tenderer on all the pages and duly signed all pages of tender shall be placed with Technical Bid. Also the company stamp shall be placed under

the signature of person on each and every page of tender document.

- 14. All the columns of the tender shall be duly, properly and exhaustively filled in. The rates and units shall not be overwritten. The rates shall always be both in figures and words.
- 15. NSIC reserves the right to reject any tender/ bid wholly or partly without assigning any reason.
- 16. Nothing extra shall be paid on account of any discrepancy in nomenclature of items. The Tenderer shall seek clarifications if any before submitting the tender.
- 17. While submitting the tender, any of the prescribed conditions are not fulfilled or are incomplete in any form, the tender are liable to be rejected.
- 18. Any cutting/over writing etc. in the tender must be signed by the person who is signing the tender.
- 19. Conditional Tenders would not be accepted, and are liable to be rejected.
- 20. The Earnest Money deposit of Rs. 6,000 (Rupees Six Thousand only) by way of DD drawn in favor of "National Small Industries Corporation Ltd." Payable at New Delhi" shall be submitted in the first envelope super scribed as, "Tender for Operation and Maintenance of AC Plant" Technical Bid". No Cheque or cash towards Earnest Money deposit shall be accepted. The offers without Earnest Money Deposit will be rejected. However, the parties who registered with MSME/NSIC under the Govt. Purchase Scheme, shall be exempted for deposition the EMD.
- 21. The EMD deposited by the successful tenderer shall be converted into security deposit. The EMD of the rest of bidders will be refunded after award of the contract.

- 22. Successful Tenderer will have to deposit an amount of 10 per cent of the quoted amount as a performance Security Deposit in the form of an Account Payee Demand Draft drawn in favour of "NSIC LTD". Earnest Money deposited by the successful Tenderer will be adjusted against this amount and the balance amount has to be submitted within 10 days from the date of intimation, failing which this offer will be cancelled. The Security Deposit will be retained by the NSIC till the end of the contract period and will be returned on satisfactory completion of the work.
- 23. NSIC LTD has right to verify the particulars furnished by the bidder independently.
- 24. The Tenderer agrees that the rates submitted shall remain valid for acceptance for a period of 120 days from the date of opening of Technical Bid of tender.
- 25. Tenderer shall take into account the cost of labour, loading/unloading & cartage, taxes etc. for providing the service at site i.e. NSIC-Exhibition Complex, Okhla Industrial Estate, Ph-III, New Delhi while quoting the rates. In this regard no claim what so ever shall be entertained.
- 26. The AMC Contract will be awarded for a period of one year from the date of awarding the contract. The period of AMC can be extended for another one year based on mutual agreement/contract.
- 27. The interested bidder should inspect the AC plant before submitting their bids. The plants can be inspected on any working day between 11:00 hours and 17:00 hours with the engineer in charge or authorized representative of NSIC. The tenderers must thoroughly inspect the systems and furnish their quotes in —**as is where is** condition without stipulating any preconditions.
- 28. The financial bids of the participants which are found to meet all the requirements as specified in the Technical Bid will alone be opened on a date which will be communicated at the

appropriate time. Only the authorized representative of the firms will be present during the opening of technical and financial bids.

- 29. After opening of technical bids, if necessary a technical team may inspect the infrastructure of the firm for verification and further action.
- 30. Complete tender document available on our website <u>www.nsic.co.in</u>, any further corrigendum/addendum to this tender document shall be made available on aforesaid website. It is therefore, requested that the bidders may regularly visit the website for checking any corrigendum/addendum to this document.
- 31. In the event of any dispute the legal matter shall be subjected to the jurisdiction of Delhi Court only.
- *32.* All the communication with respect to the tender shall be addressed to:

Chief General Manager (Works/Estate), NSIC- LTD, NSIC Bhawan, Okhla Industrial Estate, Phase-III, New Delhi-110020

We hereby confirm our acceptance to the instructions (S.No-1 to 31 above) as given above.

SIGNATURE OF THE CONTRACTOR

Chief General Manager (Works/Estate)

GENERAL CONDITIONS OF CONTRACT

- 1. Corporation shall mean 'The National Small Industries Corporation Ltd. (A Government of India Enterprise) "NSIC Ltd.,NSIC Bhawan ,Okhla Industrial Estate, New Delhi-110020 and shall include their legal representatives, successors and permitted assigns.
- **3.** The Contractor is required to approach the Corporation for execution of agreement for the said work as per the prescribed proforma to be provided by the Corporation on a non-judicial stamp paper of Rs.100/-within 10 days from the issue of the letter of award.
- 4. The Contractor shall inspect and examine the Site and its surrounding and shall satisfy himself before submitting his tender as to the nature of the Site, the quantities and nature of works and material necessary for the providing the services.
- 5. The Contractor shall be deemed to have satisfied himself before tendering as to the Correctness and sufficiency of his tender for the works and of the rates and prices quoted in the Schedule of Quantities, which rates and prices shall except as otherwise provided, cover all his obligations under the contract and all matters and things necessary for the proper completion and maintenance of the Works.

Security Deposit:

Total security deposit shall be 10 % of the accepted tender cost and shall be deposited by the contractor within ten (10) days of receipt of the letter of intent/notification of acceptance of the tender by him. The earnest money deposited shall be converted into initial security deposit.

All compensation or other sums of money payable by the contractor under the terms of this Contract or any other Contract or any other account whatsoever may be deducted from the security deposit.

Refund *of Security deposit*: Security deposit refundable without interest to the Contractor shall be refunded to the Contractor on the Engineer-In-Charge certifying in writing that the AMC period of 12 months has been completed satisfactorily.

Security Deposit will be forfeited in the event of the contract offered in full or in part not being fulfilled by the Tenderer/Contractor.

SSI units registered with the NSIC under its Single Point Registration Scheme will be exempted from submission of Security Deposit.

Labour:

a.) The Contractor shall employ its labour in sufficient numbers to maintain the required rate of progress and of quality to ensure workmanship of the degree specified in the Contract and to the satisfaction of the Engineer-in-Charge. The Contractor shall not employ in connection with the Works any person who has not completed eighteen years of age.

b.) All the workers or employees deployed by the contractors shall be considered the employees of contractor and corporation shall not have any liability what so ever in nature in regard to such workers/employees.

c.) The Contractor shall pay to labour employed by him directly wages not less than fair wages as per Minimum Wages Act. Fair Wage' means wages, which shall include wages for weekly day of rest and other allowances whether for time or piece work, after taking into consideration prevailing market rates for similar employment in the neighborhood but shall not be less than the minimum rates of wages fixed under the payment of Minimum Wages Act.

d.) The Contractor shall in respect of labour employed by him or his sub-contractor comply with or cause to be complied with the Contractor Labour Regulation in regard to all matters provided therein.

e.) The Contractor shall comply with the provisions of the payment of Wages Act, 1936, Minimum Wages Act, 1948, Employers' Liability Act, 1938. Workmen's Compensation Act, 1923, Industrial Disputes Act, 1947, Maternity Benefit Act, 1970 or any modification thereof or any other law relating thereto and rules made there under from time to time.

f) The Contractor shall indemnify and keep indemnified the Corporation against:

i)Any claim arising out of third party loss/ damage to life or property caused by/ during execution of the work.

ii) Any claim arising out of loss/ damage to the workmen engaged by the contractor during execution of the work. iii) Any claim due to non-compliance of applicable PF/ Labour laws, ESI regulations etc.

PAYMENT TERMS:

Quarterly payment shall be made after completion of a quarter against the bill. Quarter shall mean three months. Statutory taxes like income tax, work contract tax/service tax etc. as applicable in the state shall be deducted from the payment.

Income Tax/WCT/VAT

Income tax including surcharge if any, at the prevailing rate shall be deducted from the Contractor's bills as per the provision of Income Tax Act. The Contractor shall ascertain from the concerned commercial tax department regarding the applicability of Works Contract Tax / VAT/TIN. Necessary deductions will be made from the contractor's bill as applicable.

REVIEW OF CONTRACT:

The performance of the firm shall be reviewed in every quarter and if the performance is not found satisfactorily, the contract will be terminated by giving on 15 days notice.

Tool and Plants:

The required tools and plants for carrying out the work shall have to be arranged by the Contractor at his cost and no tools will be arranged by NSIC. The Contractor shall keep all required tools at site.

Other terms & conditions

• During this period the contractor will be liable for 01 overhauling of plant along with operation during the period of contract. The overhauling is supposed to be carried out at the start of the season/contract/ during the winter shutdown period. Plant may be kept shut only on Sundays / Holidays.

• The contractor should deploy adequate number of skilled/semiskilled persons for operating the plants. The operators are to be competent and have experience in handling Air-conditioning Plants.

Experience	of	workmen
Experience	U	workinch

s.	Description of workman	Experience of workman
no		
1.	Skilled operator	The skilled operator should have
		at least 05 years of experience in
		operation and maintenance of
		Central AC Plant of Similar type.
2.	Semi skilled operator/	The semi-skilled operator/helper
	Helper	should have at least 03 years of
		experience in operation and
		maintenance of Central AC Plant
		of similar type.

- The contractor must ensure warranty provided by him for the supplied material and workmanship is 12 months after each yearly overhauling. If any material supplied by contractor or workmanship of contractor is found defective during this period, such defects would have to be removed by the contractor free of cost.
- Any part taken out for repairing or changing or for any other purpose must be authorized by engineer in charge by valid gate pass.
- A logbook is to be maintained for keeping record of parts taken out / returned back for record purpose.
- Arrangement of necessary tools, instruments and other necessary items for operation, maintenance and servicing work will be the sole responsibility of the contracting agency.
- The NSIC shall supply the consumable materials and spare parts.

The contractor should intimate the essential and necessary spare parts during contract period in the offer so that it can be considered and procured by NSIC for ready requirement.

- Any material supplied by the contractor should be of best quality and compatible with the AC plant, that to be certified by the Engineer In-charge before use of the same in the plant.
- Scrap generated out of replacement or during work is to be handed over to the NSIC against written documentation.
- The contractor must ensure the comfortable conditions inside the Air-conditioned area while keeping the machine parameters normal.
- During the process of overhauling or routine maintenance if any modification/improvement of plant is required to be undertaken that has to be cleared by the Engineer In charge in writing.
- The contractor will be liable to handover the plant in running condition with all the equipment serviceable at the end of contract or termination of contract.
- Supervision of personnel provided by the Contractor shall be his responsibility. The Contractor shall ensure the quality of job performed by his personnel and in case of any complaint; the Contractor shall have to replace the concerned personnel.
- As far as possible, the contractor will engage same manpower for the job defined in the work-scope so that there is continuity of work and the job quality does not suffer.
- NSIC shall not be responsible for payment of wages and/ or any other emoluments to the personnel/workers of the Contractor so deployed and it shall be the sole responsibility of the Contractor to make payment to the said personnel/workers in time and the Contractor shall at all time keep NSIC indemnified against any claim from its personnel/workers in this regard.

- All records, documents under various statutory provisions including ESI/PF/Disbursement of monthly Wages shall be maintained by the Contractor and shall be open for inspection by an authorized representative of NSIC and Government Agencies.
- The service provider shall at his own risk and cost ensure that his employees deployed to carry out the work of NSIC are insured against all attendant risks that may be associated with the job.
- Due to unprecedented rain if water enters central Air Conditioning plant room etc. the draining out of water and keeping the plant room clean and dry is the responsibility of the contractor.
- The Contractor shall employ only adult trained, efficient and responsible staff with good health and sound mind for operation and maintenance of the Central AC plant.
- In case any material/property of the NSIC is damaged due to misuse or mishandling or carelessness by the Contractor or his employees, the Contractor will immediately inform the Engineer in charge or authorized Departmental Head of Works division. In such a case, the Contractor will be liable to replace the item at his own cost or the NSIC shall have the right to recover the loss from the Contractor's bill. The decision of the NSIC in this matter will be final.

Timing of operation of the Plant Operator deployment:

- 1. Timing of Operation: As per requirement from 08.30 hours to 18.00 hours or equivalent hours. It may be required to run the plant beyond normal hours or on other non-working days due to exigencies of work or exhibition days.
- 2. Deployment of Operators: Contractor should deploy sufficient numbers of manpower to complete the overhauling/repairing and maintenance jobs during the contract period and provide suitable number of skilled/semi-skilled staff for operation and maintenance of the plant.
- 3. Total days of operation: 50 days (Approx), however it may increase or decrease depending on requirement.

4. Prior intimation will be given to the contractor for carrying out operation outside the office hours mentioned above.

PENALTY:

- *i. Rs.* 500/- per day shall be deducted from the payment if complaints are not attended within the given period of time or within 12 hrs. from the time of lodging the intimation. After carrying out the repair, the service personnel shall submit the service report.
- *ii. Rs.* 4000/- per day shall be deducted from the payment if plant is not operated during the exhibition period or whenever required inspite of prior intimation given to the contractor for carrying out the operation of plant.

Maintenance of Records:

The Contractor has to maintain the following records:

- a) Attendance Register of the Staff
- b) Daily/weekly/monthly preventive and overhaul maintenance register cum-log book.
- c) Inspection Register

All the above mentioned Registers shall be checked by the Engineer-in-Charge/ or by authorized representative of NSIC.

Facility to be provided by NSIC:

NSIC will provide the following free of cost to the Contractor

- a) Electricity for operation and repair/maintenance of Plant.
- b) Water

Contract Period:

The period of contract will be one year from the date of award of work and may be extended for a further period of one year depending upon the satisfactory performance and on the same rates, terms and conditions. However, decision of the Engineer-in-charge shall be final in this case.

Safety Clause

The contractor shall ensure necessary safety measures in compliance with standard norms and practices for operation and maintenance of AC Plant.

PLANTS OPERATION:

SPECIFIC DUTIES OF OPERATORS:

- a) Routine operation of the system as per requirement
- b) Seasonal starting and stopping of the system as per requirement.
- c) Taking all required readings regularly, maintaining the logbook record up to date with observations, if any.
- d) Operations like pump down, removing and charging refrigerant, purging, leak testing, evacuation and dehydration etc.
- e) Cooling water and chilled water system leakage detection in the plant.
- f) All other routine inspections to ensure smooth running of the plants as well as those which are otherwise related to satisfactory plant operations, viz., safety related checks.
- g) Performing all the operations according to standard methods, without damaging other working parts of the system.
- h) Maintaining operation logbook for the inspection of Engineer in charge.
- i) Taking adequate insurance cover against all risks for the persons deployed by the contractor.

CGM (Works/Estate)

SIGNATURE OF THE CONTRACTOR

(Undertaking from Tenderer)

To, The Chief General Manager (Works/Estate) NSIC- LTD, NSIC Bhawan, Okhla Industrial Estate, Phase-III, New Delhi-110020

Sir,

Name of work :	Operation and Maintenance of AC Plant installed at NSIC Exhibition Complex, Okhla,
	New Delhi-110020

Dear Sir,

HAVING EXAMINED AND PERUSED THE FOLLOWING DOCUMENTS

Notice Inviting Tender Instruction to the Tenderer General Conditions of Contract

Format & Requirement for submitting Technical Bid

Format & Requirement for submitting Financial Bid Technical Specifications of items for which tender issued

I/Wedo hereby submit tender for Operation and Maintenance of AC Plant installed at NSIC Exhibition Complex, Okhla, New Delhi-110020, as per the quoted rate and in all respects in accordance with the conditions applicable.

I/We enclose herewith a Bank Draft /Pay Order for Rs.6, 000/- as Earnest money. I am aware that the Earnest Money will not bear any interest.

If this tender is accepted, I/We agree to abide by and fulfill all the terms and provisions in the tender documents and agree to enter into

an agreement with all the conditions that may be stipulated by the NSIC or in default there of pay to the NSIC the sum of money mentioned in the said condition without prejudice to any other right of the NSIC.

I/We hereby distinctly and expressly declare and acknowledge that before the submission of this tender, I/We have carefully followed the instructions and I/We have understood the existing system of supply in the NSIC, including the scope and nature of duties expected from the Tenderer.

I/We distinctly agree that I/We would hereafter make no claim or demand upon the NSIC based upon or arising out of any alleged misunderstanding or misconceptions or mistake on my/our part of the said contract, agreements, stipulations, restrictions and conditions.

Any notice required to be served on me/us shall be sufficiently served on me/us by post (registered or ordinary) or courier or left at my/our address furnished herein.

I/We fully understand the terms and condition of the contract to be entered into between me/us and the Corporation and the written agreement shall be foundation of the rights of both the parties and the contract shall not be deemed to be completed until an agreement has been signed by me/us and the NSIC.

Date this.....day of......2014

Name of the Tenderer/s: Seal:

Authorized Signatory: With complete address, phone/fax numbers

DECLARATION

(To be given by Tenderer at the time of submission of complete tender)

Name of work: Operation and Maintenance of AC Plant installed at NSIC Exhibition Complex, Okhla Industrial Estate, New Delhi-20.

I/We have read the Tender documents and related matters carefully and diligently and that I/We have submitted the tender after having studied, understood and accepted the full implications of the agreement.

The requirements of the tender agreement as stated above will be fulfilled by me/us to the satisfaction of the NSIC.

Tenderer:

Seal:

(Authorized Signatory): (To be submitted along with the tender document)

Enclosures: (Details shall be given for the documents attached)

- 1.
- 2.
- 3.
- 4.

ANNEXURE-A

THE NATIONAL SMALL INDUSTRIES CORPORATION LTD. (A GOVT OF INDIA ENTERPRISE) NSIC BHAWAN, OKHLA INDUSTRIAL ESTATE, NEW DELHI – 110020

SCOPE OF WORK

A. PREVENTIVE MAINTENANCE

Monthly:

- 1. Routine inspection and maintenance works of all the 3 plants to be done in any one of working day.
- 2. All safety and indicating devices to be checked up.
- 3. Current & Voltage measurements for all the plants in full load.
- 4. Routine inspection and maintenance of all electrical items like Switches / Cables etc.
- 5. Cleaning of all the AHUs.
- 6. Cleaning of air filters and replacement whenever required.
- 7. Inspection of belts and adjustment / replacements if required.
- 8. Checking of AHU fan motor, Impeller, Impeller housing, shaft, bearing and replacement if required.
- 9. Recording various readings and calculating tonnage of plants, calculating the cooling tower efficiency.
- 10. Cleaning the cooling towers.
- 11. Check up for possible leakages in the refrigeration system.
- 12. Checking of electrical panels.
- 13 Cleaning of micro Vee filters.

14. Checking of cooling tower nozzles, sprinklers, cooling tower motors/fans and servicing/ replacement if required.

Quarterly:

- 1. Cleaning of AHU cooling coils
- 2. Lubrication of bearings of motors and other machinery
- 3. Tightening of V-Belts.
- 4. Cleaning of Pot Strainers in water circuit.
- 5. Checking of safety control and switches / replacement if required.
- 6. Calibration of meters and gauges / replacement if required.
- 7. Cleaning of contact switches, checking of relays, timer etc./replacement if required.
- 8. Cleaning of AHU outlet like diffusers, grills etc.
- 9. Cleaning of cooling coils.

Annual: Overhauling of complete AC plant and accessories:-

Total plant overhauling shall be done once a year, preferably in winter. Prior permission shall have to be taken from the Engineer-in-charge for the job. (Required materials shall be supplied by the NSIC)

- a. Condenser to be descaled on half yearly basis.
- b. compressor and accessories to be serviced.
- c. All motor to be greasing and servicing.
- d. Main electrical control panel to be serviced.
- e. Control panel along with gauge to be serviced.
- f. A.H.U coil to be cleaning with suitable chemical.
- g. Dumper and duct with diffusers to be serviced.
- h. Cooling tower and accessories to be serviced.
- i. Any other part of the AC plant, not covered by the above, to be serviced also.

B. BREAKDOWN MAINTENANCE :

The firm has to attend to the unscheduled service calls as and when required for locating the faults and rectify the same within 04 hours. In case of any break down or any abnormal functioning of the equipment, the same has to be brought to the notice of the Engineer-in-Charge immediately and necessary remedial measures would be taken immediately as required / advised.

C. GENERAL CONDITIONS

- 1. No additional payment will be made for transportation of equipment from the NSIC to parties work shop or delivery of the materials to the NSIC at any point of time.
- 2. The works of urgent nature should be attended immediately whether it is office hours or holidays for which no additional charges will be payable. If the party fails to maintain or to carry out the repairs of any defect to the satisfaction of the office, then the NSIC, in order to keep the A/C Plants running will undertake the works of getting it done through outside agency and cost incurred thereby will be deducted from the firm's bills.
- 3. All Compressors should be maintained in optimum condition. The compressors will be checked for proper functioning. The defective spares and consumables like oil will also be supplied by the Corporation as and when required.
- 4. Refrigerant gas will be provided as and when necessary by the Tenderer.
- 5. All such items should be original and no additional charges will be payable for these materials at any point of time.
- 6. The party must ensure availability of the spares in their stock to handle any break-down without delay.
- 7. The party shall make good all the losses occurred during servicing, overhauling, repairing and maintenance of plants.

D. INCLUSIONS

The following routine maintenance work shall also be carryout by party with supply of consumable materials as and when required

(i) All oils and greases for lubrication of compressors, fan bearings, motors bearings, pivots and other moving parts.

- (ii) All refrigerant required for topping up.
- (iii) All consumable filter elements/rolls.
- (iv) All chemicals for the correct chemical treatment of the cooling tower and chilled water system and cleaning of filters and coiling coil.
- (v) All carbon brushes required to replace worn brushes in electric motors.
- (vi) All electrical contact points required to replace worn electric contact points in switchgears, motor starter gears, electronic control gears and electric relays.
- (vii) All electric fuses required to replace blown fuses.

E. EXCLUSIONS :

- 1. Every effort will be made by the Contractor in servicing condenser and chilled water pumps and if they go beyond repair, they would be replaced by the NSIC. However, the labour cost for replacement will be borne by the firm, under maintenance contract.
- 2. Works related to replacement of AHU, sheet metal panels, base tray and thermal insulation materials will be provided by NSIC, work to be carried out by the Firm under AMC.
- 3. Works related to water piping, cooling tower uprights, fills, cooling tower PVC panels materials will be supplied by the NSIC and work will be done by the firm under AMC.
- 4. Works related to ducting, duct lining, false ceiling and masonry / steel structure works.
- 5. Replacement of valves in the cooling tower area, but effort should be made to repair/rectify by servicing. The valves required for replacement will be supplied by the NSIC and the work will be done by the firm under AMC.

- 6. Replacement of Micro Vee filters in AHU. If replacement is necessary, the Micro Vee filters will be supplied by the NSIC and the work will be done by the firm under AMC.
- 7. Replacement of electrical cablings, incoming power supply switches.
- 8. Any replacement required because of theft or fire.
- 9. Any modification, shifting, alteration to suit future requirements.
- 10. Any repairing/replacement of water distribution system, namely piping and valves.
- 11. Replacement of cooling tower fills, gear assembly & fan blade assembly.
- 12. Replacement of any equipment as a whole, *e.g.*, pumps, condenser, shell & tube chiller motors, AHU cooling coil for AHU, compressor etc.

EQUIPMENTS INCLUDED UNDER THE SCOPE OF THE ANNUAL MAINTENANCE CONTRACT

1.	Chilling unit	
	Make	Carrier LIMITED
	Capacity	60 TR chilled water A/C Plants
	Quantity	3 Nos.
2.	Cooling Tower	03 Nos.
3.	AHU's	5 Nos. fitted inside the
		exhibition hall at NSIC
		Exhibition Complex
4.	Condenser Pump Motor	3 Nos.
5.	Chiller pump motor	3 Nos.
6.	Other associated	1 lot
	items/electrical panel	
	related with operation	
	and maintenance of AC	
	Plant	

ANNEXURE "B"

PERIODICAL TESTING AND MAINTENANCE CHART OF AIR CONDITIONING PLANT INSTALLED AT NSIC EXHIBITION CENTRE

S.	System	Activity	Duration	Remarks
	Component			
1.	Chiller	 (i) Check refrigerant level, leak test with electronic leak detector. If abnormal, trace and rectify as necessary. (ii) Inspect level and conditions of oil. If abnormal, trace fault and rectify as necessary. Inform to engineer in charge in writing. (iii) Check the liquid line sight glasses for proper flow. (iv) Check all operating pressure and temperature. (v) Inspect and adjust, if required, all operating safety controls. (vi) Check capacity control. (vii) Visually inspect machine and associated components and listen for unusual sound or noise for evidence of unusual 	Monthly	
		conditions. (viii) Check lock bolts and chiller spring mount.		
		 (i) Perfom all functions for monthly check. (ii) Check all flanges for tightness (iii) Check oil temperature control. (iv) Check motor terminals Check connections in starter. 	Annually	

2.	Water Pumps	 i) Inspect all water pumps. ii) Check all seals, glands and pipelines for leaks and rectify the same as required. iii) Re-pack and adjust pump glands as necessary. iv) Check all pumps bearings and lubricate with oil or greaves as necessary. v) Check the alignment and conditions of all rubber couplings between pumps and drive motors and rectify as necessary. vi) Check all bolts and nuts for tightness and tighten as necessary. 	Monthly
3.	Expansion tank	 (i) Perform all function for monthly checks. (ii) Check motor earthing and connections wiring on each leg. (iii) Tighten motor terminals. (iv) Check starter contacts. (v) Test and calibrate overload setting. i) Inspect expansion tank, drain, clean as necessary. (ii) Flushing 	Annually Annually

4.	Air handling units and fan coil units	 (i) Inspect all air handling and fan coil units. (ii) Check all air filters and clean or change filters as necessary. (iii) Check all water coils, seals and pipelines for leakages and rectify the same as required. (iv) Check and re-calibrate modulating valves and controls. Adjust and rectify as necessary to ensure compliances to the original specifications. (v) Purge air from all water coils. (vi) Check and clean all the tension of all belt drives and adjust as necessary. (viii) Check and clean all the condensate pans, trays and drains. (ix) Coil to be cleaned by (a) spray of high-pressure clean water not exceeding 30 psi (b) With chemical spray, if necessary. 	Monthly
		 (i) Perform all functions for monthly checks. (ii) Tighten motor terminals. (iii) Check starter contacts. (iv) Test and calibrate overload settings. 	Annually

5.	Air distribution system	Check operation of all modulating and fixed dampers controlling air flow through units. Lubricate all damper bearings and linkages as necessary.	Annually
6.	Switch board	 (i) Clean and adjust all switch gear, contactors, relays and associated electrical equipments. (ii) Check and prove operation of thermal overload and protection devices. (iii) Check and ensure tightness of all equipment fastenings and cable terminations within switch board. (iv) Vacuum clean all switch board cubicles. 	Half yearly or Depends upon condition
8.	Piping system	 (i) Check all piping system for leaks and repair these where they have occurred. (ii) Check for damage & deterioration of insulation or sheathings. Rectify as necessary. 	Monthly
		The contractor shall carry out a complete system operability test on all the system or sub systems as called for in the contract. The purpose of the test is to verify that the performance of all the systems or sub- systems in the contract is in accordance to the specifications. The test shall be carried out in the presence of the Engineer-in-Charge or authorized representative of NSIC.	Annually

Annexure "C"

FINANCIAL BID

SCHEDULE OF QUANTITIES

S.	Description of work	Qty.	Rate (Rs.)	Amount
NO.			(In Figure	(Rs.)
			& words)	(In Figure)
1.	Maintenance (routine & preventive) and breakdown maintenance of the air conditioning plant comprising of Annual Maintenance Contract of 180 TR Screw type water cooled chilling units, air handling units, cooling towers, condenser pumps, chilled water pumps for a period of one year as per maintenance schedule attached. The spares required for maintenance of the systems (including replacement for the defective parts as detailed under head exclusions in annexure "A" shall be provided by the Corporation.	(for 12		
2.	Operational charges for running 3 x 60 TR AC plant by deputing suitable number of skilled operators during the exhibition days. It is expected that exhibition will be held for approx. 50 days during the year & operation period of the plant will be around 12 hrs a day.	50 day	Rate to be quoted for per day (12 hrs)	

AUTHORIZED SIGNATORY OF THE COMPANY WITH OFFICIAL SEAL