

केंद्रीय एसी संयंत्र के संचालन और व्यापक रखरखाव के लिए  
निविदा दस्तावेज (2x110 टीआर)

**TENDER DOCUMENT FOR OPERATION &  
COMPREHENSIVE MAINTENANCE OF CENTRAL AC  
PLANT (2X110 TR)**

राष्ट्रीय सहकारी विकास निगम (एनसीडीसी),  
4, सिरी इंस्टीट्यूशनल एरिया, हाँज खास, नई दिल्ली - 110016

**NATIONAL COOPERATIVE DEVELOPMENT CORPORATION**  
Plot no.4, Siri Institutional Area, Hauz Khas, New Delhi-110016

वेब साइट: <http://www.ncdc.in>  
Web Site: <http://ncdc.in>

निविदा की लागत:-निःशुल्क  
Cost of tender :- FREE

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राष्ट्रीय सहकारी विकास निगम  
4, सिरी इंस्टीट्यूशनल एरिया  
हौज खास, नई दिल्ली - 110016

संख्या:एनसीडीसी:9-4/99- सामान्य

दिनांक:05.12.2017

निविदा सूचना

1. एनसीडीसी कार्यालय भवन में केंद्रीय एसी प्लांट (न्यूनतम क्षमता 2x110TR) के संचालन और व्यापक रखरखाव के लिए ठेकेदारों/ फर्मों से जो कि अगले तीन सालों तक पर्याप्त संसाधन और कम से कम 3 वर्षों के समान कार्य का अनुभव रखते हों, से निविदाएँ आमंत्रित की जाती हैं। ठेकेदारों/ फर्मों के पास निम्नलिखित होना चाहिए :

(i) फर्म को केंद्रीय सरकार/ राज्य सरकार/ सरकारी क्षेत्र के उपक्रम/ स्वायत्त निकाय/ भारत सरकार के संलग्न या अधीनस्थ कार्यालय/ सांविधिक निकायों या निगमों/ ख्याति प्राप्त निजी संस्थानों में केंद्रीय एसी संयंत्र (न्यूनतम क्षमता 2x110TR) के संचालन और व्यापक रखरखाव का काम पिछले 3 वित्तीय वर्षों के दौरान किया हुआ होना चाहिए।

एएमसी के प्रत्येक वर्ष के लिए तीन समान पूर्ण कार्य जो कि रुपये 4.00 लाख से कम न हों  
या

एएमसी के प्रत्येक वर्ष के लिए दो समान पूर्ण कार्य जो कि रुपये 6.00 लाख से कम न हों  
या

एएमसी के एक वर्ष के लिए एक समान पूर्ण कार्य जो कि कुल खर्च रुपये 8.00 लाख से कम न हो

(ii) पिछले 3 वित्तीय वर्षों में प्रत्येक वर्ष के दौरान वार्षिक वित्तीय कारोबार कमसे कम रूपए 100.00 लाख का होना चाहिए।

(iii) जीएसटी, ईएसआई और पीएफ रजिस्ट्रेशन (नवीनतम चालान के साथ)।

(iv) ठेकेदार / फर्म का एक कार्यालय दिल्ली / एनसीआर में होना चाहिए।

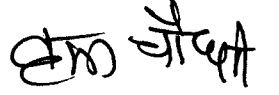
2. निविदा दस्तावेज (गैर-हस्तांतरणीय), एनसीडीसी कार्यालय से दिनांक 27.12.2017 तक किसी भी कार्य दिवस में 10:00 ए.एम. से 5:00 पी.एम. तक नि:शुल्क प्राप्त किया जा सकता है। निविदा दस्तावेज को एनसीडीसी की वेबसाइट [http // ncdc.in](http://ncdc.in) से भी डाउनलोड किया जा सकता है।

3. निविदा को (विधिवत में भरी हुई, हस्ताक्षरित और प्रत्येक पृष्ठ पर मुहर लगी हुई), सील कवर में दो लिफाफों में, यानि पूर्व अर्हता बोली और मूल्य बोली, राष्ट्रीय सहकारी विकास निगम (एनसीडीसी), प्लाट संख्या 4, सिरी इंस्टीट्यूशनल एरिया, हौज खास, नई दिल्ली (110016) में केंद्रीय एसी प्लांट (2x110TR) के संचालन और व्यापक रखरखाव के कार्य के लिए, दिनांक 28.12.2017 को अपराहन 3.00 बजे तक अधोहस्ताक्षरी के कार्यालय में प्रस्तुत किया जाना चाहिए। पूर्व अर्हता बोलियों को बोलीदाताओं / उनके प्रतिनिधियों की मौजूदगी में 28.12.2017 को अपराहन 3.30 बजे खोला जाएगा। केवल उन ठेकेदारों/ फर्मों की मूल्य बोली खोली जाएगी जिनकी पूर्व अर्हता बोली निविदा दस्तावेज में उल्लेख पात्रता मापदंडों के अनुसार स्वीकार्य होना पाया जाता है। समय और मूल्य बोली खोलने

की तारीख अलग से तय की जाएगी और फैक्स / फोन / ई-मेल के माध्यम से पात्र ठेकेदारों/ फर्मों को सूचित किया जाएगा।

4. "राष्ट्रीय सहकारी विकास निगम", नई दिल्ली के पक्ष में देय - निविदा बयाना राशि डिमांड ड्राफ्ट /पे ऑर्डर के रूप में रूपये 25,000/- (पच्चीस हजार रूपये) की राशि देनी होगी। बयाना राशि बिना निविदाओं को अस्वीकार कर दिया जाएगा।

5. निगम को यह अधिकार है कि वह किसी भी निविदा को स्वीकार या बिना कोई कारण बताए सभी निविदाओं को अस्वीकार कर सकता है।



कृष्ण कुमार  
कार्यकारी निदेशक (सा.प्र.)

**National Cooperative Development Corporation  
4, Siri Institutional Area  
Hauz Khas, New Delhi - 110016**

No.NCDC:9-4/99-Genl.

Dated:05.12.2017

**TENDER NOTICE**

1. Sealed tenders are invited for operation & comprehensive maintenance of Central AC Plant (minimum capacity 2x110TR) in NCDC office building for three years from the Contractors in line who possess adequate resources and at least 3 years experience of similar works and should have the following:

i) The firm should have carried out the work of operation and comprehensive maintenance of Central AC Plant (minimum capacity 2x110TR) in Central Govt./State Govt./Public Sector Undertaking / Autonomous Bodies/attached or subordinate offices of Govt. of India or statutory bodies or Corporations / private organisations of repute during the last 3 financial years.

Three similar completed works costing not less than Rs. 4.00 lakh for each year of AMC  
Or

Two similar completed works, costing not less than Rs.6.00 lakh for each year of AMC  
Or

One similar completed work of aggregate cost not less than Rs.8.00 lakh for one year of AMC

ii) Annual financial turnover of Rs. 100.00 lakh in each year during the last 3 financial years.

iii) GST, ESI and PF registration (with latest challans)

iv) The Contractor/ Firm must have its one office in Delhi / NCR.

2. Tender document (non-transferable) can be obtained from the NCDC office free of cost from 10.00 A.M. to 5.00 P.M. on any working day up to 27.12.2017. The tender document can also be down loaded from NCDC website <http://ncdc.in>.

3. The tender (duly filled in, signed and stamped on each page), containing two envelopes i.e. prequalification bid & price bid separately in sealed covers for said work of 'operation and comprehensive maintenance of Central AC Plant (2x110TR)' must be submitted to the office of the undersigned up to 3.00 P.M. on 28.12.2017 and the prequalification bids will be opened on the same date at 3:30 PM in the presence of bidders/their representatives. The price bid of only those firms shall be opened whose pre-qualification bid are found to be acceptable as per eligibility criteria mentioned in the tender document. The time and date of opening of price bid shall be fixed and intimated to the eligible firms separately.

4. The tender should be accompanied with earnest money amounting to Rs.25,000/- (Rupees Twenty five thousand only) in the form of demand draft in favour of "National Cooperative Development Corporation" and payable at New Delhi. The tenders without earnest money shall be rejected.

5. The Corporation reserves the right to accept any or reject the entire tender without assigning any reason thereof. The tenders without earnest money shall be rejected.



**(Krishan Kumar)**

**Executive Director (GA)**

पूर्व अर्हता बोली

**PREQUALIFICATION BID**

**Particulars of the firm/Contractor**

1. Name of the firm/ Contractor :- \_\_\_\_\_
2. Office address :- \_\_\_\_\_
3. Date of Incorporation (attach documents):- \_\_\_\_\_
4. Status of firm (Whether Pvt. Ltd Company/ Public Ltd Company/ Partnership Firm/ Proprietorship Firm):- \_\_\_\_\_
  - i) Telephone and mobile no. of contact person \_\_\_\_\_
  - ii) E-Mail & Fax No. \_\_\_\_\_
5. GST No. \_\_\_\_\_
6. PAN No. \_\_\_\_\_
7. Aadhaar Card No. \_\_\_\_\_
8. Details & Qualification of Professional / Skilled manpower available with the firm for execution of works (may attach a separate sheet) \_\_\_\_\_
9. Turnover in the last three years (Attach photocopies of balance sheet / accounts highlighting Turnover). Whether Firm has Annual Financial Turnover of at least Rs.100.00 lakhs in each year during last three consecutive financial years (Yes/ No):- \_\_\_\_\_.

	<u>Year</u>	<u>Turn Over</u>
i)	2016-2017	_____
ii)	2015-2016	_____
iii)	2014-2015	_____

10. Contact Details and Address of Contractor's/ Firm's \_\_\_\_\_  
Office in Delhi/ NCR \_\_\_\_\_
11. Whether registered with CPWD / railways or any State Govt. Indicating class of category \_\_\_\_\_
12. Earnest Money: - DD/ Pay Order No. \_\_\_\_\_ Date \_\_\_\_\_  
Bank \_\_\_\_\_  
Amount \_\_\_\_\_

I / We certify that the above information is true to the best of my / our knowledge and belief.

Signature of \_\_\_\_\_  
Authorized Person \_\_\_\_\_  
Name \_\_\_\_\_  
Address of the firm \_\_\_\_\_  
(with seal) \_\_\_\_\_

**(Please attach copy(s) of documents in support of above information)**

**DETAILS OF EXPERIENCE OF SIMILAR WORK OF OPERATION AND COMPREHENSIVE MAINTENANCE OF CENTRAL AC PLANT (minimum capacity 2x110TR) IN GOVT./PSU/GOVT. UNDERTAKINGS/PRIVATE ORGANIZATION OF REPUTE DURING LAST 3 FINANCIAL YEARS i.e. 2014-15, 2015-16, 2016-17 :( ATTACH RELEVANT DOCUMENTS IN SUPPORT)**

S.No.	Name & Address of the client	Details of the work	Work award cost	Date of completion		Reasons for delay, if any	Remarks
				As per contract	Actual		

Note: Please attach copies of work award letters and performance certificates as proof of above information

Signature of  
 Authorized Person \_\_\_\_\_  
 Name \_\_\_\_\_  
 Address of the firm \_\_\_\_\_  
 (with seal) \_\_\_\_\_



**ELIGIBILITY CRITERIA**

(i) The firm should have carried out the work of operation and comprehensive maintenance of Central AC Plant (minimum capacity 2x110TR) in Central Govt./State Govt./Public Sector Undertaking / Autonomous Bodies/attached or subordinate offices of Govt. of India or statutory bodies or Corporations / Private organization of repute during the last 3 financial years.

Three similar completed works costing not less than Rs. 4.00 lakh for each year of AMC

Or

Two similar completed works, costing not less than Rs.6.00 lakh for each year of AMC

Or

One similar completed work of aggregate cost not less than Rs.8.00 lakh for one year of AMC

ii) Annual financial turnover of Rs. 100.00 lakh in each year during the last 3 financial years.

iii) GST, ESI and PF registration (with latest challans)

iv) The Contractor/ Firm must have its one office in Delhi / NCR.

v). The Contractor/ Firm should deposit an EMD of Rs.25,000/- (Rupees Twenty five thousand only) in the form of demand draft/pay order of a scheduled/nationalized bank in favour of "National Cooperative Development Corporation" payable at New Delhi

**Authorised Signatory**

Name & Address.....  
of the firm.....  
with seal.....

## **Manning for Operation and Comprehensive Maintenance of Central AC Plant**

### **Manning**

Deploying one skilled and one semiskilled person for 8 hours per day basis as under:

- (i) Skilled : Having ITI trade certificate in electrical or mechanical trade with Minimum 3 years relevant experience.
- (ii) Unskilled : VIII standard passed with minimum 3 years relevant experience.

### **Terms & Conditions:-**

(a) The persons deployed by Contractor/ Firm should not have any Police records/criminal cases against them. The character and antecedents of each person of the Contractor/ Firm will be got verified by the Contractor/ Firm before their deployment after investigation by the local police, collecting proofs of identity like driving license, bank account details, previous work experience, proof of residence and recent photograph and a certificate to this effect submitted in the NCDC. The Contractor/ Firm will also ensure that the personnel deployed are medically fit and will keep in record a certificate of their medical fitness. The Contractor/ Firm shall withdraw such employees who are not found suitable by the office for any reasons immediately on receipt of such a request.

(b) There is no master & servant relationship between the persons/employees of the Contractor/ Firm and NCDC and further that the said person of the Contractor/ Firm shall not claim any absorption in NCDC.

(c) The persons deployed by the Contractor/ Firm shall not claim any benefit/ compensation/ absorption/ regularization of services from/ in NCDC under the provision of Industrial Disputes Act, 1947 or Contract Labour (regulation 7 Abolition) Act, 1970. Undertaking from the persons in this effect shall be required to be submitted to the Contractor/ Firm in NCDC.

(d) They shall also not divulge or disclose to any person, any detail of office, operation process technical know-how, security arrangements, administrative/organizational matters which they came across during performance of their official duties in NCDC.

(e) The persons should be polite, cordial, positive and efficient, while handling the assigned work. They shall not consume alcoholic drinks, paan, gutka, smoking, loitering without work. The Contractor/ Firm shall be responsible for any act of indiscipline on the part of persons deployed by him.

(f) That the persons deputed shall not be below the age of 18 years and they shall not interfere with the duties of the employees of NCDC.

(g) The Contractor/ Firm has to provide Photo Identity Cards and uniform to the persons employed by him/ her for carrying out the work. The persons will remain in uniform and constantly display identity cards during duty hours.

Name & Address.....  
of the firm.....  
with seal.....

(h) The Contractor/ Firm will be wholly and exclusively responsible for payment of wages to the persons engaged by it in compliance of all statutory obligations under all related legislations as applicable to it from time to time including Minimum Wages Act, Employees Provident Fund, Pension, ESI Act etc. and NCDC shall not incur any liability for any expenditure whatsoever on the persons employed by the Contractor/ Firm on account of any obligation.

(i) The Contractor/ Firm will be required to submit proof of submission of EPF, ESI etc. of previous months of its employees engaged in NCDC, a certificate to effect that the wages have been paid to the employees for the month as per the minimum wages of Govt. of NCT Delhi and also attendance of all the employees while raising monthly bill.

(j) No wage-remuneration will be paid to any staff FOR THE DAYS OF ABSENCE FROM DUTY.

(k) The Contractor/ Firm shall provide a substitute well in advance if there is any probability of the person leaving the job due to his/her own personal reason or on long leave. The payment in respect of the overlapping period of the substitute shall be the responsibility of the service provider.

(l) The rates of skilled person (Electrician) and semi skilled person shall be based on as per minimum wages of Govt. of NCT, Delhi (Labour Deptt.) as on date. Any increase in wages by the Govt. of NCT, Delhi (Labour Deptt.) from time to time, the same shall be reimbursed in the monthly bill on production of documentary proof in this regard.

(m) The Contractor/ Firm shall pay not less than the minimum wages prescribed under the Minimum Wages Act by Delhi Government to the workers engaged for the work.

(n) The Contractor/ Firm shall comply with all EPF; Pension, ESI formalities in respect of the persons engaged for the work in NCDC.

Authorised Signatory

Name & Address.....  
of the firm.....  
with seal.....

**Background and technical details etc. of the Central AC plant**

(I) The Central AC plant (2x110 TR) with all connected installations including strip heater banks in AHUs for winter season was installed in 1992. Subsequently in 2006-2007 cooling tower, both the condensers and all the AHUs have been got replaced. However, in the AHUs, the existing cooling coil and motor which were in good working condition have been retained. The technical details of the key equipments and other connected installations of the plant are given as under:

<u>S.No.</u>	<u>Brief Details</u>	<u>Qty. Installed</u>
1.	Compressor, Kirloskar 110TR-150HP Model : AC 1470	2 nos.
2.	Chillers (Batliboi)	2 nos.
3.	Condensers (Shell & tube type)	2 nos.
4.	Condenser's water pumps Beacon-20HP Model : Monobloc centrifugal	3 nos. (one standby)
5.	Chilled water pumps Beacon -10HP Model : Monobloc centrifugal	3 nos. (one standby)
6.	Cooling tower 250 TR FRP induced draught type With PVC fill & FRP basis	1 no.
7.	Air Handling Unit with 15HP motor at VI Floor	2 nos.
8.	Air Handling Unit with 10HP motor at II & IV Floor	4 nos.
9.	Air Handling Unit with 5HP motor in the basement	1 no.
10.	Heating strip banks in the AHUs	
i)	II F (E)/ II F (W) (6 Banks - 3 phase x 3KW each)	2 nos.
ii)	IV F (E)/IV F (W) (5 Banks - 3 phase x 3 KW each)	2 nos.
iii)	VI F (E)/ VI F (W) (6 Banks - 3 phase x 3 KW each)	2 nos.
iv)	Basement (3 Banks - 3 phase x 3 KW each)	1 no.
11.	AHU motor switch board and heating bank Control panel in the AHUs	7 nos.
12.	Control console (Basement)	1 no.
13.	Main L.T. Panel (for Central AC plant) with incoming 800 Ampere Air Circuit Breaker and Outgoing switch fuse units for various equipments, Change over switch and control wiring etc.	1 no.
14.	Connecting bus duct & 800Ampere Isolator for L.T. panel	1 no.

- 15. Chilled water/ condenser water pipe lines, Insulation and valves & controls etc. Lot
- 16. Power wiring, cable trays, control wiring etc. for the above equipments Lot
- 17. Ducting, grills and duct insulation Lot

(II). Spaces to be air conditioned are as follows

	Area (Sq.mtr.)	
	East Wing	West Wing
- 1 <sup>st</sup> Floor	238	238
- 2 <sup>nd</sup> Floor	238	238
- 3 <sup>rd</sup> Floor	238	238
- 4 <sup>th</sup> Floor	238	238
- 5 <sup>th</sup> Floor	238	238
- 6 <sup>th</sup> Floor	238	238
- 7 <sup>th</sup> Floor	213	213
- Basement		207

(III).	<u>Outside Design conditions ( ° C)</u>		<u>Inside design conditions</u> (around the year)- Dry bulb]
Summer	43.3	DB	Temp. 24+1.1 ° C
	23.9	WB	
Monsoon	35.0	DB	65% max.
	28.3	WB	
Winter	7.2	DB	
	5.0	WB	

(IV) Fresh Air Changes:

One air change per hour for all areas except for 6<sup>th</sup> Floor (East Wing) for which fresh air shall be 1.5 air changes per hour.

Authorised Signatory

Name & Address.....  
of the firm.....  
with seal.....

## SCOPE OF CONTRACT

The scope of contract covers operation, day-to-day running and comprehensive maintenance of the AC plant for 3 years.

### **(A) OPERATION PART**

- i) **STAFF:** The operating staff will consist of two persons (a) one skilled person with minimum 3 year relevant experience and having valid ITI Trade (mechanical or electrical) certificate from a recognised institution. (b) One semiskilled person with minimum 3 years relevant experience.
- ii) **OPERATING HOURS:** The plant has to be run so as to have effective air conditioning on all working days from 9.00 A.M. to 5.30 P.M. However, to ensure proper conditioning, the plant has to be started even earlier, depending upon the weather conditions and other arising need.
- iii) **CHECKING OF THE PLANT BEFORE STARTING:** The operating staff, before running the plant shall carry out necessary checks for sufficient water in the cooling tower, water make up tank, proper supply voltage and general condition of the plant. Any abnormal condition/fault or inconformity etc. shall be recorded in the log book and brought to the notice of the engineer in charge immediately and necessary corrective measures be taken in consultation with the Engineer in charge or other concerned officials.
- iv) **MAINTENANCE OF THE LOG BOOK:** A log book in proper format shall be maintained by the contractor and all the operations/ observations etc. shall be recorded. The log book shall be shown and countersigned by the Engineer-In-Charge or his representative on each day. All the repair works etc. carried out in the plant/AHUs shall be mentioned in the job card already in position in the plant/AHUs and advance information to this effect shall be given to Engineer-In-charge or his representative. Besides, monthly and annual inspection and service etc. shall also be carried out as per maintenance schedule at Annexure-IV.

### **(B) MAINTENANCE:**

The maintenance contract is comprehensive which includes day-to-day maintenance, preventive maintenance, security arrangements and maintaining required gas pressure in the compressors including filling of gas in case of leakage etc., changing of compressor oil, lubricating the bearings and repair/replacement of all worn out parts of the AC plant. All the labor, material, tools equipment & plants etc. required for upkeep, running safety, both stated as well as implied in the maintenance of the plant including cleaning of plant, plant room, AHU rooms, etc. are deemed to have been included in the scope of work, whether these have been specifically mentioned or not in the tender document. However, power cables, cable tray, MS piping for condenser/chiller water line and butterfly valves requiring replacement due to ageing/normal wear & tear are not included in the scope of this work. Also any kind of civil work and creation of new infrastructure is not included in the scope of work. The brief description of key elements is given as under:

- i) **ELECTRICAL:** Periodical check up and repair of the 800 Ampere Isolator, bus duct, L.T. panel with 800 Ampere Air Circuit Breaker, control console and AHU panels including control wiring etc. The work includes replacement of HRC fuses, control fuses indicating lights, contractors, overload relays, switch fuse units etc. as required. The repair/ rewinding/ replacement of ball bearings, mounting bases in ground etc. of the motors of the compressors, cooling tower, AHUs, chilled water pumps and condenser water pumps, as also replacement of strip heaters, thermostat, connecting wiring (excluding replacement of power cables & cable tray) are also integral part of the work contract.
- ii) **OVERHAULING OF MAJOR EQUIPMENTS:** The overhauling/repair of the major equipments viz. compressors (Kirloskar), FRP cooling tower, chillers and condensers (Batliboi/Patel Airtemp) will be carried out at least once a year before summer as per the maintenance manual and guidelines of the respective manufacturers. The work also includes periodical checking of refrigerant/safety devices such

as H.P. /L.P. cutouts, thermostats, solenoid valves, gauges, thermometers etc. Descaling of chillers/ condensers, cleaning and replacement of worn out distribution pipes, fills, strainers, splash, cups etc. and overhauling/ repair/ rewinding of fan motor of the cooling tower (as the case may be) will also be required to be carried out before summer to ensure proper flow/distribution of water.

iii) AHUs: The maintenance of AHUs includes periodical cleaning of air filters every fortnightly, tightening, replacement of worn out set of V belts, replacement of worn out bearings, periodical overhauling/repair/rewinding of blower motors, OH tanks with fittings and all insulated/ non-insulated pipes etc., proper drainage of condensed water, repair of drain pipes, descaling of cooling coils before summer season and in between as and when required, proper placement of anti vibration pads and replacement of the same to check vibrations on the floors near AHUs.

iv) DUCTING: Cleaning of supply air and return air ducts on various floors at least once in a month and setting of dampers and air grills to achieve required air flow and checking the same with flow meter, as and when required shall be attended and relevant reports shall have to be produced to owner.

v) PIPING: Proper maintenance/ repair of valves, drain pipe, pipe supports on ground (including concrete base) and in ceiling and making good of the insulation of chilled water pipes/pumps/chillers etc.

vi) PAINTING: Two or more coats of enamel paint of approved shade and make on all equipments, accessories, pipes and pipe fittings will be done during the currency of the annual contract. (Outdoor – once in a year and indoor – once in two years)

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**Maintenance schedule for monthly/annual inspection & services etc.**

<b>Chiller</b>	Monthly Inspection and Service	<ol style="list-style-type: none"> <li>1. Check refrigerant level, leak test with electronic leak detector, if abnormal, trace and rectify as necessary, inform department in writing on the rectification.</li> <li>2. Inspect level and condition of oil. If abnormal, trace fault and rectify as necessary. Inform department in writing on the rectification.</li> <li>3. Check all operating pressure, temperature, liquid line sight glasses for proper flow.</li> <li>4. Inspect and adjust, if required, all operating safety and capacity controls.</li> <li>5. Lubricate vane/linkage/bearings.</li> <li>6. Visually inspect machine and associated components, and listen for unusual sound or noise for evidence of unusual conditions.</li> <li>7. Check lock bolts and chiller spring mount.</li> <li>8. Review daily operating log maintained by department's operating personnel.</li> <li>9. Providing written report to Department, outlining services carried out, adjustment made, rectification carried out and if the deficiency is of a major nature, arrange with department for shut down to rectify equipment.</li> </ol>
	Annual Inspection	<ol style="list-style-type: none"> <li>1. Perform all functions for monthly check</li> <li>2. Check oil temperature control, motor terminals, connections in starter and all flanges for tightness,</li> <li>3. Change oil in oil sump and Replace filters.</li> </ol>
<b>General</b>		<p>Please note that oil filter gasket replacement shall deem to be included in the contract.</p> <ol style="list-style-type: none"> <li>1. Check motor earthing, meggar motor, connection wiring on each leg, motor temperature cut-out, starter contacts, arc shield, transformer and tighten motor terminals.</li> <li>2. Check dashpot oil, clean dashpot and replace oil when necessary.</li> <li>3. Test and calibrate overload setting.</li> <li>4. Inspect, calibrate and adjust to original specifications all gauges, safety and operating controls including low temperature and high pressure cutout, oil pressure switch, load limit relay and electrical interlocks.</li> <li>5. For water cooled condenser systems, inspect condenser tubes for fouling. If fouling exceeds original specifications, the contractor shall carry out cleaning of the tubes at his own expense.</li> </ol>
<b>Water pumps</b>	Monthly Inspection	<ol style="list-style-type: none"> <li>1. Inspect all water pumps and check all seals, glands and pipelines for leaks, re-pack &amp; adjust pump glands and rectify all as necessary.</li> <li>2. Check all pump bearings and lubricate with oil or grease as necessary</li> <li>3. Check the alignment and condition of all rubber couplings between pumps and drive motors and rectify as necessary</li> <li>4. Check all bolts and nuts for tightness and tighten as necessary</li> </ol>
	Annual Inspection	<ol style="list-style-type: none"> <li>1. Perform all function for monthly checks</li> <li>2. Check motor earthing, starter contacts, meggar Motor and connection wiring on each leg.</li> <li>3. Tighten motor terminals, Test and calibrate overload setting</li> </ol>
<b>Expansion tank</b>	Annual Inspection	<ol style="list-style-type: none"> <li>1. Inspect expansion tank, Drain, clean and flush out tank as necessary</li> </ol>
<b>Air handling units</b>	Monthly Inspection	<ol style="list-style-type: none"> <li>1. Inspect all air handling units and check all air filters and clean or change filters as necessary.</li> <li>3. Check all water coils, seals and pipelines for leaks and rectify as necessary</li> <li>4. Check and re-calibrate modulating valves and controls. Adjust and rectify as</li> </ol>



<b>Air handling units</b>		necessary to ensure compliance to the original specifications. 5. Purge air from all water coils. 6. Check all fan bearings and lubricate with grease as necessary. 7. Check the tension of all belt drives and adjust as necessary. 8. Check and clean all the condensate pans, trays and drains. 9. Check measure and re-calibrate all sensors if necessary. 10. Check, clean and service smoke detectors. Carry out a system test to ensure that the smoke detector will trip the AHU's. 11. Check spring vibration isolators for abnormal vibration. Rectify if necessary. 12. Coil to be cleaned by (a) spray of high-pressure clean water (not exceeding 30 psi (b) with chemical spray, if necessary.
	Annual Inspection	1. Perform all functions for monthly checks. 2. Tighten motor terminals, Check starter contacts, Test and calibrate overload settings.
<b>Switch board</b>	Six-monthly and annual Inspection	1. Clean and adjust all switch gear, contactors, relays and associated electrical equipment at intervals not exceeding six months. 2. Check, ensure and prove operation of thermal over load and protection devices, tightness of all equipment fastenings and cable terminations within switch boards. 3. Vacuum clean all switch board cubicles.
<b>Piping system</b>	Monthly and annual Inspection	1. Check all piping system for leaks and repair these where they have occurred. 2. Check for damage and deterioration of insulation of sheathings. Rectify as necessary

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## TERMS & CONDITIONS

### 1. SUBMISSION AND OPENING OF TENDERS

i) The tender documents are in two parts i.e. Prequalification Bid & Price Bid. The tenders are to be submitted in two envelopes as under:

A) First envelop: containing Prequalification Bid and earnest money of Rs.25,000/- in the form of demand draft/pay order of a scheduled/ nationalized bank in favour of 'National Cooperative Development Corporation' payable at New Delhi.

B) Second envelop : Price bid – Performa for quoting rates (Annex.-V)

ii) The officer opening the tender shall first open the envelope containing Prequalification Bid and earnest money. If the earnest money is found to be in order, only then the officer shall proceed further. In case the Earnest money is not deposited or found not in order, the tender shall stand rejected.

iii) The price bid of only those firms shall be opened whose Prequalification bid are found to be acceptable. The price bids will be opened on specified date & time (which will be intimated to the Contractors/ Firms whose Prequalification bid has been found acceptable), in the presence of the representatives of the Contractors/ Firms who wish to be present.

iv) Scrutiny / evaluation of the Prequalification bids shall be done by the department in consultation with any agency as deemed necessary. In case it is found that the Prequalification bid of a Contractor/ Firm is not in line with tender specifications, requirements and/or contains many deviations, the department reserves the right to reject the Prequalification bid of such firm (s) without making any reference to the Contractor/ Firm(s).

v) The Contractor/ Firm will have to fill up their rates only in the price bid issued by the department. Tenders in which the price bids are given in any other format are liable to be rejected. The abstract of cost will be required to be filled & signed.

vi) Conditional tender will not be accepted and will be rejected. The tender other than in the prescribed format shall also be rejected. In case any Contractor/ Firm mentions any condition including conditional rebates in their price bid, tender shall be rejected forthwith. Submission of two price bids or in any other format will lead to rejection of tender.

vii) A Contractor/ Firm will also not be allowed to withdraw or modify any condition at a time after the technical bids have been accepted and the decision to open the price bid has been taken by the department.

viii) The department reserves the right to reject any or all the tender and call for fresh prices/tenders as the case may be without assigning any reason.

ix). The tender should be duly filled and signed on each page and submitted along with the following document:-

(a) Attested/ photocopy of Aadhaar GST, ESI, and PF registration issued by the appropriate authority.

(b) Bank draft for EMD.

(c) Attested/ photocopy of Experience certificate and Balance sheets for Annual Financial turnover.

(d) Copy of Address proof.

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x) The corporation will not provide any statutory forms/ road permits if required by the Contractor/ Firm.

2. EARNEST MONEY

The tender should be accompanied with earnest money amounting to Rs. 25,000/- (Rupees Twenty five thousand only) in the form of demand draft in favour of 'National Cooperative Development Corporation' payable at New Delhi. THE TENDERS WITHOUT EARNEST MONEY SHALL BE REJECTED. No interest will be paid on Earnest money deposit on what so ever grounds & reasons. EMD will be refunded to unsuccessful Contractor/ Firm after award of work to successful Contractor/ Firm. EMD of successful Contractor/ Firm will be adjusted against the security deposit amount to be deposited with NCDC.

3. ACCEPTANCE AND EXECUTION OF AGREEMENT

After receiving the confirmed offer from NCDC, the Contractor will give his acceptance and execute an agreement on stamp paper of requisite value within ten days from the date of receiving the confirmed order. IN CASE THE CONTRACTOR FAILS TO EXECUTE THE AGREEMENT WITHIN TEN DAYS AS ABOVE, THE OFFER FOR THE WORK IS LIABLE TO BE CANCELLED AND THE EARNEST MONEY SHALL BE FORFIETED. In such particular case, the owner is free to award the offer to other party. Please note that the Scope of Work and terms & conditions etc. will form part of the agreement.

4. INDEMNITY

The successful Contractor/ Firm shall at all times indemnify the department, consequent on this work contract. The successful Contractor/ Firm shall be liable, in accordance with the Indian Law and Regulations for any accident occurring due to any cause and the contractor shall be responsible for any accident or damage incurred or claims arising there from during the contract period.

5. VALIDITY

Tenders shall be valid for acceptance for a period of 90 days from the date of opening.

6. TERMS OF PAYMENT

The payment will be made by Cheque/NEFT/RTGS on monthly basis, after completion of each month and on production of bill by the contractor. No advance payment will be considered for the said work.

7. SECURITY DEPOSIT/PERFORMANCE GUARANTEE

An amount of 10% of the 3<sup>rd</sup> year's rates will be deposited in the form of demand draft in favour of NCDC payable at Delhi, at the time of execution of agreement by the successful Contractor/ Firm towards security deposit/performance guarantee. The security deposit will be refunded after completion/termination of the contract, as the case may be. No interest will be paid on security deposit amount.

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8. RATES

The rates quoted by the Contractor/ Firm, shall be firm and final for 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> year of the contract including increase in wages etc. during the contract period. The rates shall be inclusive of all taxes (including GST etc.), duties levies, octroi, labour cess etc. as applicable on date of submission of tender. Imposition / withdrawal of any taxes/duties by way of statutory increase/ decrease in taxes after the date of signing of the Agreement shall be reimbursable or refundable to owner as the case may be on production of necessary written evidences, vouchers and details.

9. PENALTY FOR NOT DEPLOYING OF MAN POWER

In case if not deploying skilled/ semiskilled manpower as given in the scope of work, a penalty will be imposed on the contractor/ Firm as under:

For First 15 days

- i) For not deploying skilled person - Rs. 300/- per shift
- ii) For not deploying semiskilled person - Rs. 200/- per shift

For next 15 days to maximum 30 days

- i) For not deploying skilled person - Rs. 600/- per shift
- ii) For not deploying unskilled person - Rs. 400/- per shift

After 30 days the said Annual Maintenance Contract will be terminated by giving 15 days notice & Security deposit amount will be forfeited. No claim in this regard shall be entertained.

10. CONTRACT PERIOD

The contract shall be for a period of 3 years on the rates quoted by the firm. After expiry of 3 years the contract can be extended on the same rates and terms & conditions as mentioned in tender document, depending upon the services provided by the Contractor/ Firm are found to be satisfactory and on the mutual consent of NCDC and the successful Contractor/ Firm. In case the services rendered by the firm are not found satisfactory, the contract can be terminated by giving single notice of 15 days, at any time of the Contract.

11. TERMINATION OF THE CONTRACT

In case the services rendered by the firm are not found satisfactory, the security deposit is liable to be forfeited and said Annual Maintenance Contract will be terminated by issuing single notice of 15 days. At the time of termination/expiry of the said Annual Maintenance Contract, the contractor shall hand over the entire systems/ installations/ equipment as mentioned in Annexure-III with specified standard conditions of various equipments and in good running condition.

12. HANDING OVER OF THE INSTALLATION AT THE TIME OF TERMINATION/EXPIRY OF THE CONTRACT

At the time of termination or expiry of the contract, as the case may be, the contractor shall handover the systems/installations/equipment with specified standard conditions and free from any defect. In case of failure with this clause, the work of bringing the systems/installations/equipment to normal working conditions will be got done by NCDC at the risk and cost of the contractor. And the amount so incurred will be recovered from the security deposit or any dues of the contractor available with the Corporation.

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### 13. ARBITRATION

Except where otherwise provided in contract all questions and disputes relating to the meaning of the specifications (technical, general), schedule of quantities, designs, drawings and instructions herein before mentioned and as to the quality of workmanship and materials used on the work as to any other question, claim or right, matter or thing, whatsoever in any way arising out of or relating to the contract, design, drawings, specifications, estimates, instructions, orders or these conditions or otherwise concerning the works or the execution or failure to execute the same whether arising during the progress of the work or after completion or abandonment thereof shall be referred to the sole Arbitration of the person appointed by the Managing Director, NCDC. If the Arbitrator to whom the matter is originally referred, has been transferred or is vacating his office or is unable to act for any reason then Managing Director, NCDC at the time of such transfer, vacating office or inability of the Arbitrator to act shall appoint another person to act as Arbitrator in accordance with the terms of the contract. Such person shall be entitled to proceed with the reference from the stage at which it was left by his predecessor. It is also a term of this contract that no person other than a person appointed by the Managing Director, NCDC should act as Arbitrator and if for any reason, this is not possible, the matter is not to be referred to Arbitration at all. In all cases where a total amount of the award exceeds Rs.1,00,000/- the Arbitrator shall give reason for the award. Subject to as aforesaid the provisions of the Arbitration and Conciliation Act, 1996 or any statutory modifications or re-enactment thereof and the rules made there under and for the time being in force shall apply to the Arbitration proceedings under this clause.

It is also a term of the contract that the party invoking Arbitration shall specify the dispute to be referred to Arbitration under this clause together with the amount or amounts claimed in respect of each such dispute. The award of the Arbitrator shall be final and binding on both the parties.

It is also a term of the contract that if the contractor does make any demand for arbitration in respect of any claim in writing within thirty days of receiving the instructions from the owner that the bill is ready for payment, the claim of the contractor will be deemed to have been waived and absolutely barred and the owner shall be discharged and released of all liabilities under the contract in respect of these claims.

The Arbitrator may from time to time with consent of the parties enlarge the time for making and publishing the Award.

The Arbitrator shall give a separate award in respect of each dispute of difference referred to him. The venue of Arbitration shall be Delhi and only Delhi Court will have jurisdiction in the matter.

The fees, if any, of the Arbitrator shall be required to be paid before the award is made and published and will be paid equally by the parties. The costs of the reference and of the award including the fees, if any, of the Arbitrator shall be at the discretion of the Arbitrator.

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PRICE BID

Performa for quoting ratesManning, Operation & Comprehensive maintenance of Central AC plant (2x110 TR) at etc.

S.No.	Description of item	Amount (First year)	Amount (Second year)	Amount (Third year)
1.	Operation & Comprehensive maintenance (routine & preventive) and break down maintenance of Central AC Plant (2 x 110 TR) as per the scope of contract and guidelines and terms & conditions etc. given in the tender.			
	Contractor's/ firm's profit, overheads and Administrative charges			
	GST in percentage in respect of Operation & Comprehensive maintenance			
	<b>Total (1)</b>			
2.	<b>Manning:</b> - Deploying one skilled person (ITI trade in Mechanical or Electrical) and one Semi skilled person on 8 hours per day duty as per minimum wages of Govt. of NCT as on date.	Number. of months per person per year	Rate per person per month	Amount
	a) Skilled	12 months		
	b) Semi skilled	12 months		
	Employees Provident Fund Contribution (in percentage per person applicable as on date)			
	a) Skilled			
	b) Semiskilled			
	Employees State Insurance Contribution (in percentage per person applicable as on date)			
	a) Skilled			
	b) semiskilled			
	<b>Total for manning</b>			
	Contractor's/ firm's profit, overheads and Administrative charges in percentage in respect of Manning job.			
	GST in percentage in respect of Manning job.			
	<b>Total (2)</b>			
	<b>Total AMC Amount for First year: Total (1) for first year + Total 2</b>			
<b>Total AMC Amount for Second year: Total (1) for second year + Total 2</b>				
<b>Total AMC Amount for Third year: Total (1) for third year + Total 2</b>				

Amount in words (i) First year:- \_\_\_\_\_  
(ii) Second year:- \_\_\_\_\_  
(iii) Third year:- \_\_\_\_\_

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