

TENDER

FOR

**OPERATION & ANNUAL MAINTENANCE CONTRACT
OF CENTRAL AIR CONDITIONING PLANT AT
PUNJAB NATIONAL BANK, UNITED TOWER
BUILDING, 11 HEMANT BASU SARANI, KOLKATA –
700001**

GAD, 4th Floor, United Tower Building,
Punjab National Bank,
11, Hemant Basu Sarani,
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1. Bid Details

1.	Tender Reference	ZOKOL/ZAC/United Tower/2021/01
2.	Date of commencement of Tender download	13.12.2021 from 1000 hrs
3.	Last date and time of acceptance of queries	20.12.2021 till 1700 hrs
4.	Last date and time downloading tender	27.12.2021 till 1500 hrs
5.	Bid preparation and Hash Submission	27.12.2021 till 1500 hrs
6.	Last Date for Bid Submission and re-encryption	27.12.2021 – 1601 Hrs to 28.12.2021 till 1400 hrs.
7.	EMD & Technical Bid opening	28.12.2021 from 1500 hrs
8.	Cost of Tender Document	₹5,900/- (non-refundable) in the form of Demand Draft in favour of Punjab National Bank.
9.	Earnest Money Deposit Amount	NIL, Bidder to sign the Bid Security declaration form as per format given in tender document
10.	Estimated Cost of Project	₹35.42 Lakhs (INR Thirty Five Lakh and Forty Two Thousand Only) plus GST, as applicable.
11.	Place of opening of Bids	GAD, 4 th Floor, United Tower Building, Punjab National Bank, 11, Hemant Basu Sarani, Kolkata – 700001
12.	Contact Details	Ashish Kumar, Sr. Manager (Electrical Engineer) GAD, 4 th Floor, United Tower Building, Punjab National Bank, 11, Hemant Basu Sarani, Kolkata – 700001 Email:- zokolgad@pnb.co.in/ ashish.pnbmail@gmail.com <u>Mob: 0775202729</u>

Bank shall follow the e-procurement process. Complete details of requirements for participation in e-procurement process are available on the Website of Punjab National Bank <https://etender.pnbnet.in/>. **It is mandatory for the bidder to get himself registered on bank's Website for submission of online bids.**

2.

Purpose of Tender

Punjab National Bank is having United Tower Building located at 11, Hemant Basu Sarani, Kolkata - 700001. The United Tower Building, which houses Zonal Office: Kolkata and various other Offices, is a 17 storied (G+16) building having built-up area of about 2,56,000 sqft and about 700 Bank's staff/ officials.

2. The Building has 690TR Central Air Conditioning Plant installed comprises of six water chilling units. Each water chilling unit comprises DX Cooler, Condenser, Compressor, Condenser and chilled water circulating pumps (14 nos). In addition to this, 22 number of Air Handling Units with blower motors are installed at various floors and two number of cooling towers of 350 TR capacity and one number of cooling tower of 250TR capacity are installed at roof top and condenser water & chilled water pipelines are installed from ground floor to 17th floor.

3. Now, the Bank intends to execute contract, non-comprehensive in nature, for the job of routine Operation & Maintenance, Annual Overhauling/ Recommissioning and Repair and Replacement of Parts of the Central AC Plant and Unitary ACs through OEM/ reputed/ expertise vendors for seamless operation of the system.

PUNJAB NATIONAL BANK

3. Eligibility Criteria

a. The Bidder should possess the requisite experience, resources and capabilities in providing the services necessary to meet the requirements, as described herein. The Bidder should also possess the technical know-how and the financial wherewithal that would be required to execute the scope of work. The Bid must be complete in all respects and should cover the entire scope of work as stipulated in the document. Bidders not meeting the Eligibility Criteria will not be considered for further evaluation and bid submitted by them shall be summarily rejected.

b. The bid is open to OEM, OEM authorized vendors/ dealers/ contractors proficient in the field of Operation & rendering AMC services of Centralized Air Conditioning System with water cooled chillers.

c. This invitation of bids is open to all experienced contractors, reputed firms (proprietary/ partnership/ LLP), company/ organization registered in India under Companies Act, provided they fulfil the minimum eligibility criteria as below. **Consortium/ Joint Ventures and Special Purpose Vehicles** are not eligible for the tender and the bid, if any, submitted by them shall be summarily rejected. The proposal not complying with minimum eligibility criteria, as enumerated below, will be rejected summarily and will not be considered for evaluation of technical bid. The proposal should adhere to following eligibility criteria:

<u>S. No</u>	<u>Minimum Eligibility Criteria</u>	<u>Documents to be Submitted for Proof</u>
1.	The Bidder should be OEM or OEM authorized vendors of chiller plants & dealers/ contractors proficient in the field of Operation & rendering AMC services of Centralized Air Conditioning System with water cooled chillers for a minimum period of 7 years as on 30 th November, 2021 with Central/ State Government Department/ Central Autonomous Body/ Central Public Sector Undertaking/ City Development Authority/ Municipal Corporation of City formed under any Act by Central/ State Government and published in Central/ State Gazette/ Scheduled Commercial Banks or its subsidiaries/ Private organizations (Firm/ Company must be listed in National Stock Exchange / Bombay Stock Exchange) .	Valid Letter of authorization from OEM for undertaking supply spares/ servicing/ maintenance of chillers, shall be submitted by the bidder. OEM is not required to submit this document.
2.	The bidder should have satisfactorily completed either of following (S. No. i–iii) similar work order during last 7 (Seven) years ending last day of the month of Nov' 2021. i. One similar completed work of minimum ₹33.40 Lakhs in one year (equal to 80% of Tender estimated cost) OR	Work order copies along with the completion certificates from the client to be submitted in 7-year experience. In case the similar work/s is of private nature other than Central/ State Government/ Central Autonomous Body/

Operation & Annual Maintenance Contract of Central Air Conditioning Plant at Punjab National Bank, United Tower Building, 11 Hemant Basu Sarani, Kolkata – 700001

	<p>ii. Two similar completed works of minimum ₹20.90 Lakhs in one year (equal to 50%.of Tender estimated cost)</p> <p style="text-align: center;">OR</p> <p>iii. Three similar completed works of minimum ₹16.72 Lakhs in one year (equal to 40% of Tender estimated cost)</p> <p><u>Definition of Similar Work for above:</u> Operation and Maintenance Contract work of water cooled centralized air conditioning system under single agreement for one year. Cumulative works executed under rate contract shall not be treated as one work. Components of work executed other than those included in definition of similar shall be deducted while calculating cost of similar work. Bidder shall submit abstract of cost of work in support of this. The value of executed works shall be brought to current costing level by enhancing the actual value of work at simple interest of 7% per annum, calculated from the date of completion to the last date of receipt of application for tender.</p>	<p>Central Public Sector undertaking/ City Development Authority/ Municipal Corporation of city, they shall be required to submit T.D.S. certificates/ Bank Account Statement for such works issued by respective Clients.</p>
3.	The applicant should be an assessee of Income Tax and must possess GST No.	Copy of the latest income tax return, PAN, GST Registration Certificate.
4.	The minimum average annual turnover of Bidder for the last three financial years i.e. 2018-19, 2019-20, 2020-2021** must not be less than ₹12,54,000/-. Bidder has to upload audited Balance sheet and Profit & Loss statement details for these financial years.	<p>1) Audited Balance Sheet and P & L Account for the three years mentioned.</p> <p>2) Certificate from Chartered Accountant certifying the turnover of last three financial years i.e. 2018-19, 2019-20, 2020-2021**.</p>
5.	The Bidders desirous of quoting should have a permanent office in Kolkata Zone.	Copy of valid address proof for office in Kolkata Zone.
6.	The bidder should not have been black-listed/ barred by any Public Sector Bank, RBI or IBA or any other Government/ PSU agencies.	An undertaking on Non-judicial stamp Paper of ₹100/- in this regard is to be submitted to Bank by Bidder.

d. In case of OEM of Chillers, the criteria mentioned in Sl 1 & 2 are not mandatory.

** In case, the company/ bidder does not have the audited Balance Sheet for period ending March 2021, provisional balance sheet certified by their Statutory Auditors will be acceptable.

Note: The bidder must submit the Compliance Statement failing which the bids may not be taken for further evaluation.

- e. Proposal of vendor who do not fulfil the above criteria or who fail to submit documentary evidence thereon would be rejected.
- f. The Bidder has to upload scanned and legible copies of all the supporting documents in respect of Eligibility criteria on e-procurement Website of the bank i.e. <https://etender.pnbnet.in/> for its scrutiny.
- g. The Bank reserves the right to independently verify the authenticity of the documents submitted/ claims made by the bidder, and may also ask for presenting the original copy of the submitted document(s). Further, on such verification, if it is found that the bidder has made false claims, submitted forged documents, etc., the bid shall be liable for outright rejection, notwithstanding other rights available under the tendered Terms and Conditions for taking actions against the bidder, as deemed fit by the Bank.
- h. The Bank reserves the right to seek for any additional information and also reserves the right to reject or accept the bid of a bidder, if in the opinion of Bank, the qualification data is incomplete or the bidder is found not qualified to satisfactorily execute the requirements of the project and no communication shall be entertained in this regard in future.
- i. Bidder must submit documentary evidence in respect of all above mentioned criteria while submitting the proposal. Proposal of bidder who do not fulfil the above criteria or who fail to submit documentary evidence thereon would be rejected.
- j. Bidder has to upload scanned and legible copies of all supporting documents on Bank's e-procurement website <https://etender.pnbnet.in/> for its scrutiny.
- k. To become eligible for submission/uploading, the bidder shall have to furnish an affidavit (on stamp paper of ₹100/- Non-judicial stamp paper) as under):

"I hereby certify that the firm has not been blacklisted by any central / state Govt. / Public undertaking / institute on any account during last 3 years.

I also certify that the above information is true and correct and in any case, at any stage of contract if it is found that any details provided above is incorrect the executed contract with our firm & any other contract given to the above firm may be summarily terminated and bank will take any necessary legal action in this regard the firm blacklisted."

"I/ We undertake and confirm that eligible similar work(s) has/ have not been got executed through another contractor on back to back basis. Further that, if such a violation comes to the notice of the Bank, then I/ we shall be debarred for bidding in PNB in future forever. Also, if such violation comes to the notice of the Bank before date of start of work, the Bank shall be at liberty to forfeit the entire amount of Earnest Money Deposit/ Performance Guarantee."

4. Notice Inviting Tender

Online tenders are invited on behalf of Punjab National Bank from experienced contractors, reputed firms (proprietary/ partnership/ LLP) or a company/ registered in India under Companies Act, who fulfil the eligibility criteria mentioned in the tender documents for **Operation & Annual Maintenance Contract of Central Air Conditioning Plant at Punjab National Bank, United Tower Building, 11 Hemant Basu Sarani, Kolkata – 700001** against Payment of ₹5900/- (non-refundable towards cost of tender and inclusive of GST @ 18%) in favour of Punjab National Bank payable at Kolkata and Earnest Money Deposit (EMD) shall be in the form BID SECURING DECLARATION FORM-D in two envelope system containing (1) Technical Bid (2) Commercial bid. **MSME bidders are exempt from submitting Tender Fee/ Cost in accordance with Govt. of India guidelines on the subject. However, such bidders must submit proof of being registered as MSME with Govt of India. Such registration must have been obtained prior to floating of Tender/ Bid Document. Such registration must have been obtained prior to floating of RFP i.e** Where Tender Fee/ EMD/ Bid Securing Declaration Form is not enclosed, attested copy of the Registration document by the bidder indicating Registration as MSME must be enclosed. In case of signature by authorized signatory, Board Resolution indicating authorization of such person must be enclosed. The bid is invited in two envelope system containing (1) Technical Bid and tender cost fees and EMD/ BID SECURING DECLARATION FORM-D (2) Commercial bid. Tender purchase fee of **₹5900/-** (non-refundable towards cost of tender and i/c GST @ 18%) is to be submitted in form of demand draft in a separate envelope along with technical bid. **Commercial bid shall be submitted online.**

a. The Bidders intending to participate in this tender are required to get enrolled on the Bank's website i.e. <https://etender.pnbnet.in> Enrolment on the above mentioned website is mandatory.

b. As the bids of the Bidders have to be digitally signed by the Electronic/Digital Signature of the respective Bidder before submitting the bids online, the bidders are advised to obtain Electronic/ Digital Signature Certificates in order to bid for the tender.

c. The Tender Documents containing detailed terms & conditions can be downloaded online directly from the portal <https://etender.pnbnet.in> or <https://pnbindia.in>) as per tender schedule attached and shall be submitted online.

d. All the bidders are required to submit Demand Draft in favour of Punjab National Bank, Kolkata of ₹5900/- towards the cost of tender document in favour of Punjab National Bank payable at Kolkata and Earnest Money Deposit (EMD) shall be in the form BID SECURING DECLARATION FORM-D by 28.12.2021 till 1400 Hrs, failing which, the bids shall be summarily rejected.

e. Bidders may submit their queries regarding any technical clarification before 20.12.2021 up to 1700 Hrs. No queries shall be entertained after last date fixed for acceptance of queries.

f. Standardized documents may be downloaded from the "Corrigendum/ Addendums" section of the above mentioned portal up to 1600 Hrs on 22.12.2021 after clarification on queries. No deviation on the above will be entertained by the Bank there after.

g. Based on the clarification of conditions by the Bank, the intending bidder will submit their unconditional acceptance on the prescribed format along with tender document.

h. The bidders need to upload the Technical bids online also at the website <https://etender.pnbnet.in/login>. In case of variation between the soft copy and hard copy of the bids received, hard copy shall be taken as final. In case any of the documents (Tender fees, Bid Securing Declaration Form, MSME Regn letter) are not found, the Technical bid (Envelop B) shall not be opened and the bid shall be rejected as ineligible

i. Price bid of only those bidders shall be opened who bring their tender in line with requirements of tender documents and are acceptable to the Bank and the bidder who do not submit the tender fee in the form of Bank draft, their tenders will be summarily rejected.

j. First Tender fees/ Bid Securing Declaration Form/ MSME Regn letter Envelope will be opened, and if the hard copy of the same is received on time i.e. up to 1400 Hrs on 28.12.2021, only then technical bid will be opened online.

k. Hard copy i.e. the Demand Draft in favour of Punjab National Bank, Kolkata for an amount of ₹5900/- towards tender fee and Bid Securing Declaration Form are to be submitted physically by the bidder in the office of the Chief Manager, (GAD), Zonal Office, Punjab National Bank, 4th floor, PNB United Tower, 11, Hemanta Basu Sarani, B.B.D. Bagh, Kolkata, 700001 on or before 1400 Hrs on 28.12.2021.

l. The price bid of technically eligible bidder who meets the eligibility criteria stipulated in tender documents will be opened online in the presence of participated or representatives of participated bidders as per the schedule attached. Date for opening of commercial bids will be intimated later.

m. The Tenders shall be valid for a period of not less than 90 days after the date of opening of price bid/commercial bid online.

n. The Principal appoints competent and credible Independent External Monitor for this Pact after approval by Central Vigilance Commission. The task of the Monitor is to review independently and objectively, whether and to what extent the parties comply with the obligations under the agreement.

S. No	Name of IEM	e-mail
1.	Shri Raj Kumar Singh, (M-8141488880)	mrrajksingh@gmail.com
2.	Dr. Sarat Kr. Acharya, (M-9442118060)	Sarat777@rediffmail.com

o. All disputes arising out of or in connection with this agreement shall deem to have arisen in Kolkata and only the courts of Kolkata shall have the jurisdiction to determine the same.

- Last date for downloading the tender document (as per tender schedule).
- Last date for Bid Preparation and Hash Submission (as per tender schedule).
- Last date for submission of bids on line and re-encryption (as per tender schedule).

Please note that bid preparation and hash submission and bid submission are compulsory activities, failing which bidder will not be able to submit the bids online.

p. For any further information/ Queries please contact Ashish Kumar, Sr. Manager (Electrical Engineer), Zonal Office GAD, 4th Floor, PNB United Tower, 11, Hemanta Basu Sarani, B.B.D. Bagh, Kolkata, 700001, Mob: 07752020729, e-mail: zokolgad@pnb.co.in

q. The Bank reserves the right to accept/ reject any or all the offers submitted in response to this advertisement without assigning any reason whatsoever.

r. The Bank will not be bound to accept the lowest tender and reserves the right to accept or reject any or all the tenders without assigning any reasons whatsoever.

s. Please note that, on tendering procedure through the electronic tendering system refer to the Instructions for Using the Electronic Tendering System document available along with the tender documents on <https://etender.pnbnet.in>.

t. **Commercial bid shall be submitted online only.** The Bank shall resort to E-Tendering for competitive bidding. For this, the bidders need to register at <https://etender.pnbnet.in/login>. **No physical copy of commercial bid (price bid) shall be submitted by bidder along with tender documents.** If any commercial bid or financial rates are included in the bid documents by any bidder, that bidder shall stand disqualified from the bid process

CHIEF MANAGER

PUNJAB NATIONAL BANK

5. **Letter Submitting Tender**

Chief Manager
GAD, 4th Floor, United Tower Building,
Punjab National Bank,
11, Hemant Basu Sarani,
Kolkata – 700001

Reg: Operation & Annual Maintenance Contract of Central Air Conditioning Plant at Punjab National Bank, United Tower Building, 11 Hemant Basu Sarani, Kolkata – 700001

Dear Sir,

1. Having visited the site and examined the General Conditions of Contract, Special Conditions of Contract, Technical Specifications and Schedule of Quantities for the execution of the above named works, we offer to complete and maintain the whole of the said works in conformity with the said conditions of contract, specifications and schedule of quantities for the sum stated in schedule of quantities of this Tender Document or such other sum as may be ascertained in accordance with the said conditions of contract.
2. We undertake to complete and deliver the whole of the works comprised in the contract within the time stated in the appendix hereto.
3. We have independently considered the amount of liquidated damages shown in the Appendix to form of tender hereto and agree that it represents a fair estimate of the loss likely to be suffered, by you in the event of the works not being completed in time.
4. We agree to abide by this tender for the period of 90 days from opening of Commercial Bid or extension thereof as required by the PNB from the date fixed for receiving the same and it shall remain binding upon us and may be accepted at any time before the expiry of that period.
5. We confirm that the period and rates as referred in the agreement or general conditions of contract are given or summarized in the appendix hereto, to which we give our consent and agree to abide by the same.
6. We understand that if our tender is accepted, we are to be jointly and severally responsible for the due performance of the contract.
7. We understand that you are not bound to accept the lowest or any tender you may receive and may reject all or any tender, accept or entrust the entire work to the Contractor without assigning any reason or giving any explanation whatsoever.

Dated this day of _____ 2021.

Signature _____ in the capacity of _____ duly authorized to sign tenders for and on behalf of _____ (IN CAPITALS).

Tender submitted on _____ before _____ P.M.

6. LETTER OF TRANSMITTAL

**Chief Manager
GAD, 4th Floor, United Tower Building,
Punjab National Bank,
11, Hemant Basu Sarani,
Kolkata – 700001**

Reg: Operation & Annual Maintenance Contract of Central Air Conditioning Plant at Punjab National Bank, United Tower Building, 11 Hemant Basu Sarani, Kolkata – 700001

Having examined the details given in Press advertisement and tender document for the above work, I/ we hereby submit the relevant information.

1. I/We here by certify that all the statement made and information supplied in the enclosed forms and accompanying statement are true and correct.
2. I/We have furnished all information and details necessary for eligibility and have no further pertinent information to supply.
3. I/We submit the following certificates in support of our suitability, technical knowledge and capability for having successfully completed the following eligible similar works: -

S No	Name of the Work	Value of Work	Date of Completion	Certificate issued by

“Certify that the information given in the enclosed tender documents is correct. It is also certified that I/we shall be liable to be debarred, disqualified/ cancellation of bid in case any information furnished by me/us found to be incorrect.”

Enclosures: -

Date of submission

SIGNATURE(S) OF APPLICANT(S)

Seal of applicant

7. Appendix to Form of Tender

1.	Period of Contract	One year, but, subject to satisfactory performance of the successful bidder, the contract may be extended for further period of two years (one +one) on same quoted Service charges rate and terms & conditions Bank's discretion.
2.	Date of commencement	Work shall be commenced with full man power within 7 days from the date of award of work/ written orders given by the Bank.
3.	Initial Security Deposit	03% of the accepted value of the tender by means of Performance Bank Guarantee or Non-Interest Bearing FD.
4.	Payment	Payment shall be processed as per conditions mentioned in Clause 21 of GCC.
5.	Defect Liability Period	24 months from the date of Installation/ replacement of Part/s.

8. GENERAL CONDITIONS OF CONTRACT (GCC)

Except where provided for in the description of the individual items in the Schedule of Quantities and in the specification & conditions laid down herein after, the work shall be carried as per standard specifications and under the directions of the PNB.

1. Interpretation

In construing these conditions, the specifications, the schedule of quantities, tender and agreement, the following words shall have the meaning herein assigned to them except where the subject of context otherwise requires:

- i. Employer: The term employer shall denote PNB/ Punjab National Bank with the Zonal Office, Punjab National Bank, PNB United Tower, 11, Hemanta Basu Sarani, B.B.D. Bagh, Kolkata, 700001 and any of the PNB's employees or representative authorized to act on their behalf.
- ii. The Bank: The term Bank shall mean Punjab National Bank/ PNB.
- iii. The In-charge: The term means any Staff (temporary or permanent) of the Bank deployed to look after the work.
- iv. Contractor/ Successful Bidder: The term Contractor shall mean, successful bidder M/S ----- (name and address of the Contractor) and his/ their heirs, legal representative assigns and successors.
- v. Site: The site shall mean PNB United Tower, 11, Hemanta Basu Sarani, B.B.D. Bagh, Kolkata, 700001.
- vi. Specifications: The work is to be carried out in accordance with Specifications, the Schedule of Quantities which may be supplied, or any other instruction, which may be given by the PNB during the execution of the work.
- vii. The Successful Bidder shall ask in writing for all clarifications in respect of Specifications and Schedule of Quantities or to additional instructions at least 10 days ahead from the time when it is required for implementations so that the PNB may be able to give decision thereon.
- viii. "The Work" shall mean the work or works to be executed or done under this contract.
- ix. "Act of Insolvency" shall mean any act as defined by Insolvency and Bankruptcy Code, 2016.
- x. "The Schedule of Quantities" shall mean the schedule of quantities as specified and forming part of this contract.
- xi. Order of precedence for any ambiguity in the schedule of quantities, general conditions, special conditions and specifications for the Contractor shall be as per the decision of the PNB and the same will be binding on the Contractor, and shall be read as under in the decreasing order of importance.
 - a. Schedule of Quantities.
 - b. Special Conditions.
 - c. General Conditions.
 - d. Standard (Technical) Specifications of Contract.
 - e. C.P.W. D specifications.
 - f. BEE Specifications/ Guidelines
 - g. Bureau of Indian Standards/ specifications.
 - h. State P.W.D/ General Engineering Practice.

Note: Any ambiguity observed shall be brought to the notice of PNB and be executed after obtaining approval from the PNB. In case of any ambiguity between the above, the most stringent will follow.

2. Description of Work

- a. The overall scope of the successful bidder includes complete Operation & Annual Maintenance Contract (AMC) of HVAC System/ equipment which form part of the HVAC System including electrical panels, piping work, etc. and Unitary Air Conditioner/s in the United Tower Building. List of Equipment and Scope of Work in detail are mentioned in the Section 16 of the tender document. The operation & maintenance of the equipment shall be undertaken as per recommendation of the OEMs.
- b. The work consists of Operation and Maintenance Work based on technical specifications furnished by the OEMs/ building design. The contractor shall be responsible for its functioning according to the design criteria and its parameters. Notwithstanding the details furnished, any discrepancies shall be brought out in the technical bid highlighting the shortcomings and suggest modifications.
- c. The work to be carried out under the contract shall, except as otherwise provided in these conditions, include all labour, materials, tools, plants, equipment and transport which may be required in preparation of and for and in the full and entire execution and completion of the works.
- d. The descriptions given in the Schedule/ Bill of Quantities shall, unless otherwise stated, be held to include wastage on material, carriage and cartage, carrying and return of empties, hoisting, setting, fitting and fixing in position and all other labour necessary and for the full and entire execution and completion as aforesaid in accordance with good engineering practice and recognized principles.
- e. If there are varying or conflicting provisions made in any one or more document(s) forming part of the contract, the Accepting Authority shall be the deciding authority with regard to the intention of the document and his decision shall be final and binding on contractor.
- f. Any error in description or quantity or rate in Schedule of Quantities or any omission there from shall not vitiate the Contract or release the contractor from the execution of the whole or any part of the works comprised therein according to drawings and specifications or from any of his obligations under the Contract.
- g. The contractor shall forthwith comply with and duly execute any work comprised in such Employer's instruction, provided always that verbal instructions, directions and explanations given to the contractor's or his representative upon the works by the Employer shall, if involving a variation be confirmed in writing to the contractor/s within 3 days.
- h. No work for which rates are not specifically mentioned in the priced schedule of quantities, shall be taken up without written permission of the Employer. Rates of items not mentioned in the priced schedule of quantities shall be fixed by the Employer as per prevailing market rates.
- i. Regarding all factory made products, they shall be manufactured as per their respective IS code updated and all test undertaken at factory.

3. Facilities to be Provided by the Contractor

3.1 The contractor shall provide everything necessary for the proper execution of the work according to the intent and meaning of the design parameters, technical specifications, drawings and schedule of quantities. Based on the details furnished in the NIT, the contractors should undertake their own assessment and design the plant and system required. If the contractor finds any discrepancies, it should immediately be brought to the notice of the Bank.

3.2 The tenderer shall take full responsibility for adequacy, suitability and safety of all the design, works and methods of design/ installation.

3.3 The Bank shall on no account be responsible for the expenses incurred by the contractor during the progress of work at site, towards any incidental expenditure like medical amenities to the workers at site, security arrangement etc. The Bank shall not be responsible for the safety of the workers at site either on account of the works executed by the contractor or on account of the works executed by any other agency involved at that time.

3.4 The Employer on no account shall be responsible for storage of materials or loss or pilferage or theft either in respect of the material stored or material already built and paid for by the Bank.

3.5 The contractor shall at all times give access to workers employed by the Bank.

3.6 All tools, equipment and other required facilities for execution of work shall be provided by the contractor.

3.7 Any facilities available at site shall be utilised only with prior permission of the Bank or the in-charge of the site and cannot be taken as granted and for such services and utilities, the Bank is entitled to charge at his discretion.

3.8 Contractor shall provide and maintain all measuring instruments at all time for properly carrying out the work and for the use of the employer including employing skilled attendants and site engineer at site.

3.9 No extra charges shall be paid over and above what has been quoted for any of the above or for similar such services.

3.10 ITEMS/ SERVICES TO BE PROVIDED BY THE EMPLOYER:

3.10.1 Power and water, as required, free of cost.

3.10.2 Any modification/ alternation to the A.C. System to meet future requirement.

3.10.3 Complete replacement of any major equipment like Compressor, Condenser, Chiller, Motors, Pumps, AHUs, Cooling Coil, MCC, Cooling Tower.

3.10.4 Spares and Refrigerant as detailed under the Section Part-A and Part-B.

3.11 PERFORMANCE REQUIREMENT:

The following Conditions are to be maintained in the A.C. Space inside the Bank -

(a) Temperature : 75 °F ± 2 °F

(b) R. Humidity : Around 60%

3.12 The Bidders shall assess the Cooling load requirement of individual floors based on the design parameter/ recommendations of the Bank, prior to submission of his offer and guarantee above inside condition in all the places.

3.13 The equipment shall be operated and Maintained in such a way that the total down time does not exceed 5% of the total operating days in a year

4. Tools, Storage of Materials, Protective Works and Site Office Requirements

4.1 The contractor shall not fix or place any placards or advertisement of any description or permit the same to be fixed or placed in or upon any hoarding, gantry, building structure other than those approved by the Bank. No fixtures or materials to

be placed in such a manner that can be considered dangerous to the installation and to the persons working or passing by or visiting the site or occupants.

4.2 **Storage of materials:** The contractors shall make use of existing facilities with due permission of the Bank for storage of materials at site, but watch & ward arrangements for the safety of materials shall be the responsibility of the contractor.

5. **Period of Contract:** The contract period for the said work is one year. However, the contract may be extended further for a period of one-year same rate based on the performance of the contractor and same terms & conditions at Bank's discretion. Further, the Contract can be terminated if the service of the contractor is not satisfactory/ any other reason whatsoever by serving 30-day notice by Bank. Notwithstanding anything contained in this tender documents PNB can at any time terminate the contract/ agreement with the successful bidder without assigning any reason if the bidder is neglect or fail to observe and perform all or any of the acts, matters of things by this contract, to be observed and performed by him.

6. The contractor shall forthwith comply with and duly execute all work comprised as per the Bank's or its representative's instructions, provided always that verbal instructions, directions and explanations given to the contractor's or his representative.

7. **Notice and Patents of Appropriate Authority and Owners**

7.1 The successful bidder shall indemnify the PNB against all claims in respect of patent rights, royalties, and damages to buildings, roads or member of public in course of execution of work and shall defend all actions arising from such claims and shall keep the PNB saved harmless and indemnified in all respects from such actions, costs and expenses.

7.2 The contractor shall conform to the provisions of any Acts of the Legislature relating to the work, and to the regulations and bye-laws of any authorities, and or other Companies (Indian or International), and/ or Statutory Authorities, with whose system and design or technical knowhow are/were proposed to have connection with this work. Also the contractor shall, before making any variations from the drawings or specification that may be associated to so conform, give the Employer written notices specifying the variations proposed to be made and the reasons for making them and apply for instruction thereon. The Employer on receipt of such intimation shall give a decision within a reasonable time.

7.3 The contractor shall arrange to give all notices required for by the said Acts, regulations or Bye-laws to be given to any authority, and to pay to such authority or to any public officer all fees that may be properly chargeable in respect of the work and lodge the receipts with the Employer.

7.4 The contractor shall indemnify the Employer against all claims in respect of patent rights, royalties, damages to buildings, roads or members of public in course of execution of work and shall defend all actions arising from such claims and shall keep the Employer aloof and indemnified in all respects from such actions, cost and expenses.

8. **Clearing Site and Setting out Works:** The site of work shown shall be cleared of all obstructions, waste materials, and rubbish of all kinds. All material damages on the place of work on the walls, ceiling or flooring or any other connected equipment, materials or installations shall be re-done to maintain the originality and levelled at the contractor's own cost.

9. **Disposal of Dangerous/ Waste Materials:** All waste materials and other matters of any offensive nature shall be taken out once the works are completed. The contractor shall keep the works free from dangerous materials like industrial gases, welding machines and any such devices or material of toxic and poisonous nature shall not carry within the site or building any material that are explosive in nature. Any such offensive materials which are essentially required in course of work shall be undertaken with due written permission of the Bank provided such materials are permissible under Law.

10. **Access:** Any authorized representatives of the Bank shall have to be provided free access to the works and/ or to the workshops, factories or other places where materials or equipment are being prepared or constructed for the work and also to any place where the materials are lying or from where they are being obtained, and the contractor shall extend necessary facilities to the Bank or their representatives for inspection, examination & testing of the quality & workmanship of the materials.

11. **Materials, Workmanship, Samples and Testing of Materials**

11.1 All the works specified and provided for in the specifications or which may be required to be done in order to perform and complete any part thereof shall be executed in the best and most workmanlike manner with materials of the best and approved quality of the respective kinds in accordance with the particulars contained in and implied by the specifications and as represented by the drawings or according to such other additional particulars, and instructions as may from time to time be given by the Employer during the execution of the work, and to his entire satisfaction.

11.2 If required by the Bank the contractor shall have to carry out tests on materials and workmanship in approved material testing laboratories or as prescribed by the Employer at his own cost to prove that the materials etc. under test conform to relevant Bureau of Indian Standards and/ or as specified in the specifications. The necessary charges for sample material, transporting, testing etc. shall have to be borne by the contractor.

11.3 All material must be the best of their kind available and the contractors must be entirely responsible for the proper and efficient carrying out of the work. Samples of all the materials to be used must be submitted to the Bank when so directed by the Bank.

11.4 Should the work be suspended by any reason, the contractor shall take all precautions necessary for the protection of work and at his own expenses shall make good any damages arising from any of these causes.

12. **Removal of Improper Work:** In case the contractor refuses to comply with the order the Bank shall have the power to employ and pay other agencies to carry out the work and all expenses consequent thereon or incidental hereto as certified by the Bank shall be borne by the contractor or may be deducted from any money due to or that may become due to the contractor. No certificate that may be given by the employer, shall relieve the contractor from his liability in respect of unsound work or bad materials or design.

13. **Contractor's Employees** The contractor shall employ technically qualified and competent supervisors for the work who shall be available (by turn) throughout

the work and shall participate during site meetings and be available to take and comply with instructions of the Bank.

14. **No Child Labour** No labour below the age of eighteen years shall be employed on the work. In case of electrical works, the labour employed by the tenderer or their sub- contractor should be authorized person as permitted by the Chief Electrical Inspectorate office of the respective State Government. The Employer shall not be responsible for any deviation and the tenderers shall indemnify the Bank from any legal action or in any way directly or indirectly.

15. **Safety and Labour Laws**

15.1 All safety and labour laws enforced by statutory agencies as well as by PNB shall be applicable in the performance of this Contract, and the Service Provider shall abide by these laws.

15.2 Service Provider shall take all measures which are necessary and/or proper to protect the personnel, work and facilities, and shall observe all reasonable safety rules and instructions.

15.3 Service Provider shall report as soon as possible any evidence, which may indicate or is likely to lead to an abnormal or dangerous situation and shall take all necessary emergency control steps to avoid such abnormal situations.

15.4 The Service Provider shall apply, within 7 days from the date of award of the contract, to appropriate Labour Authority for Labour License to provide the services and shall submit the copy of the Labour Licenses along with the first bill.

15.5 The Service Provider shall not engage/employ persons below the age of 18 years and not above 45 years of age.

15.6 It shall be the duty of the party/ bidder to acquaint his staff with all safety regulations as proposed by any statutory authorities.

15.7 The contractor shall indemnify the Bank against any violation of safety laws, rules and regulations while carrying out maintenance as required by the contract.

15.8 All liabilities, owing to injury/ death due to negligence or miscommunication or during discharging regular work of the staff of the party/ bidder, will be to the party/ bidder and what so ever the work, in any case Bank will not be responsible for any liabilities of injury/death etc. It's the duty of party/ bidder to guide the staff regarding safety measures.

15.9 All staff of the party while working on Air Conditioners & Electric infrastructure should use adequate safety/ protection equipment such as Electrical safety gloves, Rubber shoes, Insulated cutting Pliers & screw drivers and Insulated line tester.

15.10 The workmen shall execute the work as per IS code of practice of relevant equipment and follow the IE rules 1956. The party/ bidders staff has to follow the safety & procedures & practices in electrical works as per IS 5216 part 1 and 2. The contract shall take all precautions to avoid accident and causes of accident. He must be careful regarding safety during working of his staff in the premises.

15.11 Safety precautions of portable electrical appliances: Precaution in handling portable electrical appliances are more significant under monsoon conditions, some likely situations are highlighted here for your attention and action to ensure that conditions and methods of usage conform to the safety of personnel and property.

15.12 Broken sockets/ pin plug/ loose connections: These conditions cause sparks which lead to fault conditions or electrical shock situations. Wires shall not be directly inserted into the sockets as the earth lead of the equipment inserted into the phase socket may give shock to the operator.

15.13 Polarity of phase/ neutral and earth: certain appliances may give violent electrical shock during work if polarity conditions are not satisfied.

15.14 Joints in flexible cables: Usage of portable appliances is such that electrical and physical integrity of joint may be suddenly affected, leading to severe sparking and fire if combustible/ inflammable materials are present near the joint. Perhaps this may not be noticed by operator at all.

15.15 Appliance body grounding and system grounding: In absence of or ineffective appliance body grounding, operator may receive severe shock in case of phase to earth fault during usage. And also, all earth pins in sockets must have low impedance and mechanically firm earthing according to Indian Electricity Rule so that safety is assured to operator even under fault conditions.

16. Compliance of Labour Regulations

16.1 The Tenderer shall at his own expense arrange for all the safety provisions for the safety of all workers and employees directly or indirectly employed on the work by the tenderer or his sub-contractors.

16.2 The Tenderer shall be fully responsible for compliance at his own expense all the labour regulations and rules to be observed by him and his sub-contractors and by the Employer as Principal Employer of workers. The Tenderer shall fully indemnify the Employer against any action by the state and/ or **Central Government** for any default or alleged default by the Tenderer, Sub-contractor or Employer of any of such rules and regulations. If, due to any default of the tenderer or his sub-contractors, the Employer has to incur any expenditure for compliance of the rules and regulations or for any other reason connected with such default, the Employer shall be entitled to recover from the tenderer all such expenditure in full from any payment due to the tenderer.

17. **Dismissal of Workmen** The contractor shall on request of the Employer immediately dismiss or take off from the works, any person employed thereon by him, who may in the opinion of the employer, be unsuitable or incompetent or who may misconduct himself. Such discharge shall not be the basis of any claim for compensation or damages against the Employer or any of their officers or employee.

18. **Assignment** The whole of the works included in the contract shall be executed by the contractor and the contractor shall not directly or indirectly transfer, assign or underlet the contract or any part, share or interest therein nor, change in constitution and no subletting shall relieve the contractor from the full and entire responsibility of the contract or from active superintendence of the work during their progress.

19. Damage to Persons, Workmen and Property

19.1 The Bidder shall be responsible for all injury to the worker or workmen or persons, animals or things and for all damages to the building/ part of the building, materials, equipment, structural and/ or decorative part of property/ property in the vicinity which may arise from the operations/installation or neglect of himself or employees whether such injury or damage arise from carelessness, accident or any

other cause whatsoever in any way connected with the carrying out of this contract/ performing the work.

19.2 The Bidder shall indemnify the PNB and hold harmless in respect of all and any expenses arising from any such injury or damages to persons or property as aforesaid and also in respect of any claim made in respect of injury or damage under any acts of compensation or damage consequent upon such claim.

19.3 The Bidder shall reinstate, rectify and remedy all damages of every sort mentioned in this clause so as to deliver the whole of the contract works complete and perfect in every respect and so as to make good or otherwise satisfy all claims for damages to the property.

20. **Accounts Receipts & Vouchers** The contractor shall, upon the request of the Employer furnish them with all the invoices, accounts, receipts and other vouchers that they may require in connection with the works under this contract. If the contractor shall use materials less than what is required under the contract, the value of the difference in the quantity of the materials that was required to use and that actually used shall be deducted from his dues. The decision of the Employer shall be final and binding on the contractor as to the amount of materials the contractor is required to use for any work under this contract.

21. **Payment Terms**

The following terms of payment shall be applicable -

(a) **Operation & Maintenance: Minimum Wage Policy**

i. Contractor shall quote the price format, taking into consideration the minimum wages applicable as on last date of submission of bids as notified by central Government for the personnel to be deployed. However, in case of any variation in minimum wages between last date of submission of bids and one-year contract period (after award of work) the same shall be borne by bidder at his own cost. This aspect is to be kept in consideration by bidder while submission of bids.

ii. The Contractor shall make monthly payment to his workmen deployed to execute this contract such amount which shall in no case be less than what has been mentioned above. Bank shall the power to inspect the Wage Register and for physical verification of salary paid to the staff with reference to any records of the Contractor and to insist the Contractor/successful bidder to comply with the applicable Laws.

iii. Proof of payment of monthly wages and deposit of monthly EPF and ESI contributions through electronic challan receipt (ECR)/ Bank challan will be provided by the Contractor to PNB along with Form-6 under ESI Act. Such proof/ records will be provided with the bill for the month. Bidder shall ensure that contributions towards EPF & ESIC shall be deposited through separate challans for this contract which will be exclusively for workers deployed in this contract and not for any other contract.

The payment will be made against monthly running bills to be submitted at the end of each month after completion of satisfactory Operation and Maintenance of the entire A.C. System.

(b) **Annual Overhauling and Recommissioning:**

The payment will be made after completion of Annual Overhauling, recommissioning and at least three weeks of regular and satisfactory operation of the A.C. system.

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However, payment against spares, if used during overhauling, shall be made maximum in two instalments against contractors' bills with supporting documents.

Note: All payments shall be made after tax deduction at source as per IT notification within 15 days from the date of submission of original invoice subject to executing the satisfactory work and submission of the following documents.

- i. Original Invoice
- ii. Report on performance of HVAC System, records of defects and preventive, routine and breakdown maintenance work undertaken etc.
- iii. Attendance sheet of deputed staff duly verified by Bank staff/ Engineer in-charge.
- iv. Submission of the following certificate:
 - aa. We are maintaining proper records w.r.t. payment of wages and statutory dues to all our employees and the same are being paid.
 - ab. That we have paid the minimum wages to all the workers employed by us as per the wages announced by Government of India vide their latest notification. Copy of salary receipt enclosed.
 - ac. We have paid/ deposited all the statutory dues i.e. PF and ESI of our employees deputed at Punjab National Bank, United Tower Building, 11 Hemant Basu Sarani, Kolkata – 700001. The copy of challan for the month of _____ is enclosed herewith.
 - ad. The GST collected from during the month of _____ has been deposited in Govt. Account on _____. The copy of challan is enclosed.
 - ae. We as a contractor is following all the statutory rules and provisions as required by law/s and indemnify you, (the Bank) against all the consequences arising out of this payment.
 - af. The Successful bidder will make the payment to staff deployed at PNB United Tower and submit the bill in following format:

S. No	Particulars	Duty days in a month	Supervisor (Skilled)		Operator/ Electrician cum Helper (semi-skilled)	
			Rate per month	Amount (in ₹)	Rate per month	Amount (in ₹)
1.	Minimum wages (Basic + VDA) for 26 days	26				
2.	EPF @13%on on (Basic +VDA) for 26 day					
3.	ESI @3.25% on (Basic +VDA) for 26 day					
4.	Bonus @8.33% on 7000/-					
5.	Monthly Charges for Dress					
6.	Service Charge as quoted					
7.	Total Bill Amount per Manpower per month					
8.	Total bill for all Manpower as per agreement					
9.	Total Bill amount					
10.	CGST 9% + SGST 9%					
	Total of Sr. 9 & Sr. 10 (in figures)					
	Total of Sr. 9 & Sr. 10 (in Words)					

22. **Escalation:** The rate quoted shall be firm throughout the tenure of the contract i.e. for one year. The Bank, at its discretion, may extend for further period of one year on same rate and terms & conditions subject to satisfactory performance of the bidder/ Bank's requirement. However, work and will not be subject to any fluctuation due to increase in cost of materials, labour, GST, etc. unless specifically provided in these documents during the period of contract.

23. **Idle Labour** Whatever the reasons may be, no claim for idle labour, additional establishment cost of hire and labour charges of tools and plants would be entertained under any circumstances.

24. **Visit of Site**

Intending Bidder shall visit the site to understand the scope of work involving for executing the work in the Bank's premises and make self thoroughly acquainted with the local site conditions, orientation & functioning of equipment/ systems, nature and requirements of the works, facilities of transport conditions, effective labour and materials, accesses and storage for materials. The successful Bidder will not be entitled to any claim of compensation for difficulties faced or losses incurred on account of any site conditions.

25. **Tenders**

25.1 The e-tender should be submitted by bidder duly priced and also digitally signed. The Schedule of Quantities shall be filled in as follows:

- a. Service Charges (only Contractor's Overheads & profit) in INR (₹) over and above Monthly wages for routine Operation and maintenance.
- b. Lump Sum price (in INR) for Annual Overhauling and Re-commissioning individually for two years.
- c. The cost of spares and repair work indicated against respective items in Price Schedule (PART – I) and Item rates in Annexure – II and shall remain firm for one year.
- d. The PNB reserves the right to reject the lowest or any tender.
- e. The language for tender shall be ENGLISH and the total amount tendered should be written in the same language only.

25.2 The Bank reserves the right to accept the tender in full or in part and the bidder shall have no claim for revision of rate or other conditions if his tender is accepted in parts. Any error on the part of the bidder while quoting the rates will not be accepted as an excuse for refusal to execute the order for any or all items, if order is placed on the basis of the quoted rates. For refusal of the order, the E.M.D. of the bidder will be forfeited.

25.3. The bidder shall note that his tender shall remain open for consideration for a period of 90 days from the date of opening of the tender (Commercial Bid).

25.4 **Agreement** The successful contractor shall be required to sign agreement and shall pay for all stamps and legal expenses, incidental thereto.

25.5 **Amendment of Bidding Documents by the Bank:** At any time prior to the last Date and Time for submission of bids, the Bank may, without assigning any reason whatsoever, modify the Bidding Documents through amendments at the sole discretion of the Bank. All amendments shall be uploaded on the Bank's websites

(www.pnbindia.in and <https://etender.pnbnnet.in/login>) and shall be binding on all Bidders. In order to provide prospective Bidders a reasonable time to take the amendment if any, into account in preparing their bid, the Bank may, at its discretion, extend the deadline for submission of bids.

25.6 Modification and Withdrawal of Bid by the bidder

25.6.1 Modification of the submitted bid shall be allowed on-line and the bidder may modify and resubmit the bid on-line only before the deadline of Bid Hash Preparation. For modification of e-bid, bidder has to rework and upload/ resubmit digitally signed modified bid on bank's e-tendering portal i.e. <https://etender.pnbnnet.in/login>.

25.6.2 Bids once submitted will be treated as final and no bid may be modified subsequent to the deadline for Bid Hash Preparation.

25.6.3 No bid may be withdrawn in the interval between the deadline for submission of bids and the expiration of period of bid validity specified in tender documents. For withdrawal of bid after the end date of online bid submission, the bidder will have to make a request in writing to Tender Inviting Authority of Bank. Withdrawal of bid may be allowed till issue of work order with the following provision of penal action:

25.6.4 If the request of withdrawal is received before informing the date for opening of commercial bid, the EMD submitted by bidder will be forfeited and bidder will be debarred for 6 months from participating in tenders in PNB. The commercial bid of remaining technically qualified bidders will be opened and the tender process shall go on.

25.6.5 If the request of withdrawal is received after informing the date for opening of commercial bid, the EMD submitted by bidder will be forfeited and bidder will be debarred for 1 year from participating in tenders in PNB. The commercial bid of all technically qualified bidders including this bidder (if found technically eligible) will be opened and action will follow as under:

- a) If the bidder withdrawing his bid is other than L-1, the tender process shall go on.
- b) If the bidder withdrawing his bid is L-1, the re-tender will be done.

25.7 Contacting the Bank Any effort by a bidder to influence the Bank in evaluation of the bid, bid comparison or contract award decision may result in the rejection of the Bidders' bid. Bank's decision will be final and without prejudice and will be binding on all parties.

25.8 Clarifications of Bids: To assist in the examination, evaluation and comparison of bids the Bank may, at its discretion, ask the bidder for clarification. The response should be in writing and no change in the price or substance of the bid shall be sought, offered or permitted.

25.9 Security Deposit

25.9.1 The successful bidder/ contractor shall submit Bank Guarantee/ Non-Interest Bearing FD towards security deposit, amounting to 03% of awarded work value covering the entire period of the contract. The deposit/ PBG is to be renewed from time to time and the Bank shall have the authority to forfeit the amount deposited in case of failure of the Contractor to observe the terms and conditions of

the Agreement and also appropriate the deposit towards any damages that may be caused by negligence of the Contractor and/ or its personnel deployed for the performance of the contract. The Bank is not liable to pay any interest on Performance Security Deposit. The decision of the Bank will be final in this regard. The PBG (from a Scheduled Commercial Bank other than PNB) will have to be made by the Contractor to the Bank within 03 days of acceptance of award/ Acceptance Letter.

26. Government and Local Rules

The Contractor shall confirm to the provisions of all local Bye-laws and acts relating to the work and to the regulations etc. of the Government and local authorities and of any company with whose purview the work proposed to be governed. The Contractor shall give all notices required by said act, rules, regulations and Bye- laws etc. and pay all fees payable to such authorities for execution of the work involved. The cost if any shall be deemed to have been included in his quoted rates, taking into account all liabilities etc. He shall indemnify the PNB against such liabilities and shall defend all actions arising from such claims or liabilities.

27. Taxes and Duties. The bidders must quote their tender prices excluding the prevailing rate of GST or any other cess or local charges, as may be applicable (at present or in future). **GST shall be paid extra as per applicable rates as per Govt Guidelines. Further, EPF and ESI contributions paid to the workmen shall be reimbursed on actual basis on submission of requisite documents by the contractor.** No Contractor's Profit shall be admissible/ payable on such contributions. However, tax shall be deducted at source at the specific rate of Central Government regulations and guidelines respectively, if applicable. The certificate in respect of TDS shall be issued by the Bank as per rule. Any variation in taxes and duties and/ or imposing any new taxes and duties during currency of contractor extended period, i.e. only the difference in tax, shall be borne by the Bank. No claim whatsoever on this account shall be entertained. The rates quoted by bidder shall be valid for one year from the date of start of work.

28. Other Persons Engaged by the PNB

The PNB reserves the right to execute any part of the work included in this contract or any work which is not included in this contract by other agency or persons and Contractor shall allow all reasonable facilities.

29. Disputes and Arbitration

a. All disputes or differences, whatsoever, arising between the parties out of or in relation to the terms and conditions, meaning and operation or effect of this Tender/ Agreement or breach thereof shall be settled amicably.

b. In case they are not able to settle the disputes or differences between them amicably, the matter may be referred to a sole arbitrator mutually agreed upon after issue of at least 30 days' notice in writing to the other party clearly setting out there in the specific disputes and the same shall be settled by arbitration in accordance with the Indian Laws relating to arbitration, i.e. in accordance with the provision of the Indian Arbitration and Conciliation Act, 1996 and the award made in pursuance thereof shall be binding on the parties.

c. In the event of absence of consensus about a single arbitrator, the dispute may be referred to three arbitrators, one to be nominated by each party and the said arbitrators shall appoint the third presiding arbitrator before commencing the arbitration proceedings.

- d. The venue of arbitration shall be at Kolkata.
- e. All arbitration proceeding shall be conducted in English and a daily English record of such proceeding shall be maintained.
- f. Any appeal against the arbitration award will be subject to the jurisdiction of courts at Kolkata only.
- g. Successful Bidder shall continue to work under the Contract during the arbitration proceedings unless otherwise directed in writing by the PNB, unless the matter is such that the works/ services cannot possibly be continued until the decision of the arbitrator or of the presiding arbitrator, as the case may be, is obtained.

30. Excepted Matters from Arbitration

If the dispute of difference pertains to the under noted matters (called excepted matters) the decision and in writing of the PNB shall be final, conclusive and binding on the parties.

- a. Instruction
- b. Transactions with local authorities.
- c. Proof of quality of materials.
- d. Assigning or under letting of the contract
- e. Causes of delay on the part of the successful bidder and justifying extension of time.
- f. Notice to the successful bidder to the effect that he is not proceeding with due diligence.
- g. Certificate that the bidder has abandoned the contract.
- h. Notice of the determination of the contract by the PNB.

31. Safety Measures

Adequate precautions shall be taken to prevent danger from electrical equipment. No materials on any of the sites of work shall be so stacked or placed as to cause danger or inconvenience to any person or the public.

32. Relationship Between Parties

The engagement of bidder shall not constitute the appointment of either Party as the legal representative or agent of the other Party. This engagement is on a principal to principal basis between the Parties hereto. No Party to this engagement shall have any right or authority to assume, create or incur any liability or any obligation of any kind, express or implied, against or in the name of or on behalf of the other Party to this Tender/ Agreement except as may be specifically provided.

33. Publicity

In connection with the transactions contemplated by this engagement each Party agrees that it will not use other Parties name, marks, symbols, or logos in any advertising, promotional material, press release, publication, public announcement, or through other media, whether written or oral, without the prior written consent of such other Party.

34. Non-Exclusivity

It is expressly agreed that the engagement between the parties, shall be on a non-exclusive basis. Bank reserves its right to appoint/engage one or more contractors/ agencies/ service providers to provide the like services or/ and work concurrently during the currency of engagement.

35. Other Terms & Conditions

35.1 Bank shall not entertain any claim arising on account of damages, compensation or expenses payable as a result of any accident or injury sustained by any workman/ staff of the bidder or any claim under the Workman's Compensation Act etc. The bidder may obtain necessary insurance cover to meet any of the above contingencies.

35.2 The bidder and his staff shall abide by the regulations/requirements of Security Department and strictly follow the rules. Bank's security staff will have right to check, search or interrogate any of the bidder staff while entering/ remain present/ leaving the PNB premises for security purposes.

35.3 The bidder shall be responsible for any loss/damage to the materials and other assets of the PNB by his staff deployed for duty.

35.4 The bidder shall also be wholly responsible for theft, burglary, fire or any other mischievous act and conduct done by their staff.

36. Penalty Terms:

a. If the Contractor fails to maintain required number of manpower, the Bank is entitled to deduct as penalty at the rates indicated below from the amount payable to the Contractor:

- | | |
|----------------------------------|------------|
| i) Supervisor | ₹1500/ day |
| ii) Operator-cum-mechanic/Helper | ₹1000/ day |

b. For extended downtime of equipment/ system beyond the permissible timelines for repair/ replacement mentioned in scope of work, suitable penalty as found deemed by the Bank shall be levied, maximum up to the 50% of work value. Bank's decision in this regard is final.

c. In case the person on duty found sleeping will be fined ₹500/- per service/ per head. Amounts will be deducted from the bidder's current monthly bill.

d. Non-wearing of uniforms, shoe shall attract a fine of ₹300/- per service/ per head. 02 nos. sets, Uniforms must be provided by the successful bidder before deployment of staff at site.

9. INSTRUCTIONS TO BIDDERS

1. Bidding Process (Two Stages)

For the purpose of the present job, a two-envelope bidding process will be followed. The response to the present tender will be submitted in two parts:

- Technical bid
- Commercial bid

The bidders will have to submit the technical bid in Banks e-procurement system as well as in hard copy and commercial bids in only online form through Bank's e-procurement system.

1.1 Technical Bid

Technical bid will also contain the Compliance statement as per the Terms & Conditions mentioned in the Tender Documents, and NOT contain any pricing or commercial information at all. Technical bid documents with any commercial information will be rejected.

In the first stage, only technical bids will be opened and evaluated. Only those bidders confirming compliance to all the terms & conditions of Tender document shall be short-listed for commercial stage.

1.2 Commercial Bid

In the second stage, the Commercial bid of only those bidders, whose technical bids are short listed, will be opened.

2. Submission of Bids

Bidders are required to strictly submit their bids in electronic form using the e-procurement system at <https://etender.pnbnet.in/> the Bank by using their digital certificates of class II and above (both encryption and signing). All the interested bidders should register themselves in the e procurement system <https://pnbindia.biz> for submitting the bids online, if they have not done earlier. The Tender document and further corrigendum, if any can also be downloaded from Bank's website www.pnbindia.in; <https://etender.pnbnet.in/>. Bids received after closing of the bid in the e-procurement system are summarily rejected without any reason. The commercial bid should be submitted online only.

All the technical supporting documents should be submitted manually in a sealed envelope shall be super scribed as "Technical bid for **Operation & Annual Maintenance Contract of Central Air Conditioning Plant at Punjab National Bank, United Tower Building, 11 Hemant Basu Sarani, Kolkata – 700001**" before the final date & time of bid submission at the following address.

Tender Processing Fee of ₹5,000/- + GST@18% (i.e. Rs.5900/-) shall be submitted in a sealed envelope shall be super scribed as "Tender Fee for **Operation & Annual Maintenance Contract of Central Air Conditioning Plant at Punjab National Bank, United Tower Building, 11 Hemant Basu Sarani, Kolkata – 700001**" before the final date & time of bid submission at the following address.

Chief Manager
GAD, 4th Floor, United Tower Building,
Punjab National Bank,
11, Hemant Basu Sarani,
Kolkata – 700001

At the time of physical submission of bid, bidder has to show acknowledgement e-mail received after completion of the bid submission in proof of having submitted the bid online.

3. Content of Documents to be Submitted

Documents required in Technical Bid Envelope (Sealed Cover):

- i. Letter submitting tender & email copy for bid submission.
- ii. Tender Document & corrigendum if any, duly signed on all pages by the authorized person.
- iii. Valid authorization Certificate **in Original** from OEM for servicing/ maintenance of chillers.
- iv. Work order copies along with the completion certificates from the client.
- v. Copy of the latest income tax return, PAN, GST Registration Certificate.
- vi. Audited Balance Sheet and P & L Account for the three years mentioned.
- vii. Certificate from Chartered Accountant certifying the turnover of last three financial years i.e. 2018-19, 2019-2020, 2020-2021.
- viii. Copy of address proof for office Kolkata Zone.
- ix. An undertaking in respect of not black-listed/ barred by any Public Sector Bank, RBI or IBA or any other Government/ PSU agencies.
- x. Bidder Information
- xi. Acceptance of Compliance Statement
- xii. Bid Earnest Money/ Tender Processing Fee.
- xiii. Power of attorney/ Board resolution in favour of authorized person signing the Bid documents.
- xiv. Contact details of service team/ centers, nodal point of contact and escalation matrix.
- xv. Integrity Pact and Integrity Agreement duly signed.

Note: a) All pages of the bid documents must be signed by authorized person.
b) All pages of the bid documents should be numbered in serial order i.e. 1, 2, 3...
c) Commercial bid to be submitted in e-procurement process only. No hardcopy of the same be enclosed with the supporting documents.

4. Preliminary Examination

Bank will examine the bids to determine whether they are complete, whether any computational errors have been made, whether required information has been provided as underlined in the bid document, whether the documents have been properly signed, and whether bids are generally in order.

The bid determined as not in order as per the eligibility criteria will be rejected by the Bank. The decision of the Bank is final towards evaluation of the bid documents.

5. Evaluation and Award Criteria

5.1 After opening of the technical bids, all the documents and annexure (except commercial documents/ offer) will be evaluated first by the Bank. First, received bids will be evaluated based on the eligibility criteria. Technical bids of only those bidders satisfying the eligibility criteria will be evaluated.

5.2 Only those bidders satisfying the technical requirements and accepting the terms and conditions of this document shall be short-listed for further steps. PNB will determine to the satisfaction whether the bidder selected, having submitted the best

evaluated responsive bid, is qualified to satisfactorily perform the contract. The decision of PNB will be final in this regard.

5.3 The determination will take into account bidder's financial, technical and support capabilities, based on an examination of documentary evidence submitted by bidders in support of eligibility criteria.

5.4 The commercial bids will be opened only if at least two Technical Bids are found suitable. In any case single Commercial Bid shall not be opened.

5.5 The L-1 bidder shall be decided on the basis of total cost of all items quoted in commercial bid.

5.6 The award of contract will be based on evaluation of technical and commercial bids.

Note: - Technical bids will be opened in the presence of bidders who qualify and choose to attend as above. The above schedule is subject to change. Notice of any changes will be published on Bank's website (www.pnbindia.in & <https://etender.pnbnet.in>). Further, please note that commercial bid opening date and time will be intimated to the technically qualified bidders at a later date.

10. SPECIAL CONDITIONS FOR CONTRACT (SCC)

1. The specification for the entire work shall be in accordance with latest CPWD specifications and latest IS codes. Whenever these codes are silent, the same shall be governed by sound engineering practice and the decision of the Bank in matter of interpretation shall be final and binding on the successful bidder.
2. The contractor will carry out preventive maintenance /checks and operation as per CPWD specifications/ respective standard trade practice and as per details mentioned elsewhere in the tender.
3. The contractor shall arrange to render efficient services outlined above. However, in case he fails to maintain the service to the satisfaction of the Engineer-in-charge and the Bank has made any expenditure to maintain the installations by alternate arrangement, the expenditure thus incurred will be recovered from the contractor, for which decision of Engineer-in-charge shall be final.
4. The A.M.C. shall be taken only for equipment working in all respects. Before entering into A.M.C., representative of the firm shall visit the site and ascertain the proper functioning of equipment and its sub-assemblies.
5. Only bonafide contractor's persons shall be allowed in the premises for carrying out the maintenance work.
6. The contractor shall be responsible for any accident occurring during the period of the maintenance or any other work is being attended by the contractor.
7. The contractor shall be responsible for any damage caused to the equipment/ building during the execution of the maintenance work.
8. In case of any accident during the operation/ maintenance of the equipment leading to injuries/ damages to human being equipment and or loss of life, the contractor shall be fully responsible for settling all claims and indemnify the Department against any claims arising out of such accidents, consequential damages to other systems will however be not recoverable from contractor.
9. Any break-down call or complaint reported to the contractor verbally or in writing shall be attended promptly.
10. All the material used for the comprehensive maintenance for the chiller should be OEM certified material.
11. The tendered rates quoted by the contractor shall be firm and final. Nothing extra will be paid on this account except GST which will be payable extra by the bank.
12. Contractor is liable to provide all necessary electrical precautionary measure to his staff and all the local safety and security regulations shall be observed strictly.
13. All electrical works shall be got carried out through licensed Electrical Contractor having experience of similar work. The work shall be executed as per specifications and strictly in keeping with relevant IS code and rules and regulations of authorities
14. The successful bidder shall be required to maintain the coordination with the Building Electrical Contractor, as required.
15. No old/ dismantled material shall be used by the contractor in the work under any circumstances. Unless otherwise specified or under instruction of the Bank.
16. Any act of indiscipline/ misconduct/ theft/ pilferage on the part of any employee

engaged by the successful bidder resulting in any loss to Bank in kind or cash will be viewed seriously and Bank will have the right to claim damages or levy fine and/ or terminate the Contract forthwith, if necessary.

17. The successful bidder shall not assign the contract. He shall not sublet any portion of the contract except OEM/ with the prior written consent of the Bank. No Brokers/ Intermediaries shall be entertained. The Bank reserves the right to Accept or reject any or all offers in full/ part without assigning any reasons whatsoever.

18. The successful bidder shall strictly comply with the provisions of safety code including obtaining necessary insurance cover/ policy to protect Bank's interest on account of loss to any person(s) and the property arising due to faulty installation etc. on the successful bidder's part.

19. The successful bidder shall obtain adequate insurance policy/ policies in respect of his workmen to be engaged for the work towards meeting the liability of compensation arising out of death/ injury/ disablement at work etc.

20. In case of any major defects founds in the system during checking it should be informed to the Engineer-in-charge and defects should be rectified immediately.

21. Any abnormality in electrical installation or major fault should be brought into the notice of Engineer-in-charge.

22. A suitable record for the work done will have to be maintained by the contractor.

23. The monthly report detailing the nature of the service carried out, the defect observed to be supplied to the Engineer-in-charge.

24. Preventive maintenance shall be done as per OEM recommendation.

25. If any AC related equipment added during the contract period, the operation & maintenance of same shall be included in the contract without any escalation cost.

11. ARTICLES OF AGREEMENT

This agreement made on this day of _____, 2021 at **Kolkata, West Bengal**

BETWEEN

Punjab National Bank, a Body Corporate, constituted under the Banking Companies (Acquisition and transfer of undertakings) Act 1970, having its Head Office at Plot No 4, Sector -10, Dwarka, Delhi-110075 (hereinafter called the “Bank”, which term shall, wherever the context so permits, mean and include its successors and assigns) of the First Part;

AND

M/s _____, having its Office at _____ (hereinafter called the “Contractor”, which term shall, wherever the context so permits, mean and include its successors and permitted assigns) of the Second Part. Whereas,

a. The Bank vide its letter dated _____ has entrusted to the Contractor the “Operation and Annual Maintenance Contract (AMC) of the HVAC System, complete high and low side equipment installed at its United Tower building at 11, Heamant Basu Sarani, Kolkata- 700001 for the period from _____ to _____. The detailed list of low side equipment is placed at annexure.

b. The Contractor has agreed to perform the work described herein below in consideration of the charges prescribed herein.

NOW THIS AGREEMENT WITNESSES AS FOLLOWS:

1. In this agreement words and expressions shall have the same meaning as are respectively assigned to them in the said conditions of contract hereinafter referred to.
2. The following documents and the terms & conditions contained therein shall form and construe as integral part and parcel of this agreement viz.
 - a. Original tender document (Part ‘A’ & ‘B’).
 - b. Award/ Acceptance letter.
 - c. Performance Bank Guarantee.
3. The aforesaid documents shall be taken as complementary and mutually explanatory of one another, but in the case of ambiguities of discrepancies the latest documents issued by the Bank shall prevail over the earlier documents.
4. In consideration of payment to be made by the PNB to the Contractor as hereinafter mentioned, the Contractor hereby covenants with the PNB to perform, execute, complete and maintain the work in conformity in all respects with the provision of the contract.
5. The PNB hereby covenants to pay the Contractor in consideration of the execution, completion and maintenance of the work such sums as shall become payable hereunder at the time(s) and in the manner prescribed in the said conditions and price schedule of quantities / bill of quantities prescribed in the contract.

6. IN WITNESS whereof the parties hereto have caused their respective common seals to be hereunto affixed (or have hereunto set their respective hands and seals) the day, month and year first above written.

7. All disputes arising out of or in connection with this agreement shall deem to have arisen in Kolkata and only the courts of Kolkata shall have the jurisdiction to determine the same.

SIGNED AND SEALED AND DELIVERED BY THE

Said

Said

(Name)

(Name)

on behalf of the Contractor

on behalf of the PNB

In the presence of

In the presence of

Name:

Name:

Address:

Address:

Note: - This draft form is included in the tender documents only for the information of the bidders. Successful bidder will be required to complete the form in due course.

12. BIDDERS INFORMATION

1. Name
2. Constitution (Proprietorship/ Limited etc.)
3. Address
4. Names & Addresses of the Partners/ Directors if applicable
5. Name of Contact Person(s) with their Mobile Numbers
6. Office Telephone, Fax, e-mail
7. PAN No.
8. GST Details: GSTIN/ ARN –
State Code –
HSN/ SAC Codes –
9. Manpower Employed.

13. BIDDERS FINANCIAL INFORMATION

Name:

Constitution:

Address:

Names & Addresses of the Partners if applicable:

Contact Person(s) _____

Telephone, Fax, e-mail _____

Number of years of experience _____

Please give brief financial particulars of your firm for the last three accounting years along with the volume of business handled.

(The information will be kept confidential)

Year	2018-19	2019-20	2020-21
Total Turnover			
Average Turnover			

Signature of authorized person

Seal of company

14. COMPLIANCE STATEMENT

DECLARATION:

Please note that any deviations mentioned elsewhere in the bid will not be considered and evaluated by the Bank. Bank reserve the right to reject the bid, if bid not submitted in proper format as per Tender Document.

<u>Compliance</u>	<u>Description</u>	<u>Compliance (Yes/No)</u>
Terms and Conditions	We hereby undertake and agree to abide by all the terms and conditions including all annexure, corrigendum(s) etc. stipulated by the Bank in this Tender Document. (Any deviation may result in disqualification of bids).	
Scope of work	We certify that the services offered by us for NIT confirm to the Scope of work stipulated by you (Any deviation may result in disqualification of bids)	

Signature:

Seal of company

15. INTEGRITY PACT

To,

.....,
.....,
.....

Reg: NIT No. for the work

Dear Sir,

It is hereby declared that PNB is committed to follow the principle of transparency, equity and competitiveness in public procurement.

The subject Notice Inviting Tender (NIT) is an invitation to offer made on the condition that the Bidder will sign the integrity Agreement, which is an integral part of tender/bid documents, failing which the tenderer/ bidder will stand disqualified from the tendering process and the bid of the bidder would be summarily rejected.

This declaration shall form part and parcel of the Integrity Agreement and signing of the same shall be deemed as acceptance and signing of the Integrity Agreement on behalf of the PNB.

Yours faithfully,

**Chief Manager,
GAD, Zonal Office,
Punjab National Bank,
PNB United Tower,
11, Hemanta Basu Sarani,
B.B.D. Bagh, Kolkata, 700001.**

PUNJAB NATIONAL BANK

16. INTEGRITY PACT

To,

**The Chief Manager,
GAD, Zonal Office,
Punjab National Bank,
PNB United Tower,
11, Hemanta Basu Sarani,
B.B.D. Bagh, Kolkata, 700001**

Sub: Operation & Annual Maintenance Contract of Central Air Conditioning Plant at Punjab National Bank, United Tower Building, 11 Hemant Basu Sarani, Kolkata – 700001.

Dear Sir,

1. I/We acknowledge that PNB is committed to follow the principles thereof as enumerated in the Integrity Agreement enclosed with the tender document.
2. I/We agree that the Notice Tender (NIT) is an invitation to offer made on the condition that I/We will sign the enclosed integrity Agreement, which is an integral part of tender documents, failing which I/We will stand disqualified from the tendering process. I/We acknowledge that THE MAKING OF THE TENDER SHALL BE REGARDED AS AN UNCONDITIONAL AND ABSOLUTE ACCEPTANCE of this condition of the NIT.
3. I/We confirm acceptance and compliance with the Integrity Agreement in letter and spirit and further agree that execution of the said Integrity Agreement shall be separate and distinct from the main contract, which will come into existence when tender is finally accepted by PNB.
4. I/We acknowledge and accept the duration of the Integrity Agreement, which shall be in the line with the enclosed Integrity Agreement.
5. I/We acknowledge that in the event of my/our failure to sign and accept the Integrity Agreement, while submitting the tender, PNB shall have unqualified, absolute and unfettered right to disqualify the tenderer/applicant and reject the tender in accordance with terms and conditions of the tender.

Yours faithfully

(Duly authorized signatory of the Applicant)

17. Pre Contract Integrity Pact

Punjab National Bank, a body corporate constituted under the Banking Companies (Acquisition and Transfer of Undertaking Act 1970) (Act no V of 1970) and having its Head Office at Plot no. 4, Sector 10, Dwarka, New Delhi 110075, hereinafter referred to as “The Principal”, which expression shall mean and include unless the context otherwise requires, its successors in office and assigns of the First Part.

And

M/s. _____ having its registered office at _____ hereinafter referred to as “The Bidder/ Contractor/ Vendor”, expression shall mean and include unless the context otherwise requires, successors and permitted assigns of the Second part.

Preamble

The Principal intends to award, under laid down organizational procedures, contract/s for..... The Principal values full compliance with all relevant laws of the land, rules, regulations, economic use of resources and of fairness/ transparency in its relations with its Bidder(s) and/ or Contractor(s).

In order to achieve these goals, the Principal will appoint Independent External Monitors (IEMs) who will monitor the tender process and the execution of the contract for compliance with the principles mentioned above.

Section 1- Commitments of the Principal

(1) The Principal commits itself to take all measures necessary to prevent corruption and to observe the following principles: -

a. No employee of the Principal, personally or through family members, will in connection with the tender for, or the execution of a contract, demand, take a promise for or accept, for self or third person, any material or immaterial benefit which the person is not legally entitled to.

b. The Principal will, during the tender process treat all Bidder(s) with equity and reason. The Principal will in particular, before and during the tender process, provide to all Bidder(s) the same information and will not provide to any Bidder(s) confidential/additional information through which the Bidder(s) could obtain an advantage in relation to the tender process or the contract execution.

c. The Principal will exclude from the process all known prejudiced person.

(2) If the Principal obtains information on the conduct of any of its employees which is a criminal offence under the IPC/ PC Act, or if there be a substantive suspicion in this regard, the Principal will inform the Chief Vigilance Officer and in addition can initiate disciplinary actions.

Section 2- Commitments of the Bidder(s)/ Contractor(s)

(1) The Bidder(s)/ Contractor(s) commit themselves to take all measures necessary to prevent corruption during any stage of bid process/ contract. The Bidder(s)/ Contractor(s) commit themselves to observe the following principles during participation in the tender process and during the contract execution.

a. The Bidder(s)/ Contractor(s) will not, directly or through any other person or

firm, offer promise or give to any of the Principal's employees involved in the tender process or the execution of the contract or to any third person any material or the other benefit which he/ she is not legally entitled to, in order to obtain in exchange any advantage of any kind whatsoever during the tender process or during the execution of the contract.

b. The Bidder(s)/ Contractor(s) will not enter with other Bidders into any undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to introduce cartelization in the bidding process.

c. The Bidder(s)/ Contractor(s) will not commit any offence under the relevant IPC/PC Act; further the Bidder(s)/ Contractor(s) will not use improperly, for purposes of competition or personal gain, or pass on to others, any information or document provided by the Principal as part of the business relationship, regarding plans, technical proposal and business details, including information contained or transmitted electronically.

d. The Bidder(s)/ Contractor(s) of foreign origin shall disclose the name and address of the Agents/representatives in India, if any. Similarly the Bidder(s)/ Contractor(s) of Indian Nationality shall furnish the name and address of the foreign principals, if any. Further details as mentioned in the "Guidelines on Indian Agents of Foreign Suppliers" shall be disclosed by the Bidder(s)/ Contractor(s). Further, as mentioned in the Guidelines all the payments made to the Indian agent/representative have to be in Indian Rupees only.

e. The Bidder(s)/ Contractor(s) will, when presenting their bid, disclose any, and all payments made, is committed to or intends to make to agents, brokers or any other intermediaries in connection with the award of the contract.

f. Bidder(s)/ Contractor(s) who have signed the Integrity Pact shall not approach the Courts while representing the matter to IEMs and shall wait for their decision in the matter.

(2). The Bidder(s)/ Contractor(s) will not instigate third persons to commit offences outlined above or be an accessory to such offences.

Section-3 Disqualification from tender process and exclusion from future contracts.

If the Bidder(s)/ Contractor(s) before award or during execution has committed a transgression through a violation of Section 2, above or in any other form such as to put their reliability or credibility in question, the Principal is entitled to disqualify the Bidder(s)/ Contractor(s) from the tender process or take action as per the procedure mentioned in the "Guidelines on Banning of business dealings".

Section 4- Compensation for Damages

(1). If the Principal has disqualified the Bidder(s) from the tender process prior to the award according to Section 3, the Principal is entitled to demand and recover the damages equivalent to earnest Money Deposit/Bid Security by forfeiting the same

(2). If the Principal has terminated the contract according to Section 3, or the Principal is entitled to terminate the contract according to Section 3, the Principal

shall be entitled to demand and recover from the Contractor liquidated damages of the contract value or the amount equivalent to Performance Bank Guarantee/ Initial Security Deposit by forfeiting the same.

Section 5- Previous transgression

(1) The Bidder declares that no previous transgression occurred in the last three years immediate before signing of this integrity pact with any other Company in any country conforming to the anti-corruption approach or with any Public Sector Enterprises or central/state government department in India that could justify his exclusion from the tender process.

(2). If the Bidder makes incorrect statement on this subject, he can be disqualified from the tender process or action can be taken as per the procedure mentioned in "Guidelines on Banning of business dealing".

Section 6- Equal treatment of all Bidders/ Contractors/ Subcontractors

(1) In case of Sub-contracting, the Principal Contractor shall take the responsibility of the adoption of integrity Pact by the Sub-contractor.

(2) The Principal will enter into agreements with identical conditions as this one with all Bidders and Contractors.

(3) The Principal will disqualify from the tender process all the Bidders who do not sign this Pact or violate its provisions.

Section 7- Criminal charges against violating Bidder(s)/ Contractor(s)/ Subcontractor(s)

If the Principal obtains knowledge of conduct of a Bidder, Contractor or Sub contractor, or of an employee or a representative or an associate of a Bidder, Contractor or Subcontractor which constitutes corruption, or if the Principal has substantive suspicion in this regard, the Principal will inform the same to the Chief Vigilance Officer.

Section 8- Independent External Monitor

(1) The Principal appoints competent and credible Independent External Monitor for this Pact after approval by Central Vigilance Commission. The task of the Monitor is to review independently and objectively, whether and to what extent the parties comply with the obligations under the agreement.

S. No	Name of IEM	e-mail
1.	Shri Raj Kumar Singh, (M-8141488880)	mrrajksingh@gmail.com
2.	Dr. Sarat Kr. Acharya, (M-9442118060)	Sarat777@rediffmail.com

(2) The Monitor is not subject to instructions by the representatives of the parties and performs his/her functions neutrally and independently. The Monitor would have access to all Contract documents, whenever required. It will be obligatory for him/ her to treat the information and documents of the Bidders/ Contractors as confidential. He/ she reports to the Managing Director and CEO, Punjab National Bank.

(3) The Bidder(s)/ Contractor(s) accepts that the Monitor has the right to access without restriction to all project documentation of the Principal including that provided by the Bidder(s)/ Contractor(s). The Bidder(s)/ Contractor(s) will also grant the Monitor, upon his/ her request and demonstration of a valid interest, unrestricted and unconditional access to their project documentation. The same is applicable to Sub-

contractor.

(4) The Monitor is under contractual obligation to treat the information and documents of the Bidder(s)/ Contractor(s)/ Subcontractor(s) with confidentiality. The Monitor has also signed declarations on “Non-Disclosure of Confidential Information” and of “Absence of Conflict of Interest”. In case of any conflict of interest arising at a later date, the IEM shall inform MD & CEO, Punjab National Bank and recuses himself/ herself from that case.

(5) The Principal will provide to the Monitor sufficient information about all meetings among the parties related to the Project provided such meetings could have an impact on the contractual relations between the Principal and Contractor. The parties offer to the Monitor the option to participate in such meetings.

(6) As soon as the Monitor notices, or believes to notice, a violation of this agreement, he/she will so inform the Management of the Principal and request the Management to discontinue or take corrective action, or to take other relevant action. The monitor can in this regard submit non-binding recommendations. Beyond this, the Monitor has no right to demand from the parties that they act in a specific manner, refrain from action or tolerate action. The Monitor will submit a written report to the MD & CEO, Punjab National Bank within 8 to 10 weeks from the date of reference or intimation to him by the Principal and, should the occasion arise, submit proposals for correcting problematic situations.

(7) If the Monitor has reported to the MD&CEO, Punjab National Bank, a substantiated suspicion of an offence under relevant Indian Penal Code/ Prevention of Corruption Act, and the MD & CEO, PNB has not, within the reasonable time taken visible action to proceed against such offence or reported it to the Chief Vigilance Officer, the Monitor may also transmit this information directly to the Central Vigilance Commissioner.

(8) The word ‘**Monitor**’ would include both singular and plural.

Section 09- Pact Duration

This Pact begins when both parties have legally signed it. It expires for the Contractor 12 months after the last payment under the contract, and for all other Bidders 6 months after the contract has been awarded. Any violation of the same would entail disqualification of the bidders and exclusion future business dealings.

If any claim is made/lodged during this time, the same shall be binding and continue to be valid despite the lapse of this pact as specified above, unless it is discharged/ determined by MD & CEO, PNB.

Section 10- Other provisions

(1) This agreement is subject to Indian Law. Place of performance and jurisdiction is the “Place of award of work”.

(2) The actions stipulated in this Integrity Pact are without prejudice to any other legal action that may follow in accordance with the provisions of to the extant law in force relating to any civil or criminal proceedings.

(3) Changes and supplements as well as termination notices need to be made in writing. Side agreements have not been made.

(4) If the Contractor is a partnership or a consortium, this agreement must be signed by all partners or consortium members.

(5) Should one or several provisions of this agreement turn out to be valid, the remainder of this agreement remains valid. In this case, the parties will strive to come to an agreement to their original intentions.

(6) Issues like warranty/ Guarantee etc. shall be outside the purview of IEMs.

(7) In the event of any contradiction between the Integrity Pact and its Annexure, the Clause in the Integrity Pact will prevail.

(For & On behalf of the Principal)

(For & On behalf of Bidder/ Contractor)

(Office Seal)

(Office Seal)

Place.....

Date.....

Witness1:

Witness2:

(Name & Address)

(Name & Address)

PUNJAB NATIONAL BANK

18. EQUIPMENT DETAILS, MANPOWER AND SCOPE OF WORK

1. List Of Air Handling Units To Be Covered Under Amc

S. No.	Floor	FRONT (E)	REAR (W)
1	Ground Floor	7.5 HP X 1 No	7.5 HP X 1 No
2	1 st Floor	10.0 HP X 1 No	7.5 HP X 2 No
3	2 nd Floor	7.5 HP X 1 No	Nil
4	3 rd Floor	7.5 HP X 1 No	7.5 HP X 1 No
5	4 th Floor	7.5 HP X 1 No	12.5 HP X 1 No + 1.5 HP x 1 No
6	5 th Floor	7.5 HP X 1 No	
7	6 th Floor	Nil	Nil
8	7 th Floor	7.5 HP X 1 No	
9	8 th Floor	7.5 HP X 1 No	
10	9 th Floor	10.0 HP X 1 No	
11	10 th Floor	10.0 HP X 1 No	
12	11 th Floor	10.0 HP X 1 No	
13	12 th Floor	10.0 HP X 1 No	
14	13 th Floor	10.0 HP X 1 No	
15	14 th Floor	10.0 HP X 1 No	
16	15 th Floor	10.0 HP X 1 No	
17	16 th Floor	12.5 HP X 1 No	
Total = 7.5 HP X 11 + 10 HP X 8 + 12.5 HP X 2 = 187.5 HP = 140 KW			

2. System Brief:

The building consists of 3 Basements and G+5 Floors. Office/ air conditioned areas are located in G+5 floors. The high side consist of 3 Nos. 375 T.R each Centrifugal chiller (each water cooled Centrifugal chiller with VFD) and 1 No. 100 T.R. water cooled rotary screw chiller located in Basement 2. The chillers eject heat to cooling towers on terrace. Chilled/ Condenser water is circulated using high efficiency motors and M.S. 'B'/C class piping. Secondary chilled water is circulated through variable pumping system. The Chillers have variable frequency drives (VFD) to improve its efficiency.

Air distribution system consist of variable volume Air handling units with VFDs for each floor level located in separate rooms, connected to the chilled water circuit. The air handling units & FCUs are provided with 2 – Way motorized control valves. The secondary chilled water pumping is a variable volume pumping system.

3. Manpower: The Contractor shall deploy the following personnel, who are having requisite experience in the field of in chiller operation, VFDs, VAVs and Central air conditioning system, at the site during working days and timing will be as per requirement of the Bank: -

S. No	Man-power	Qty	Requisite Qualification and experience	Working Hours
1	Supervisor/ Foreman (Skilled)	01	Diploma/ License holder with minimum 5 years' experience	SUMMER: 8:00 AM TO 05:00 PM (March to November) WINTER: 8:00 AM TO 05:00 PM (December to February)
2	Operator-cum-mechanic (Semi-skilled)	01	License/ ITI holder with minimum 3 years' experience	
3	Electrician-cum-operator (Semi-skilled)	01	License/ ITI holder in electrical trade with minimum 3 years' experience.	

3.1 Weekly off will be given on once a week as per roster. In case operation of central AC plant executed on Sunday/ holiday, the same shall be managed by contractor without any extra cost by using existing man power including maintenance works.

3.2 The Chiller Plants will be operated on all days round the clock as per Bank's requirement.

3.3 The Contractor shall make standby arrangement in place of any personnel deployed by the Contractor proceeding on long leave or remaining absent due to any reason for whatever number of days. The Contractor shall have to maintain an acquisition roll register mentioning therein the name of all the personnel with designation and emoluments etc. as required under the relevant laws and the register must be available at the site for inspection of all concerned.

3.4 Daily attendance record must be maintained by the Contractor of each staff and the same should be produced before the Department concerned of the Bank.

3.5 The Bank reserves the right to verify the antecedent of the personnel deployed by the Contractor and would have all the rights for asking replacement of any of the personnel. The decision of the Bank in this regard will be final.

3.6 The Operation Mechanic Cum Service Supervisor of the Contractor will inspect the Plant daily and shall sign the log sheet with date in this regard.

3.7 The Operation Mechanic Cum Service Supervisor of the Contractor shall have to submit at every weekend a performance report of the Plant, mentioning therein any defects, discrepancies, and rectification in respect of the overall performance of the Plant requiring immediate remedial action and serious discrepancies, which are out of the scope, shall have to be notified as soon as they are noticed. During this period the defective unit is to be immediately closed to avoid any deterioration.

3.8 The Contractor's Engineer shall pay a fortnightly visit to the Plant at the site and shall hold discussions with the designated Engineer of the Bank. OEM's Engineer shall pay a monthly visit to the plant.

3.9 A monthly review meeting of Sr. Engineers of the Contractor with the Bank's designated technical head shall be held at the site.

3.10 Proper uniform & identity cards shall be issued by the firm to the staff deputed at site for which nothing extra shall be paid.

19. Scope of Work

DETAILS OF WORK: PART – 1 (ANNUAL OVERHAULING & RE-COMMISSIONING)

1. Scope of this section is to describe the existing A. C. system and to describe the scope of work of O&M contractor during annual overhauling and recommissioning of the A.C. System to be carried out during each winter shut down of the A.C. plant throughout the tenure of contract period.
2. The scope of work will not only be limited to supplying required manpower, spares/ material, consumables, tools and tackles, testing instruments, all facilities for lifting/ handling/ transporting of equipment/heat exchangers; but also include insurance covering risk during transportation of equipment, risk of lives (3rd party) and risk of damages to property/ document/ any other valuables due to any accident etc., for the completion/ implementation of annual overhauling and re-commissioning of the existing A.C. System.
3. Any additional equipment, material, controls, services etc. which are not specifically mentioned herein but are required for a thorough and high standard of overhauling and recommissioning work to achieve a guaranteed continuous trouble free commercial operation of the A.C. Plant, shall be deemed to be covered under the scope of this specification.

EXISTING A. C. PLANT:

The existing chilled water plant for air conditioning the Head Office Building of United Bank of India, Kolkata was commissioned in 1972 and the plant is working since then with necessary up-gradation from time to time.

Six Water Chilling Units each of about 115 TR capacity are installed in the Ground Floor Plant Room to cater to the air conditioning requirement of the entire Building. The original A.C. Plant was installed by M/s. Blue Star Ltd. in 1971/72.

During past fifteen years, the original equipment installed by M/s. Blue Star were replaced in phases and the details of the new A.C. equipment are as under –

Sr. No.	Items	Description
1	Compressors	115 TR (actual output with water chilling units) Reciprocating compressor of “Voltas” make - 6 Nos
2	Condensers	115 TR capacity shell-and-tube water cooled condenser of VOLTAS make - 5 Nos. and of Blue Star make 1 No.
3	Coolers	115 TR DX type shell-and-tube water Cooler of VOLTAS make - 6 Nos
4	Cooling Coils	4-Row deep, 13 fins/inch copper tube aluminium finned cooling coils of Voltas
5	AHUs	The AHUs are of Blue Star make with cooling coils of Voltas make - 22 Nos.
6	Piping	The entire condenser and chilled water piping with pipe-insulation , valves, strainers etc. were replaced during 1996 -98
7	Pumps	The original pumps were replaced in 2010 -2011 with pumps of “Becon” make and were provided with mechanical seals

8	Control Panels of Compressors	The control panels for compressors with all the safety switches /gauges were replaced.
9	Cooling Towers	Presently two Induced Draft Cooling Towers each of 350 TR capacity and one ID cooling tower of 200 TR capacity of Paharpur make are in operation.

The compressors are directly coupled to 180 HP, 4-pole, slip-ring induction motors of Siemens make. The A.C. System is working with **F-22 Refrigerant**.

The Condenser and chilled water pumps were replaced in December, 2010 with recent models of “Becon” Pumps and the pumps are with “Mechanical Seals”.

The Cooling Towers are located on the roof-top i.e. above 16th Floor. The 350 TR cooling towers are provided with 20 HP motor for driving the fan.

Twenty-two (22 Nos.) AHUs are distributed in sixteen floors. There is one blower for basement ventilation.

The water softening plant for the make-up water to the Cooling Towers is located in a room on the roof of the Building (i.e. above 16 Floors). The operation and maintenance of the water softening plant is being carried out by other agency.

The power supply to various drives are fed from the MCC in the A.C. Plant room. There is a central control desk inside the plant room for operation of various AHU Blower Motors. The local control stations for the operation of the drive motors of Compressors, Pumps, Cooling Towers and AHUs are located near the respective drives. In order to improve upon the power factor of the Electrical System, Capacitor banks have been provided by the side of the MCC. All isolating fuse Switches are provided with HRC fuses.

The Bidders are advised to visit the site prior to the submission of their offers to acquaint themselves to the actual condition of the system and the equipment, extent of repair/ replacement necessary to the plant and equipment for getting satisfactory performance during the period of peak load operation. They shall also satisfy themselves regarding the Cooling load requirement in various floors in the peak summer to maintain the desired inside conditions as specified elsewhere in the specification.

ANNUAL OVERHAULING:

Repair/ replacement/ overhauling of the various equipment/ component in the A.C. System shall be carried out during annual overhauling in the winter shut-down period. All the equipment shall be overhauled as per the manufacturers' recommendation and all the clearances in the respective moving components shall be within recommended tolerance.

Before taking up the overhauling of the Chiller Packages, the Refrigerant in the water chilling units shall be transferred to the respective condenser or to refrigerant cylinders. Utmost care shall be taken to prevent escape of refrigerant to the atmosphere.

Apart from following the recommendations specified in the maintenance manuals furnished by the respective manufacturers, following guidelines shall be followed by the O & M Contractor.

Compressor:

- (a) Evacuate the compressors before dismantling.
- (b) All the dismantled parts shall be kept in rust preventive oil and stored in dust-free enclosure.
- (c) All the component shall be washed in clean Kerosene and lubrication oil before assembly.
- (d) The dismantling and reassembly shall be carried out by skilled mechanics specially trained to overhaul the compressors of this make.
- (e) The valve assembly, piston rings, bearings, shaft seal, oil pump, oil strainer and the lubrication system, refrigerant suction strainer, safety valve, cylinder valve lifting mechanism, Crankshaft journal etc. shall be checked critically during overhauling. All gaskets shall be replaced.
- (f) During overhauling the lubricating oil shall be replaced completely and correct grade of oil as recommended by the manufacturer shall be used. Oil from only sealed containers shall be used.
- (g) Repair/replacement of any component, if required shall be carried out during the annual overhauling. The specification of any component, if replaced shall be similar to the original component.
- (h) All the safety controls shall be checked/adjusted as per manufacturer's recommendation.

Condensers and Coolers:

- (a) Entire quantity of water in the pipes shall be drained out from the lowest point.
- (b) The water box covers of the condensers shall be removed for cleaning purpose.
- (c) The **inside tube surface of the condensers** shall be cleaned with circulation of recommended cleaning agents/chemicals and brushing as recommended by the manufacturers.
- (d) If necessary, the water side surface of the Chiller tubes shall be cleaned with the circulation of recommended cleaning agents/chemicals. The cost of this work shall not be included in the cost of Overhauling. Unit cost shall be indicated separately.
- (e) The cleaning of the tube surfaces shall be carried out by the agencies who have specialised only in this type of work. Before entrusting the work to any agency, clearance shall be taken from the employer.
- (f) All the gaskets shall be replaced during overhauling of the heat exchangers.
- (g) The partitions/micro baffles between the tube passes (both for water and refrigerant in the condensers and coolers) shall be checked and if necessary repaired/replaced.
- (h) The safety valves and fusible plugs in the condenser shall be checked.
- (i) The water inlet and outlet of all condensers and coolers shall be provided with Thermowell for measuring temperatures and sockets for pressure testing.
- (j) The insulation over the Cooler surface shall be checked and if necessary shall be repaired with 25 mm thick Fire Retarding Quality Nitrile Rubber Foam Insulation.

Condenser & Chilled Water Pumps:

- (a) All the water in the pipe lines shall be drained out.
- (b) The pumps shall be dismantled and the impellers, bearings, shafts and shaft sleeves, stuffing box, glands etc. shall be checked and repaired/replaced.
- (c) The gaskets shall be replaced.
- (d) The Pump-Motor coupling bushes shall be replaced.
- (e) The Pump-Motor shall be aligned properly after overhauling.

- (f) The strainer and the strainer baskets shall be cleaned and checked and if necessary repaired.
- (g) The pump bearings shall be greased. If any pump bearing need to be replaced, prior clearance shall be obtained from the employer.
- (h) The siphon and cocks with the pressure gauges in the pipe lines at the inlet and outlet of each pump/condenser/cooler/AHU shall be checked and the defective ones shall be replaced. Unit rate of SS siphon and cock shall be indicated.
- (i) The insulation over chilled water pumps, if found defective, shall be insulated with 25 mm thick fire retarding quality aluminium foil faced Nitrile Rubber Foam insulation by fixing over pump surface with recommended adhesive – all joints sealed. Over the Aluminium Foil, one layer of fibreglass cloth (of minimum 7 mil thickness) shall be fixed with a coating of "Fevicol lag coating AF - 5590" over the surface of the foil. A second layer of coating shall be applied over the fibreglass cloth.

Cooling Tower:

- (a) The water in the Cooling Tower basin shall be cleaned. Distribution deck and all nozzles shall be cleaned.
- (b) The suction strainer shall be cleaned and given two coats of Red Oxide paint and finished with one coat of synthetic enamel paint.
- (c) All the metal parts/components including fan guard and Motor base/support shall be checked and painted as described against item (b) above.
- (d) The fan drive including the gear box shall be checked and all nuts and bolts shall be tightened. The oil in the gear box shall be replaced.
- (e) The PVC fills shall be checked and its surface shall be cleaned.

Air Handling Units/ Blower:

- (a) The outside surface of the Cooling Coils shall be cleaned with chemical solution. This work shall be carried out by the agencies, specialised in this type of work. Before entrusting this work to any agency, clearance shall be taken from the employer.
- (b) The surface of the cooling coil headers shall be cleaned with wire-brush and shall be given two coats of red oxide paints and the two coats of black synthetic enamel paint.
- (c) The filters shall be cleaned and re-fixed. Any gap between the filters and edge shall be closed with sheet metal to prevent unfiltered air to enter coil. Filters guide in AHUs and filter frames shall be repaired, if necessary.
- (d) The impeller of the blowers shall be cleaned and painted with two coats of red oxide. Fan shaft shall also be painted. Apply synthetic enamel paint over primer.
- (e) The impeller and the fan shaft shall be checked whether unbalanced and if necessary shall be rectified.
- (f) The bearing shall be checked and lubricated after thorough cleaning.
- (g) The bottom tray of both the blower and coil section shall be thoroughly cleaned.
- (h) If the bottom trays of blower and the coil sections are corroded beyond repair, they may have to be replaced with prior approval from the Owner/ Employer.
- (i) The panels of the AHUs shall be repaired wherever necessary. The M.S. parts shall be given two coats of red oxide after wire brushing and then given a coat of Synthetic enamel paint. The panels shall also be given two coats of silver paints after thorough cleaning.

Motors:

- (a) All motors (including Cooling Tower fan motors and AHU blower motors) shall be completely overhauled as per manufacturer's recommendation.
- (b) The bearings shall be lubricated and the windings shall be cleaned by high velocity dry air and heat varnished.
- (c) All the belt guards shall be re-fixed.
- (d) Megger test shall be carried out on all motors and the slip rings.

Electrical (General):

- (a) All the contactors are to be cleaned, worn-out/pitted contactors are to be replaced.
- (b) All connections are to be checked against their tightness and correctness.
- (c) Earth connections are to be checked and replaced/refitted in case of discontinuity.
- (d) All cables/control wires are to be properly dressed, adequately supported if needed.
- (e) Replace the oil in the rotor starters and dashpots.
- (f) Check and if necessary replace the brushes of the slip ring.
- (g) Check and adjust the overload settings of all starters.

M.C.C.:

- (a) Inspect bus bar and unit Compartment and the cable alley for tools, conductors and other foreign material and remove such articles.
- (b) Remove dust etc. using Vacuum Cleaner or air blower.
- (c) Wipe the inside clean, particularly the insulation surfaces with dry clean cloth.
- (d) Check all power and control circuit connection at terminal blocks, cable terminals, switch terminals, contactor terminals and bus bolts for tightness.
- (e) Ensure that all unused openings in the vertical chambers are blocked with rubber plugs.
- (f) Plug all cable/wire entries and other unused entries.
- (g) Inspect all relays and make sure that the disc/armatures move freely.
- (h) Check all the fuses and replace, if found defective. Check and reset O/L settings of all starters.
- (i) Make sure that on & off mechanism of all the switches function correctly and door interlocking is positioned to prevent door from opening when the switch handle is in "ON" position.
- (j) The ammeter and voltmeters are giving correct reading.
- (k) The Electrical System shall be given Megger test.
- (l) Check the settings of main incoming circuit breaker.

Note: Before working on the MCC, the main incoming power shall be switched off. The main horizontal bus shall be earthed and shall be checked whether fully de-energised. All control voltages shall be isolated. Padlock the circuit breakers or Switch in off position before working on Motor or branch circuits. Only qualified and experienced personnel shall be permitted to work in the MCC.

Condenser & chilled Water Piping:

- (a) Check and repair any water leakage from any joints.
- (b) Check and service all the valves. The rotation of the valve handle shall be made free.
- (c) Check the pipe insulation and repair the damaged portion with 50 mm thick TF Quality Expanded polystyrene.
- (d) Check and if necessary repair all pipe supports and paint as per clause 1.05.01.

Duct Work:

- (a) Check the entire duct work in respect of supports, leak tightness, and insulation.
- (b) Check the dampers in the duct and fresh air intake points for their normal operation and repair if necessary.
- (c) Clean all the supply and return air grills and paint wherever necessary. Only spray painting will be accepted. Unit rate of spray painting shall be indicated. Overhauling cost shall not include the cost of painting the grills.
- (d) The Fresh Air intake damper shall be adjusted for correct air intake. Dampers shall be thoroughly cleaned and painted as per clause 1.05.01.

AHU Rooms & A. C. Plant Room:

The AHU Rooms and A.C. Plant room shall be thoroughly cleaned. All the Exhaust fans in the A.C. Plant room shall be overhauled and painted.

PRESSURE TESTING AND VACCUMISING:

In case of detection of any leakage in the refrigeration system of any water chilling unit, the leak shall be rectified and the system shall be pressure tested with Nitrogen at 20 KG/ CM² for 24 hours. On successful completion of pressure testing the system shall be vacuumed down to 10,000 microns and vacuum shall be broken with Dry Nitrogen. Repeat the procedure of evacuation and breaking the vacuum three to four times. Then continue evacuation up to 500 microns. When 500-micron vacuum is reached, close the inlet valve of the vacuum pump and observe the rise in vacuum pressure. This should not exceed 500 microns, in 30 minutes. If the pressure does not exceed 500 microns in 30 minutes, repeat the above procedure. After the system is evacuated to 500 microns and pressure rise during half an hour does not exceed 500 microns, break the vacuum with F-22.

Use a suitable vacuum gauge with range of 1-1000 microns such as IBP make thermocouple vacuum gauge model TC3M with matching gauge adaptor. It is useless to measure vacuum on a conventional dia type compound gauge or 0-760 mm vacuum gauge.

PAINTING:

The entire plant shall be painted properly with synthetic enamel paint of any reputed make like Asian Paints, Berjer, Nerolac or equivalent. Before painting, the surfaces shall be cleaned properly. Wherever there is rust formation, the area shall be cleaned with wire brush and then provided with two coats of red oxide primer over which finishing paint shall be provided. Following colour code shall be followed.

- (a) Hot gas line - Red (b) Liquid line - Yellow (c) Suction line - Green (d) Water line - Blue (e) Drain line - Black (f) Equipment - Battleship grey (g) AHUs - Silver

All the equipment shall be numbered and arrow mark shall be indicated over pipes in the direction of flow.

RECOMMISSIONING:

After completion of overhauling, the A.C. Plant shall be re-commissioned, all controls shall be adjusted and the system shall be balanced to give satisfactory performance.

The performance of the A.C. system as well as individual equipment shall be tested during operation of the plant in peak summer every year throughout the contract period. This test shall be carried out to determine whether the plant meets the

performance required in the specification. All instruments required for measuring various parameters during such tests shall be supplied by the contractor. During peak summer, the air quantity of each AHUs shall be measured by the contractor. The adjustment of the dampers in the duct, if required, shall be carried out.

SPARE PARTS AND CONSUMABLES:

The rates quoted by the contractor for overhauling and recommissioning shall include the cost of all consumables like grease, gland packing, Nitrogen/ CO₂, for pressure testing, Welding rods/ brazing sticks and flux, Oxy-acetylene gas, chemicals/ acids for descaling, paints and primers, kerosene and other cleaning agents, cotton waste, adhesives, nuts/ bolts/ washers, Gaskets for pipes and all main equipment like compressors/ pumps, any type of fabricated support for pipe or equipment and any other type consumable which may be required during overhauling and recommissioning.

Most of the spares which may be required during overhauling of major items like Compressors, Motors, Pumps AHUs, Cooling Towers, MCC, Starters etc. will be borne by the employer. The Employer/ Bank will also bear the cost of Compressor lubricating oil, Transformer oil, Refrigerant and V-belts required during the Overhauling and re-commissioning.

The contractor shall indicate a percentage towards his O/H and profit over the value in the cash memo/ invoice for supplying the spares or carrying out any type of specialised repair/ machining work. The spares will be procured only from the manufacturers or their authorised agents. The employer reserves the right to insist on submitting three quotations for the spares or any repair/ machining work (where the work has to be carried out through outside agencies) from the contractor before approving the procurement action.

In case of non-scheduled items of replacement/ spares, the payment will be made on rate analysis and as per the market rate duly certified by the representative of the Employer/ Consultant.

The O&M Contractor will assess the requirement spares in respective equipment and submit a list of the same to the concerned officer in the Bank within three weeks of receiving the Work Order for approval. Without the approval, the contractor shall not procure any spare. The same procedure will be followed in the balance two annual overhauling to be carried out during two subsequent winter shutdown.

RATE ANALYSIS:

The Contractor shall submit rate analysis of their quoted rates, if called upon.

OVERHAULING PROGRAMME AND RECORD:

Annexure – I enclosed with the tender indicates the completion Schedule of the Annual Overhauling. The O&M contractor will make all effort to adhere to this completion schedule. In case the contractor wishes to make any minor change in the completion schedule, they will intimate the same to the Bank within seven days of receipt of the letter of intent for approval.

During the tenure of O&M period, the contractor will submit a similar Completion Schedule before end October of every subsequent year so that the overhauling work can be taken up right from 16th November and completed by end February of that

particular Winter Shutdown. Recommissioning, testing and balancing of the systems shall be completed before 7th of March, of the particular year.

A register/ Log Card shall be maintained for all the major equipment which will record the spare parts, that will be replaced in individual machines during overhauling. The same register will also be used for recording the spares, if replaced, during O&M period with dates. The register will also record the consumption of refrigerant and oil in respective Water Chilling Unit. The register shall be maintained as per the format approved by the Bank the Register will be handed over to the Bank at the end of O&M period.

WINTER OPERATION:

During the period of winter shut down, the blowers of all AHUs and the blower for basement shall be operated to maintain air circulation in the A.C. space. The Bidders shall include the cost of this operation in their rate for Overhauling.

PUNJAB NATIONAL BANK

**DETAILS OF WORK, PART - 2
(OPERATION & MAINTENANCE)**

SCOPE:

The intent of this section is to describe the annual operation and maintenance of the Air Conditioning Plant and System for the Head Office Building of United Bank of India at 11. Hemanta Basu Sarani, Kolkata-700 001, during the contract period.

The scope of work and services will not only be limited to supplying required manpower for day to day operation, data logging, routine maintenance, breakdown maintenance, all spares/ materials, consumables, tools and tackles, testing instruments, all facilities for lifting/ handling/ transporting of equipment/heat exchangers as and when required but also include insurance covering risk during transportation of equipment, risk of lives (3rd party) and risk of damages to property/ document/ any other valuables due to any accidents pertaining to A.C. System and any other material or incidental not specifically mentioned but are required for operation, maintenance, repair and overhauling of the A.C. Plant and system all through the year to achieve specified inside condition in different areas of the office building.

Any additional items, tools, services, consumables etc. which are not specifically mentioned herein but are required for satisfactory day to day operation and routine/ break down maintenance to achieve desired inside condition and speedy restoration of the plant in case of forced outages; shall deemed to be covered under the scope of this specification.

TOOLS AND INSTRUMENTS:

The O&M contractor shall store a complete set of tools and measuring and testing instruments in the plant room for satisfactory Operation and Maintenance of the A.C. Plant. A minimum set of tools, as per the list in Annexure-IV, shall be kept inside the plant room. If the contractor requires any additional tools and tackles, testing/ measuring instrument, the same shall be arranged within minimum possible time but not more than a day.

SPARE PARTS AND CONSUMABLES:

Rates quoted by the O&M contractor for operation and maintenance shall include the cost of all consumables as described in Annexure II.

Rates quoted by the O&M contractors will also include replacement of all minor/small items which may be required during the operation and maintenance period. The contractor shall replace free of cost the items like fuses for indicating lamps and in the control circuits, indicating lamps, hold-on coils in the contactors/ solenoid valves, lugs, Neoprene Vibration Isolation pads, neoprene/rubber bush for pump couplings, thermometers etc.

Any spare/ component which were replaced during the overhauling of the A.C. Plant in the preceding winter shut down, if breaks down or found defective or not giving required performance shall be replaced free of cost by the contractor. This will also be applicable in case of motor winding.

During the period of operation and maintenance, if any equipment/ component/ parts is damaged due to negligence/ incompetence on part of operators/ workmen, the

contractor shall replace free of cost such equipment/ component/ part to its original specification.

To take care of very minute leakage of refrigerant from the system during routine operation, maintenance and overhauling, the employer will supply up to two cylinder of gas every year. In case any additional quantity of gas will be required for any reason whatsoever, the same shall be borne by the contractor.

Cost of all other spares, if required during O&M period shall be borne by the owner/ employer. The cost of these spares shall be worked out as per clause/s of this tender specification.

Cost of Lubricating oil and transformer oil, if required during annual overhauling, shall be borne by the owner/ employer.

MANPOWER/ LABOUR:

All manpower/ labour required during O&M period for routine operation, maintenance, annual overhauling and also for breakdown maintenance shall be included in the rate for O&M quoted by the tenderer. At least one supervisor, one skilled technician, one semi-skilled technicians and one Electrician shall be permanently posted at site during O&M period.

The O&M contractor shall carry out daily, weekly, monthly, half yearly maintenance as per the scope of work. In order to avoid sudden break-down, the contractor shall also carry out regular preventive maintenance as per the instructions given in manufacturers manual which shall be collected by the bidders from the manufacturers. The rate for O&M shall include the above work.

In case of any break-down, the contractor shall immediately take corrective action to put the plant back into operation within two days. The total down time shall not be more than 5% of the total operating period.

In case of any break-down, additional man power if required, will be employed by the O&M contractor to put the plant back into operation without any additional cost to the Bank.

RECORD OF RUNNING THE PLANT:

The O&M contractor shall maintain proper Log book to record date wise running hours of the plant, readings, all failures/ break downs/ cause of such breakdowns, remedial measures taken including list of spares/ quantity of gas replaced and the same shall be produced to the Owner/ employers' representative at regular intervals as per his instruction. This log book shall be maintained in a systematic and presentable form.

The O&M contractor shall provide Sling Psychrometer, tongue tester, accurate thermometer and pressure gauges and other recording instruments for noting daily readings.

DURATION OF DAILY OPERATION:

Generally, the plant will be operated between 8-30 A.M. to 05-00 P.M. on working days.

Cleaning of plant room, AHU rooms, plant and equipment and routine checks shall be completed before 8-15 AM and plant shall be put into operation at least one hour before the office starts. The A.C. plant shall be switched off by 05-00 PM or as per instruction from Employer.

In case it will be necessary to operating the A. C. Plant on Sundays, holidays and beyond 05-00 PM on weekdays (or beyond 4:30 PM on Saturdays), notices will be served on the contractor and they are bound to operate the plan beyond the office hours. The contractor may indicate separately, their rates for operating the plant on Sundays, holidays only and not for beyond the specified office hours.

5.1 Supplying of all spares and consumable/ materials, which are needed for preventive maintenance, attending to Electrical and Mechanical breakdown/ overhauling including oil and refrigerant at agreement cost without additional cost.

5.2 Attending to all Electrical and Mechanical breakdown of the Plant and other equipment with spares at agreement cost.

5.3 All tools including specialized tools needed for the purpose will be arranged by the Contractor and no extra payment on this account will be made. Storage facility for the same has to be made in the Plant room by the Contractor himself within the quoted cost.

5.4 The Operator will maintain logbooks for recording the temperature at each floor of the Building. The temperature reading on all floor of both blocks/ wings shall have to be taken twice at 10:30 hrs and 15:30 hrs on daily basis. Necessary analysis/ maintenance of system shall be undertaken to achieve the desired temperature without additional cost to Bank, if abnormal temperatures observed.

5.5 Operation of PAC units (3 Nos – 12 TR each) installed at Server Room

5.6 The Plant will be serviced four times in the contract period as per time slot allotted by the bank, as required, during holidays. One of these services will be rendered positively before the onset of summer to ensure trouble free working of the Plant during the summer. The next service will be rendered in each quarter after the summer season. Break down calls will be attended to during the contract period immediately

5.7 Overhauling the Plant when condition warrants/ found necessary, which includes:

- a. Rewinding of all motors of AC installations like compressor motor, condenser & chilled water pump motor, CT fan motor, AHU blower motor and other motors meant for AC system.
- b. Replacement of spares of microprocessor units such as motherboard, micro card, electronic parts, VFDs, VAVs & all other parts as required to be replaced to keep the microprocessor unit in perfect working orders.
- c. Replacing of spare parts of all machinery, equipment, electrical panels etc. due to normal wear & tear.
- d. Repair/ replacement of all thermostats and flow switches, temperature meters, pressure gauges.
- e. All consumable material as and when required shall be supplied free of cost by the contractor.

5.8 De-scaling of the condenser will be carried out once in a year. If fouling exceeds the prescribed limit, the contractor shall carry out cleaning of the tubes at his own expense. De-scaling/ cleaning of evaporator, cleaning of air filter,

cleaning of cooling towers and cooling coil shall be undertaken periodically to meet design parameters/ conditions warranting the same/ as per OEM recommendations.

5.9 Yearly preventive maintenance schedule to be followed by the Contractor as approved by the Engineer-in-charge of the Bank.

5.10 To rectify all leakages of water piping and servicing all gate/globe valve/butterfly/balancing valve, y-strainer and pot strainer etc. during the period of contract and replacement of defective parts for making the system functional.

5.11 Monthly/ Quarterly/ Yearly preventive maintenance schedule to be undertaken as per OEM Maintenance Schedule. The work shall be executed as per CPWD general specifications & HVAC works 2017 – Appendix –H (Maintenance)/ ISHRAE recommendations.

5.12 To repair/ replace controls if found necessary.

5.13 The Contractor will maintain an inventory of necessary spare parts as approved by the Bank's Engineer in charge/ OEMs including 150 kg gas cylinder and 100 Litres oil.

5.14 The Plant room has to be kept well illuminated, ventilated and all items are secured to ensure safety and security of men & machine.

5.15 The Plant room and the Plant including the air handling room and their equipment shall have to be kept neat and clean and the Bank shall provide no material on this account.

5.16 The cleaning of cooling tower tanks, fills, nozzles and feed pipes etc. are to be done as per schedule or whenever it becomes essential.

5.17 Periodical cleaning of AHU filters, coils, dampers etc. with appropriate cleaning agents/ disinfectants and Balancing of system if required.

5.18 Cleaning of evaporator/ cooling coils/ replacement of pre-filters based on assessment and working parameters of the plant.

5.19 Periodical/ Occasional Maintenance Operations/ routines of Chiller Plants mentioned in OEM Operation Manual such as Oiling, Greasing, Pre-Starting, Running & Change Over/ Shut Down Routines shall be carried out and the same should be entered/ maintained in Equipment Maintenance History Sheet/ Log Sheets and the same to be produced to the Bank's Engineer in-charge every weekly/ on demand.

5.20 If due to any reason, any maintenance routines could not be undertaken, the same to be brought into the notice of Bank's Engineer as soon as possible. The Bank will supply the log sheet and the history sheet register.

5.21 The water in cooling towers shall have to be changed weekly or fortnightly depending upon the outside atmosphere conditions/ as instructed by the Bank's Engineer. Water in the chilled water system shall be changed as per maintenance schedules including cleaning of all pot strainers and other strainers fitted in the system. Cleaning of Nozzles/ Fills of cooling tower shall also to be undertaken based on the condition/ requirement.

5.22 The seasonal servicing of the plant against preventive maintenance shall have to be carried out and also servicing at the time to change over of the Plant. The de-scaling of Plant shall have to be carried out by the Contractor as soon as possible after the season's operation or at any time whenever needed.

5.23 The Contractor shall try to operationalize the Plants at the earliest possible time after plant rendered non-operational/ inefficient due to all minor nature of defects which may arise during the operation of the Plant such as pumping set glands, bearing cooling tower seal, gas seal, pump couplings, rubber gaskets re-soldering of cables, brazing jointing of gas pipelines, replacement of switches, deteriorated PVC armoured and unarmoured cable, minor electrical or mechanical faults, replacement of belts/ felt filter, etc. and any other item which may be required for safety aspect of the Plant within their quoted cost.

5.24 Maintaining of electrical hygiene for up keeping of all electrical equipment and system viz. motors, starters, electrical wiring including cable w.r.t operation, safety and fire prevention point of view.

5.25 All the tools required for operation and maintenance of the Plant shall have to be arranged by the Contractor and no extra payment on this account will be made. Storage facility for the same has to be made in the Plant room by the Contractor himself within the quoted cost. The following minimum tools should be maintained at site:

- i. Wrenches – All sizes
- ii. Spanners – All Sizes
- iii. Screw Drivers – 02 set each of flat/ star
- iv. Thermometer – 02 Nos
- v. Humidity Meter – 02 Nos
- vi. Anemometer – 2 Nos
- vii. Noise Level Measurement/ dB Meter – 02 No
- viii. Multi Meter – 01 No
- ix. Clamp Meter – 01 No
- x. Insulation Gloves – 02 sets

The above tools are general in nature. Any tool required for day to day maintenance, shall be brought by the successful contractor.

5.26 During the period of operation, servicing, and maintenance of the Plant/ system as a whole if any unit or surrounding part thereof has been found damaged on account of negligence of contractor, the same have to be rectified/ restored to its original condition within the quoted rate. The decision of the Bank and if required, in consultation with an expert agency shall be final and the decision taken shall be binding the contractor.

5.27 The components, which may need workshop repairs, are to be taken out with the written permission and proper gate pass issued by the Bank. The same has to be brought in within the time limit specified in the pass.

5.28 The Contractor should undertake the rework, if any repair/ maintenance work observed by Bank's Engineer to be inferior or not up to the standard.

5.29 Routine Maintenance of all electrical switches, units, starter cables etc. installed and connected with the main central AC Plant are part of scope of work under this Agreement.

5.30 Replacement/ repairing of all electrical switches, units, starter cables etc. installed and connected with the main central AC Plant shall be included in the Contractor's scope of work under this Agreement.

5.31 The Contractor shall execute the work in coordination/ liaison with other contractors such as electrical, Unitary Air Conditioning and Precision Air Conditioners (PAC) of the building and plan the work in consultation with whom the work is

interlinked/ affected such as electrical maintenance, plumbing, Precision AC Operation etc.

5.32 Starting/ stopping/ maintenance of all machineries shall be performed with the permission of Bank's Engineer in-charge and any change in machinery status shall be brought to his notice without fail.

5.33 Painting and surface preparation for painting of all supporting steel structure of HVAC System as per equipment details, piping work including cooling tower base shall be done on yearly basis at quoted cost.

5.34 The corrective/ Breakdown maintenance shall be attended/ undertaken 24 hrs x 365 days' basis inclusive of Sundays/ holidays. The restoration period for minor & major defects (maximum) for various system failures is as under:

i. Minor Defects: Inclusive of repairing & replacement of all spare/ consumable components and all other electrical circuit problems/ attending of safety cut out and starting related issues other than mentioned in major defects

- Response time (Max) – 04 hrs.
- Rectification/ Attending time (Max) – 08 hrs.

ii. Major Defects:

- | | | |
|---|---|---------|
| a) Repairing/rectification of pumps under breakdown | - | 1 week |
| b) Rewinding of AHU motors | - | 1 week |
| c) Rewinding of pump motors | - | 1 week |
| d) Rewinding of compressor motor | - | 10 days |
| e) Overhauling or repairing of chiller or condenser | - | 10 days |
| f) Leak rectification/repair of chiller or condensers | - | 1 week |
| g) Rectification of sprinklers/fan blade cooling tower | - | 1 week |
| h) Replacement of electrical contact points | - | 1 week |
| i) Welding/ Brazing works on all piping works | - | 2 days |
| j) Refilling & charging of gas on detection of gas leakage- | - | 3 days |

5.35 The scope of maintenance includes all kind of repairs, replacement of all spares, refrigerant gas, oil etc. These spares shall be replaced with the same type, make and quality. However, if the same is not readily available in market, the alternate item should be got approve by the Bank before use at site. All damaged and broken parts/ accessories/ equipment, shall be replaced by the Bank at the risk and cost of the contractor. The following are required to keep the A.C. Plant & services operational, however this is an indication only, all repair/replacement etc. is included in the scope of this contract.

5.36 The contract shall include emergency call back service at all hours round the clock for rectification of defects immediately if noticed during the operation.

5.37 Log book as per standard proforma will be supplied by the contractor and have to be filled in by the contractor's staff. The log book will be kept in the plant room which will be checked by the Bank officials. The contractor will have to take action as per direction of Bank officials or his representative from time to time.

5.38 Contractor shall be maintaining history cards of each equipment. There will be check list for preventive maintenance to be carried as per attached maintenance schedule. Contractor shall be providing all the necessary maintenance services and the same shall be recorded in the history cards of the equipment with date. Copy of this history card shall be submitted to Bank officials for the records.

5.39 Since the plant are catering to the AC requirements of Zonal Office & its controlled Office Building of Punjab national Bank, which is a very important building hence the contractor will have to attended any fault/ breakdown immediately. If the desired staff is not deputed in reasonable time, Bank officials will be at liberty to employ staff to get the work done by other agency at the risk and cost of the contractor for which decision of Bank officials will be final and binding.

5.40 During the running of the contract the responsibility of physical custody of the plant will rest on the contractor.

5.41 After the expiry of the contract, the plant will be handed over back to the Bank in similar condition as was handed over to the contractor at time of start of the contract except normal wear and tear and the part of which the contractor is not responsible, failing which recovery will be made from contractor's final bill. The decision of Bank shall be final and binding.

5.42 Suitable recovery shall be made from the bill of the contractor for any shortcoming/ discrepancy in maintenance and operation work and/ or non-functioning of AC plant as per client requirement during the contract period.

5.43 Inspection and maintenance schedule shall be carried out as per OEM's operation & maintenance recommendations like, Cleaning & Maintenance, Pumping Down, Pressure Testing, Leak Testing and Off-season Precautions etc.

20. Bid Securing Declaration Form

Tender No. _____

Date: _____

**The Chief Manager,
GAD, Zonal Office,
Punjab National Bank,
PNB United Tower,
11, Hemanta Basu Sarani,
B.B.D. Bagh, Kolkata, 700001**

Sub: Operation & Annual Maintenance Contract of Central Air Conditioning Plant at Punjab National Bank, United Tower Building, 11 Hemant Basu Sarani, Kolkata – 700001.

I/ We understand that, according to your conditions, bids must be supported by a Bid Securing Declaration.

I/ We accept that I/ We may be disqualified from bidding for any contract with you for a period of one year from the date of notification if I am/ We are in a breach of any obligation under the bid conditions, because I/ We

a) Have withdrawn/ modified/ amended, impairs or derogates from the tender, my/our Bid during the period of bid validity specified in the form of Bid; or

b) Having been notified of the acceptance of our Bid by the purchase or during the period of bid validity

(i) fail or reuse to execute the contract, if required, or

(ii) fail or refuse to furnish the Performance Security, in accordance with the instructions to Bidders.

I/ We understand this Bid Securing Declaration shall cease to be valid if I am/ we are not the successful Bidder, upon the earlier of

(i) the receipt of your notification of the name of the successful Bidder; or

(ii) Thirty days after the expiration of the validity of my/our Bid.

Signed:

In the capacity of

Corporate Seal

Name:

Duly authorized to sign the bid for and on behalf of

Dated on _____ day of _____

21. PART – B: COMMERCIAL BID (Instruction to Bidder/s)

(To Be Quoted Online Only)

PRICE FOR DETAILS OF WORK PART - 1:

Lump Sum price in INR (₹) for Annual Overhauling and Re-commissioning of the A.C. Plant and the system complete with all Labour, material, consumables, tools and tackles etc. as detailed in the specification and Annexure I, and inclusive of all taxes, duties and other levies etc.

Note: Annual overhauling and re-commissioning will be completed during the period from 16th November to 10th March of the contract period.

PRICE FOR DETAILS OF WORK PART – 2:

Service Charges (Contractor's Overheads & profit) in INR (₹) over and above Monthly wages for day to day operation and routine/ preventive/ breakdown maintenance of the A.C. Plant complete with all labour, material, consumables, tools and tackles etc. as detailed in the specification. EPF and ESI contributions paid to the workmen shall be paid extra on actual basis on submission of requisite documents. No Contractor's Profit shall be admissible/ Payable on such contributions.

SPARES & REPAIR WORK:

The cost of spares and repair work including Supply, Installation, testing & commissioning of spare/s, complete in all respect, indicated against respective items in Annexure – II, shall remain firm for one year. For any Spare or repair work, where rates are not indicated, the prices of such items shall be worked out as per prevailing Market Rate Analysis/ Schedule of Rates.

Note: GST shall be paid extra as applicable.

22. ANNEXURE – I

COMPLETION SCHEDULE OF OVERHAULING

S. No.	Major Activities	Date of Commencement	Date of Completion
1	Transferring Refrigerant To Cylinders & Intimating the Bank the quantity Transferred.		
2	Draining Cond. & Ch. water		
3	Dismantling all the Butterfly valves in the System & Cleaning the same		
4	Replacement of all defective Pipes		
5	Re-fixing all valves & Pressure testing		
6	Fixing Air-separator in Chiller Water circuit		
7	Pipe Insulation		
8	Condensate Drain Piping		
9	Dismantling all AHU Panels – cleaning & painting the same		
10	Replacing all defective Coil Headers		
11	Painting all coil Headers		
12	Cleaning external & internal coil surface		
13	Assembling all AHUs		
14	Cleaning & Painting the Fresh Air Dampers		
15	Checking & repairing all electrical work including replacement of damaged earth wires inside all AHU Rooms		
16	Dismantling the Cooling Towers and scraping, cleaning and painting internals		
17	Replacement of corroded members inside Cooling Towers		
18	Cleaning & re-assembling the fills in the Cooling Tower with New sleeves		
19	Replacement of corroded pipes near the Cooling Tower		
20	Electrical work near cooling tower Including replacement of Earth wires		
21	Repairing the M. S. Ring around Pump Bases		
22	Overhauling the Compressors with Oil replacement		
23	De-scaling condenser Tubes		
24	De-scaling cooler tube surface		
25	Overhauling all motors inside Plant Room a. Compressor Motors b. Cond. water Pump Motors c. Chiller water Pump Motors		
26	Replacement of Carbon Brush & polishing Slip-rings of Comp-motors		
27	Overhauling Pumps including replacement Of defective bearings, if any		
28	Overhauling the Compressor-starters with Oil replacement		

S. No.	Major Activities	Date of Commencement	Date of Completion
29	Overhauling the Pump-starters with Oil replacement		
30	Replacement of all damaged Earth Wires		
31	Checking & adjusting all controls in chillers like HP/ LP switch, Oil Safety Switch, AFT & operating thermostats, TXVs etc.		
32	Adjusting Fresh Air Quantity in the respective AHU Rooms		
33	Completing all other pending works		
34	Re-commissioning activities		
35	Checking of all safety devices of 690 TR Central AC Plant		

23. Spares for Repair Works

Annexure II

S. No.	Description	Qty	Unit
1	Replacing the corroded pipe header over cooling tower and the Suction Header complete with Fitting, flanges, support, etc of pipe dia size: 300 mm dia NB, M.S. pipes & Malleable cast M. S. Elbow (90°) shall be of minimum 7.9 mm thickness.	1	Job
2	Replacing the corroded pipe header over cooling tower and the Suction Header complete with Fitting, flanges, support, etc of pipe dia size: 200 mm dia NB, M.S. pipes & Malleable cast M. S. Elbow (90°) shall be of minimum 7.9 mm thickness	1	Job
3	Replacing the corroded pipe header over cooling tower and the Suction Header complete with Fitting, flanges, support, etc of pipe dia size: 150 mm dia NB M.S pipes of 150 mm ND and smaller dia shall be of Heavy Class type conforming to IS - 1239.	1	Job
4	Replacing the corroded pipe header over cooling tower and the Suction Header complete with Fitting, flanges, support, etc of pipe dia size: 125 mm dia NB M.S pipes of 125 mm ND and smaller dia shall be of Heavy Class type conforming to IS - 1239.	1	Job
5	Replacing the corroded pipe header over cooling tower and the Suction Header complete with Fitting, flanges, support, etc of pipe dia size: 100 mm dia NB M.S pipes of 100 mm ND and smaller dia shall be of Heavy Class type conforming to IS - 1239.	1	Job
6	350 TR Cooling tower: Dismantling the fills, cleaning and re-fixing the fills.	2	Nos.
7	200 TR Cooling tower: Dismantling the fills, cleaning and re-fixing the fills.	1	Nos.
8	350 TR Cooling tower: Surface painting of all supporting member inside cooling tower with 2 coats of zinc chromate primer and two coats of black enamel paints.	2	Nos.
9	200 TR Cooling tower : Surface painting of all supporting member inside cooling tower with 2 coats of zinc chromate primer and two coats of black enamel paints.	1	Nos.
10	Scraping and painting the surface of entire length condenser water pipe on the roof of 16th floor with 2 coats of zinc chromate primer	1	Job
11	Repairing the Suction Strainer in the Cooling Towers and painting the same with two coats of zinc chromate primer and two coats of black enamel paint.	1	Job
12	Providing New earth wires for fan motor of all the three cooling towers with twin 6mm dia GI wire and connecting it to the respective starter panel.	180	Mtr.
13	Replacing the gear box oil of Cooling Tower	25	Ltr.
14	Replacing of oil seal of Cooling Tower	3	Nos.
15	Replacing of coupling bolt of Cooling Tower	24	Nos.
16	Replacing of nozzle and joining caps of Cooling Tower	100	Nos
17	Replacing of SS hanger of Cooling Tower	10	Nos.
18	Replacing of corroded nut, bolt of Cooling Tower	5	Kg
19	Replacing of gear box bearing of Cooling Tower	3	Nos
20	Providing 3mm thick aluminium side cover with 9mm thick nitrile rubber insulation at cooling tower no-3	40	Sqm
21	Replacing the strainer net of Cooling Tower	1	No.
22	Replacing of Tie rod of Cooling Tower	10	Nos.

Operation & Annual Maintenance Contract of Central Air Conditioning Plant at Punjab National Bank, United Tower Building, 11 Hemant Basu Sarani, Kolkata – 700001

23	Replacing of broken angle at Cooling Tower panel room.	1	Job
24	Replacing of electrical cable and new tray, fixing of 3 nos cooling tower	1	Job
25	Replacing of motor cover at cooling tower no. 1,2 & 3	3	Nos.
26	Replacing of motor and gear base with plate as per existing Cooling Tower	1	No.
27	Replacing 0-40 amp Ampere meter at Cooling Tower No.-2	1	No.
28	Replacing Cooling tower fan blade with hub	6	Nos.
29	Replacement of Pillow block bearing at AHU Units	3	Pair
30	10 HP AHU motor rewinding and motor shaft repaired at 12th floor	1	No.
31	External cleaning of AHU 12.5 HP Motor Cleaning external surface of cooling coil in respective AHUs with Chemical Solutions and rinsing the coil surface.	2	Nos.
32	External cleaning of AHU 10 HP Motor Cleaning external surface of cooling coil in respective AHUs with Chemical Solutions and rinsing the coil surface.	8	Nos.
33	External cleaning of AHU 7.5 HP Motor Cleaning external surface of cooling coil in respective AHUs with Chemical Solutions and rinsing the coil surface.	11	Nos.
34	External cleaning of AHU 1.5 HP Motor Cleaning external surface of cooling coil in respective AHUs with Chemical Solutions and rinsing the coil surface.	1	No.
35	Cleaning of internal surface of 12.5 HP Motor Cleaning internal surface of cooling coil tubes in respective AHUs with circulation of Chemical Solutions and rinsing the same.	2	Nos.
36	Cleaning of internal surface of 10 HP Motor Cleaning internal surface of cooling coil tubes in respective AHUs with circulation of Chemical Solutions and rinsing the same.	8	Nos.
37	Cleaning of internal surface of 7.5 HP Motor Cleaning internal surface of cooling coil tubes in respective AHUs with circulation of Chemical Solutions and rinsing the same.	11	Nos.
38	Cleaning of internal surface of 1.5 HP Motor Cleaning internal surface of cooling coil tubes in respective AHUs with circulation of Chemical Solutions and rinsing the same.	1	No.
39	Replacing the blower and coil tray in 12.5 HP AHU with 18G MS sheet suitably powdered coated on all sides with 19mm thick fire retardant quality nitrile rubber foam insulation fixed to inside surface with recommended adhesive and then covered with tar felt fixed to insulation surface with recommended adhesive. Both coil - tray and blower - tray shall be provided with 40 mm ND drain connection with Lock-Nut system. The drain point shall be made water tight.	2	Nos.
40	Replacing the blower and coil tray in 10.0 HP AHU with 18G MS sheet suitably powdered coated on all sides with 19mm thick fire retardant quality nitrile rubber foam insulation fixed to inside surface with recommended adhesive and then covered with tar felt fixed to insulation surface with recommended adhesive. Both coil - tray and blower - tray shall be provided with 40 mm ND drain connection with Lock-Nut system. The drain point shall be made water tight.	8	Nos.

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41	Replacing the blower and coil tray in 7.5 HP AHU with 18G MS sheet suitably powdered coated on all sides with 19mm thick fire retardant quality nitrile rubber foam insulation fixed to inside surface with recommended adhesive and then covered with tar felt fixed to insulation surface with recommended adhesive. Both coil - tray and blower - tray shall be provided with 40 mm ND drain connection with Lock-Nut system. The drain point shall be made water tight.	11	Nos.
42	Replacing the blower and coil tray in 1.5 HP AHU with 18G MS sheet suitably powdered coated on all sides with 19mm thick fire retardant quality nitrile rubber foam insulation fixed to inside surface with recommended adhesive and then covered with tar felt fixed to insulation surface with recommended adhesive. Both coil - tray and blower - tray shall be provided with 40 mm ND drain connection with Lock-Nut system. The drain point shall be made water tight.	1	No.
43	Repairing of filter Frame/ channel	4	Nos.
44	AHU body and leg repairing at ground floor	1	No.
45	Repairing the Flame & mildew resistant type flexible canvas connection at AHU blower outlet (50 mm to 75 mm Zip stitched to it) at basement, 1st and 2nd floor.	3	Nos.
46	Painting the AHU panels from both sides and all the internal supporting members with two coats of Zinc chromate primer and two coats of synthetic enamel paint. AHU 12.5 HP	2	Nos.
47	Painting the AHU panels from both sides and all the internal supporting members with two coats of Zinc chromate primer and two coats of synthetic enamel paint. AHU 10 HP	8	Nos.
48	Painting the AHU panels from both sides and all the internal supporting members with two coats of Zinc chromate primer and two coats of synthetic enamel paint. AHU 7.5 HP	11	Nos.
49	Painting the AHU panels from both sides and all the internal supporting members with two coats of Zinc chromate primer and two coats of synthetic enamel paint. AHU 5 HP	1	No.
50	Metalizing, grinding and polishing of AHU blower shaft at 10th & 12th floor.	2	Nos.
51	V-belt for AHU blower motor B-96	6	Nos.
52	V-belt for AHU blower motor B-98	6	Nos.
53	V-belt for AHU blower motor C-105	6	Nos.
54	V-belt for AHU blower motor C-108	6	Nos.
55	Replacement of 3" butterfly valve at various floor	8	Nos.
56	Replacing the drain pipe (40 nos.)	25	Mtr.
57	Repairing and adjustment the variable pitch pulley in AHU blower motor.	4	Nos.
58	Dismantling, cleaning and re-fixing all the butterfly valve and strainer with recommended cleaning agent. 80mm, 65mm, 50mm NB Valves	44	Nos.
59	Dismantling, cleaning and re-fixing all the butterfly valve and strainer with recommended cleaning agent. 80mm, 65mm, 50mm NB Y-strainer	22	Nos.
60	Repairing of bypass guard at AHU.	5	Nos.
61	Closing all the gaps around the Cooling Coil & the boxing with 22 G G.I. Sheet and painting the same with two coats of zinc chromate primer and two coats of Black enamel paint.	5	Nos.
62	Condenser pump Coupling tyre replacement	1	No.
63	Condenser pump Mechanical Seal replacement	1	Pair
64	Condenser pump Sleeve Bush replacement	2	Nos.

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65	Condenser pump Re-metalizing the pump shaft	1	No.
66	Condenser pump Replacing of 6" dia butterfly valve.	2	Nos.
67	Condenser pump Replacing of 4" dia butterfly valve.	2	Nos.
68	Condenser pump bearing replacement	2	Sets
69	Replacing 6" dia condenser butterfly valve in all unit.	7	Nos.
70	Condenser pump strainer repairing at unit no.- 1,4,5,6,7	5	Nos.
71	Condenser pump Motor bearing	2	Nos.
72	Chiller pump Motor bearing	2	Nos.
73	Chiller pump Replace the coupling tyre	1	No.
74	New channel fixing with vibration pad and anti-vibration mount with spring for compressor base.	6	Set
75	Repairing the exhaust fan at AC plant room.	2	Nos.
76	12" dia chilled water pipeline insulation at plant room.	6	Mtr.
77	Transformer oil filtration all starter and rotor starter.	1	Job
78	Replacement of 6" dia condenser butterfly valve at unit no-2, unit no.-5, unit no.-6	6	Nos.
79	Condenser air purging valve.	4	Nos.
80	Cleaning the internal surface of the cooler tubes with circulation of chemical solution.	6	Nos.
81	Compressor/ Chiller Insulation at liquid line.	1	Job
82	Compressor Suction and discharge pressure gauge.	2	Nos.
83	Compressor Coupling tyre replacing	1	No.
84	Compressor Slip ring carbon	6	Nos.
85	Compressor Slip ring polishing	1	No.
86	Compressor Moving contact	4	Nos.
87	Compressor Fixed finger contact.	12	Nos.
88	Compressor Main Fixed finger contact.	12	Nos.
89	Compressor V-Bar	2	Nos.
90	Compressor Rotor starter drum controller Fixed contact	2	Nos.
91	Compressor Rotor starter drum controller Moving contact	2	Nos.
92	Compressor Replacing the lubricating oil.	1	Job
93	Compressor Replacing of 1/4" copper line from compressor to gauge.	1	Job
94	Compressor Nitrogen test in the compressor for the above work.	1	Job
95	Compressor Carbon ring for shaft seal	1	No.
96	Compressor Bellow for shaft seal	1	No.
97	Compressor Carbon ring for shaft seal	1	No.
98	Compressor Bellow for shaft seal	1	No.
99	Compressor Discharge valve reeds	12	Nos.
100	Compressor Suction valve reeds	12	Nos.
101	Compressor Suction and discharge valve spring	72	Nos.
102	Compressor Piston oil ring	12	Nos.
103	Compressor Oil filter cartridge	1	No.
104	Compressor Suction strainer	2	Nos.
105	Compressor Discharge valve gland bush	2	Nos.
106	Compressor Connecting rod bearing	12	Nos.
107	Compressor Main bearing pump end	1	No.
108	Compressor Main bearing seal end	1	No.
109	Compressor Centre bearing	1	No.

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110	Compressor Crank shaft grinding polishing.	1	No.
111	Compressor Trutest washer grinding, polishing	1	No.
112	Compressor Teflon seal discharge valve	2	Nos.
113	Compressor Oil pump assembly.	1	No.
114	Compressor Steel wrist pin bush	12	Nos.
115	Compressor Suction valve plate grinding	6	Nos.
116	Compressor Discharge valve plate grinding.	12	Nos.
117	Compressor Piston liner	12	Nos.
118	Compressor Gasket set	1	Set
119	Compressor angle valve	5	Nos.
120	Compressor Catchall drier	4	Nos.
121	Compressor Power element.	2	Nos.
122	Compressor Expansion valve MS line	2	Nos.
123	Replacing of gasket and nut, bolt	1	Job
124	HRC fuses for AHU blower motors (25 Amps)	20	Nos.
125	Fuse carrier	10	Nos.
126	Main pump starter MCB 63 Amp at pump no. 2 and 4	2	Nos.
127	Replacing CHW pump isolator at unit no. - 2	1	No.
128	Labour charges for dismantling and re-fixing of 300mm dia MS pipe for chilled and condenser pipe line.	60	Mtr.
129	Being the charges for supply of new 300mm dia MS condenser water pipe.	60	Mtr.
130	Being the charges for fabrication and installation of new 300mm dia MS condenser water pipe with all required materials including gas cutting and welding.	1	Job
131	Being the charges for breaking of civil shaft cover around the damaged condenser water pipe to remove the pipe.	1	Job

24. PART – B: COMMERCIAL BID

(To Be Quoted Online Only)

S No.	Description of Work	Unit	Quantity	Rate (in ₹)	Amount (in ₹)
1.	Service Charges (Only Contractor's Overheads & profit) in INR (₹) over Monthly wages for day to day operation and routine/ preventive/ breakdown maintenance of the A.C. Plant complete with all labour, material, consumables, tools and tackles etc. as detailed in the scope of work mentioned in tender document for one year	12	Months	To Be Quoted Online Only	
2.	Lump Sum price (in INR) for Annual Overhauling and Re-commissioning which will be claimed by the contractor on cost of spares required for the A.C. Plant complete with all labour, material, consumables, tools and tackles etc. as detailed in the scope of work and Annexure I, mentioned in tender document for 1 st year (2021-22)	01	Job		
3.	The cost of spares and repair work indicated in Scope of Work and in Annexure II, necessary to carry out the Repair and maintenance of the Central AC Plant for one year. The quoted rate/ amount against respective items shall remain firm for one year.	XX	YY		

*** Note: Rates are to be quoted excluding GST @18%. GST shall be paid extra.**

**** Note: EPF and ESI contributions paid to the workmen shall be paid extra on actual basis on submission of requisite documents. No Contractor's Profit shall be admissible/ Payable on such contributions.**

Check list of documents to be submitted with Technical bid

Particulars of documents	YES/ NO	Page No.
Tender Fee of ₹1180/- in form of demand Draft, In favor of Punjab National Bank payable at Delhi)		
Proof of average annual financial turnover of firm during last 3 years ending 31st March 2021		
Copy of Audited Balance sheet, ITR & Profit/ Loss Account Statement for the preceding last 3 years ending on 31.03.2021.		
Proof of having successfully completes similar works during last 7 years ending 30.11.2021.		
One Similar Work Amounting to ₹33,44,000/- Two Similar Works each amounting to ₹20,90,000/- Three Similar works each amounting to ₹16,72,000/-		
Copies of Similar work experience for minimum 07 years in maintenance (CAMC) of Split/ Window Air Conditioners of various make such as Voltas/ Carrier/ Hitachi/ LG/ Blue Star/ Daikin/ O'General in Govt./ PSU/ Autonomous offices/ Scheduled Commercial Banks or its Subsidiaries/ reputed Private Organizations. (Experience Certificate/ Work Order required)		
Authorization certificate by OEM as specified in eligibility criteria.		
History & Structure of Firm, Name of Directors/ Proprietary/ Partners.		
Company's profile on the letter head bearing full address		
Letter for submitting Tender		
Bidder Information		
Acceptance of Compliance Statement		
Documentary Proof of Address		
Undertaking in respect of no black listing by any central/ state Govt./ Public undertaking/ institute on any account during last 3 years.		
Copy of GST No.		
Copy of EPF & ESI registration.		
Firm Registration Copy & Address proof of office/ workshop.		
KYC details of firm/ Directors/ Partner/ Authorized Person.		
Copy of PAN no.		
Audit Balance Sheets of Last 3 Years For the FY year 2018-19 For the FY year 2019-20 For the FY year 2020-21		
Power of attorney/ board resolution in favour of authorized person signing the Bid documents, if applicable.		
Copy of partnership deed/ Certificate of Incorporation etc.		
All tender documents sealed and signed.		
Supporting Documents as per Eligibility Criteria.		
Any Other Supporting Documents		