AGREEMENT

OPERATION & COMPREHENSIVE ANNUAL MAINTENANCE CONTRACT OF CENTRALISED AIR CONDITIONING PLANTS, AUXILIARY AIRCONDITIONING PLANTS, PLANT INSTALLED AT LHO BUILDING AT BANDRA KURLA COMPLEX, MUMBAI 400 051-

FROM 01-09.2017TO 31.08.2018

This agreement is made on	day of	betwe	en the St	ate
Bank of India incorporated under the St	ate Bank of Inc	lia Act 195	55 having	its
office at Synergy, Plot C-6, G Block	Bandra Kurla	Complex,	Mumbai	51
(hereinafter called SBI) which expression	shall include its	successor	s and assig	gns
and	, having	its	office	at
and registered	office at			
(hereinafter called the company) which ex	apression shall in	clude its su	accessors a	and
assigns.				

WHEREAS the company has agreed to provide the repairs and maintenance service to SBI at LHO building, Bandra-Kurla Complex, Synergy, C-6, G Block, Bandra (E) Mumbai 400 051, for comprehensive maintenance of the air-conditioning as listed in Annexure A and SBI has agreed to accept the repairs and maintenance service by paying necessary charges as per Annexure A, subject to terms and conditions of this agreement.

Now this agreement witnesseth as under:

1.0 COMMENCEMENT AND TERMS

The agreement is effective for one year commencing from _____ and shall continue thereafter until terminated. Either party may terminate this agreement either at the end of first year or at the end of any subsequent year by giving 90 (ninety) days notice in writing.

2.0 CONTRACT CHARGES:

The contract charges payable by SBI to the company for the repair and maintenance service described herein are indicated in Annexure 'A' (enclosed) and unless provided for elsewhere herein, no additional charges shall be claimed by the company.

2.1 State Bank of India shall pay in advance at the beginning of the quarter the prorata charges out of the total annual charges stated in Annexure 'A'.

All payments shall be made with 15 days of submission of the bills and on submission of

- i) Service invoice in duplicate.
- ii) Site certification of bills
- iii) PF challan
- iv) Wage and attendance sheet duly certified
- v) ESI Challan/workmen's compensation policy
- vi) Service tax paid challan

3.0 Operation

The contractor shall operate the entire system installed on daily basis in a first class and safe manner during Annual Maintenance Contract period.

3.1 Manpower

The minimum staff strength to be stationed at site shall be as follows: The contractor shall operate the entire system installed on daily basis in a first class and safe manner during Annual Maintenance Contract period.

a. **Manpower**

- i) Supervisor,-7 days a week 9am -6 pm, .
- ii) Operator cum Mechanic(3) 1 in each eight hour shift. .
- iii) Helpers –(3 Nos) 1 in each eight hour shift.
- b. **Qualification of Manpower:** The contractor should deploy the manpower as the following qualifications:
 - i) <u>Supervisor</u> diploma in mechanical with 2/3 years experience in operation and maintenance of HVAC system.
 - ii) <u>Operator</u> cum mechanic ITI in AC or Mechanical with min. 3/5 year Experience in this filed.
 - iii) <u>Helper</u> with 3 years experience in relevant field.

If additional manpower is required to bring the system back in order within reasonable time, the same shall be provided at no extra cost.

- c. Statutory requirements of EPF, ESIC and other applicable labour laws, insurance shall be complied with, and monthly certification to that effect to be submitted by the company to State Bank of India.
- d. Duty allocation and roaster control shall be contractor's responsibility.
- e. No overtime shall be payable by owner for any

3.2 Shut downs

a. Routine shut downs shall be permitted only with prior permission.

4.0 REPAIR AND MAINTENANCE SERVICE

- 4.1 During the terms of this agreement, the company agrees to maintain the air-conditioning plants in safe and working order and for this purpose, will provide the following repair and maintenance service.
 - a. The company shall correct any fault and failure in the airconditioning and shall repair and replace worn out or defective parts of the airconditioning plant and system at no extra cost to SBI with brand new parts during SBI's normal working hours/bank holidays.

- b. The company shall provide repair and maintenance service in response to oral including telephone notice by SBI within two hours after such intimation during SBI's normal working hours/bank holiday.
- c. The company shall ensure that faults and failures intimated by SBI as above are set right within one day of being informed.
- d. All repair and maintenance service described herein shall be performed by qualified maintenance engineer of the air-conditioning plants.
- e. The company shall assume liability for any type of malfunctioning of the air-conditioning plants and system including its controls and safety devices.

4.2 PREVENTIVE MAINTENANCE SERVICE

The company shall provide and render preventive maintenance as detailed below:

- a) Air-conditioning plants shall be regularly (1st day of every month) shall be systematically examined, adjusted and lubricated and if, conditions warrant, the component rendered defective due to normal wear and tear will either be replaced without any extra charge. Company shall always ensure the proper working of air-conditioning plants and system.
- 4.3 Company also agrees to attend all breakdown calls.
- 4.4 The company undertakes and agrees to carry out the servicing, repairs, maintenance of the plants to render trouble free uninterrupted services as per the requirement.
- 4.5 The company undertakes and agrees to carry out the servicing of the plant every month for packaged unit and quarterly for central AC plants.

- 4.6 The company undertakes and agrees to carry out following works during the servicing.
 - a. Cleaning the condenser water cooling system including draining the cooling tower tank and examining strainer, spray pipes and spray nozzles etc.
 - b. Cleaning all the electric contacts, check the termination for tightness and attend if necessary.
 - c. Checking the terminal connections of the motor for tightness and lubricate the bearings.
 - d. Inspection, checking the refrigerant gas & oil in the plant & top up if required after leak test.
 - e. Cleaning the entire plant externally.
 - f. Checking and adjusting the belt tension & replace if required.
- 4.7 Attending to the plants when called upon by SBI during company's office hours.
- 4.8 Half yearly descaling, cleaning of condensers, cooling coils, cleaning of chillers and Evaporator Line.
- 4.9 Annual changing of compressor oil of central AC plants.
- 5.0 The company undertakes and agrees to replace the spares of all the equipments related to the air-conditioning plants and system if found necessary.
 - 5.1 The company undertakes and agrees to service all the valves related to AC plants and system and check the operation for proper working.

- 5.2 The company agrees to paint all the equipments, pipes fittings and panel boards etc. once in a year.
- 5.3 The company undertakes and agrees to replace filters as and when required.
- 5.4 The company agrees to check the working of all the gauges, including air pressure gauge, ammeter, voltmeters, water pressure gauges etc. And replace the non working gauges.
- 5.5 The company agrees to replace the canvas connection drip trays, internal insulation of AHU, packaged plant etc. if necessary.
- 5.6 The company agrees to check the performance of the plant after servicing.
- 5.7 The company agrees to clean the premises of the plant room, AHU room after carrying out servicing. No material, used during servicing on dirt or debris shall be left in the plant room.
- 5.8 The company agrees for recording of parameters related to HVAC Plant systems shall be provided and maintained company showing the complete working and maintenance done on the HVAC Plant systems and it should be made available to the engineer-in-charge of state Bank of India.
- 5.9. The company agrees for all maintenance materials such as Lube oil, Refrigerant / Gas, oil filter, fuel filter, electric contactor, indicating lamps, HRC fuse, relays and all spares of chillers, AHU's different type of Air filters, Box type filters etc shall be provided by company of complete HVAC Plant systems. All spares parts and materials shall be used genuine and of same make and type as installed and a minimum quantity of spares, refrigerants (R-22, R-123, R-134a) and materials for routine maintenance may be kept at site to minimize time of maintenance. company agrees to keep all equipment well maintained for each HVAC Plant systems so as to give proper output at all times.
- 6.0 4. Tools and equipment required for proper operation and comprehensive maintenance for whole HVAC Plant systems with their Chiller units, AHU's, Cooling Towers and allied accessories etc. shall be provided company.

- 6.1 The company agrees to submit preventive maintenance plan for each plant during the year.
- 6.2 The complete risk and liability for the employees of the company while carrying out the service and maintenance of the plant will be of company. Any damages to State Bank of India's property will be the liability of the company and shall be recovered from the charges payable by State Bank of India to the company.
- 1.0 The company agrees to keep rates firm throughout the year and shall not change at any event during the contract period.

1.1 GENERAL EXCLUSIONS

- a. Repairs to condenser water line & valves.
- b. Repairs to PVC portion of cooling tower.
- c. Repairs to chilled water line and valves.
- d. Repairs/replacement of electrical main incoming switch/circuit breaker, main incoming cable, fuses and indicating lamps.
- e. Repairs/replacement of insulation, water piping, ducting, duct lining, false ceiling, any kind of masonry/structural work.
- f. Replacement of total equipment i.e. compressor, condenser, cooling tower, air handling units, pneumatic controls and motorized valves.

The company may agree to render those services of repairs and/or maintenance at such costs or charges which may be mutually agreed between SBI and the company.

1.2 <u>ABNORMAL USAGE/MISUSE</u>

a. Failure of equipments due to supply voltage beyond permitted range of voltage or defect in electrical installation is not covered by this agreement.

- b. Tampering with or repairs of the equipments of the AC plant or system at any time under any circumstances whatsoever by any person who is not the employee or authorized representative of the company will render the contract null and void without prejudice to the company's other rights. Any failure or damage arising out of tampering or repairs by any unauthorized person/entity will be attended by the company at additional costs/charges which may be agreed upon between SBI and company.
- 1.3 Any worn-out or defective part withdrawn from the air-conditioning plant and replaced by the company shall become all property of the company and parts replacing the withdrawn parts shall become the property of SBI.
- 2.0 The company's maintenance personnel shall be given access to the air-conditioning when necessary for purpose of performing the repair and maintenance services indicated in this agreement.

3.0 FORCE MAJEURE:

a. Neither parties shall be liable for non-performance or delay in performance of its obligations under this agreement, if the non performance or delay is on account of Force Majeure events such as Acts of God, earthquake, fire, floods, explosion, strike, lockout, war, civil commotion, any law promulgated by the Government or any orders/directions issued by any Government or any other authority or any other tempest reason which is beyond the control of the party who is to discharge its obligations in terms of this agreement and/or any other reason which is beyond the control of the either party. The party whose performance is affected by force majeure events as narrated above shall take all necessary steps and endeavor to minimize the delay in performance of its obligations under the agreement.

b. Notwithstanding what is stated in clause (a) above, if the Force Majeure Event subsists for a period more than 30 days, the parties will make an endeavor to arrive at an amicable solution failing which either of the parties may terminate this agreement by giving appropriate notice to the other party.

4.0 <u>SUB-CONTRACTING</u>

The company will not sub-contract or permit anyone other than company's personnel to perform any of the work, service or other performance required of the company under this agreement without the prior written consent of SBI

5.0 SECURITY

The company agrees that the company and its personnel will at all times comply with the security regulations in effect from time to time at SBI premises.

6.0 <u>LIABILITIES AND INDEMNITIES</u>

The company represents and warrants that while rendering the repairs and maintenance services, the company is not violating or infringing and would not, during the tenure of this agreement violate or infringe any patent, copyright, designs, trade secret or any other intellectual property right of any other person or entity. The company agrees to indemnify and hereby keeps SBI indemnified against all claims, actions, damages, costs including Attorney fees which SBI may suffer or incur on account of breach of any intellectual property rights by the company while rendering services as envisaged under this agreement. The obligations of the company to indemnify SBI under this clause shall be absolute and without any limitation.

7.0 BUSINESS TERMINATION

In the event that the company shall close conducting business in the normal course or wind up, make a general assignment for the benefit of creditors, suffer or permit the appointment of a receiver for its business or shall avail itself or become subject to any proceeding under any act of statute of any country or state relating to insolvency of the protection of rights of creditors, then (at the option of SBI not withstanding clause 1.0 of the agreement) this agreement shall terminate and be of no further force and effect and any property or rights of such other party, tangible or intangible shall forthwith be returned to it.

8.0 TERMINATION OF THIS AGREEMENT

- a. Under the provision of clause 1.0 of this agreement.
- b. If SBI do not make payments due to the company under this agreement.
- c. In case of contravention of the terms and conditions of this agreement by the company.

9.0 GENERAL

- 9.1 Marginal notes and headings are for guidance only and are intended to be read or constructed as per this agreement.
- 9.2 No amendment to this agreement shall be effective unless it is in writing and signed by duly authorized representative of both the parties.
- 9.3 Each party warrants and guarantees that it has full powers and authority to enter into and perform this agreement and the person signing this agreement on behalf of each has been properly authorized and empowered to enter into this agreement. Each party further acknowledges that it has read this agreement, understands it and agrees to be bound by it.
- 9.4 Words importing the singular include the plural and vice versa.
- 9.5 In the event of any differences or dispute in connection with this agreement over the right or obligations of the parties have to the matter

shall be settled by arbitration in accordance with the Indian Arbitration Act of 1940 within the Jurisdiction of Mumbai Court.

IN WITNES WHEREOF THE PARTIES HAVE EXECUTED THIS AGREEMENT ON THE ABOVE MENTIONED DATE.

AGREEMENT ON THE ABOVE MENTION	NED DATE.
MUMBAI	
FOR STATE BANK OF INDIA OF	FOR AND ON BEHALF
ASST. GENERAL MANAGER (P&E)	(NAME) (AUTHORISED SIGNATORY
DATED	

LOW SIDE HVAC Comprehensive Annual Maintenance in brief

Scope of Work

INCLUSION: -

- ➤ Check and service all the equipments every 3 months i.e. four times in a year. We will also attend to break down
- Attend the number of breakdown complaints within 4-6 Hrs.
- > Checking the functioning of Air Handling unit / Fan Coil units / Pumps / Ventilation fans / HRU, Motor control.
- ➤ All Filter cleaning to be done quaterly.
- > Repairing and overhauling of equipment at site / service station based on need.
- Descaling / chemical cleaning of evaporator coils based on working parameters of the AHU's and FCU.
- Equipments will be checked for its proper working/readjustment if necessary.
- Replacement of belt, defective / worn out parts due to normal wear and tear.
- ➤ Checking the cooling water and chilled water for chemical composition.
- Checking of Starter Panel / VFDs.
- ➤ Maintain the PPM Schedule.
- Rewinding, Lubricating, overhauling of AHU motor, Fans, pumps, exhaust, fresh air, HRU, pressurize fan.
- ➤ Cooling Tower Servicing include cleaning, fills, nozzles, pipe and air washer internals. Cleaning of CT base every 6th month. And fills once in a year.
- Cleaning of drain pipe external to the equipment.
- ➤ The maintenance service is made available even after normal working hours and on holidays.

SCOPE OF WORK EQUIPMENT BASED

AIR HANDLING UNIT:-

INCLUSION:-

- 1) Unit and clean properly.
- 2) Drive motor for operations
- 3) Condition of drive belts
- 4) Proper drive alignment.
- 5) Coupling bolts and alignment.
- 6) Starter for proper functioning, Overload relays
- 7) Proper termination of electrical cables/wires
- 8) Operation of strip heaters
- 9) Operation of thermostats
- 10) Operation of mixing valve/bypass damper
- 11) Condition of isolating valves
- 12) Air filters by water spray.
- 13) Cooling coil by water spray
- 14) Condensate tray, drain & pipes
- 15) Lubricate motor bearings
- 16) Adjust the tension of drive belts
- 17) Lubricate the mixing valves.
- 18) Lubricate the damper pins.
- 19) Run the unit and ensure proper functioning without vibrations
- 20) Ensure all inspection doors are refitted properly
- 21) Cleaning evaporator coil with suitable cleaning agent.
- 22) Inspect blower shaft, bearings, scroll and wheels
- 23) Inspect blower shaft, bearings, scroll and wheels
- 24) Clean blower wheels and scroll
- 25) Inspect absolute filters
- 26) Check operation of condensate pumps (if applicable)
- 27) Motor current in Amperes.
- 28) Air temperature at the canvas connection deg. F/C.
- 29) Return air temperature deg. F/C.
- 30) Chilled water inlet temperature deg. F/C.
- 31) Chilled water outlet temperature deg. F/C
- 32) Filter cleaning once the month
- 33) Canvas connection check, repair and replacement if require.
- 34) Complete overhauling of the AHU's Units and VFD.

FAN COIL UNIT:-

INCLUSION:-

- 1) Signs of water leakage.
- 2) Operation of the control valve.
- 3) Condensate drain blockage.
- 4) Operation of drive motor.
- 5) Working of control switch.
- 6) Operation of the thermostat
- 7) Cleaning the unit.
- 8) Run and check for undue vibration / noise
- 9) Ensure all inspection doors are refitted properly.
- 10) Run unit and ensure its proper working.
- 11) Room temperature in deg. F/C.
- 12) Canvas connection check, repair and replacement if require.
- 13) Replacement of 2 way 3 way valve and actuator valve.
- 14) Replacement of all part coil, filter motor, Fan, belts, etc.
- 15) Repair and replacement of all Electrical components from FCU panel.
- 16) Complete overhauling of the AHU's Units and VFD.

PUMPS:-

INCLUSION:-

- 1) FOUR preventive services as per checklist.
- 2) Replacing gland packing.
- 3) Lubricating bearings.
- 4) Alignment of pump and replacement of coupling bush.
- 5) Dismantling the defective pump & fixing the repaired one.
- 6) Rewinding of motor and overhauling of pump.
- 7) Replacing pressure gauge flow switch & thermometer.
- 8) Repairing or replacing of impeller / valves.
- 9) Clean and lubricate all the valves.
- 10) Clean pump strainers
- 11) Tighten the pump glands.
- 12) Ensure that the gland drain pipe is in position and clean.
- 13) Proper holding of valves.
- 14) Proper function of non return valve
- 15) Operation of drive motor.
- 16) Electrical cables and terminations.
- 17) Proper operation of electrical starter.
- 18) Run and check the pump for vibration and noise.
- 19) Pump glands, Pump alignment couplings / foundation bolts.
- 20) Check and record the motor current in Amperes.
- 21) Record the pressure at the inlet of the pump in Kgs/cm² or PSIG
- 22) Record the pressure at the outlet of the pump in Kgs/cm² or

PSIG.

- 23) Repair and replacement of all Electrical components from Pump panel.
- 24) Complete overhauling of the Pumps Units and VFD with repair and replacement of all part

VENTILATION/EXHAUSTFAN/PRESSURISE FAN/BLOWERS/HRU

INCLUSION:-

- 1) Rewinding of motor.
- 2) Four preventive services as per checklist.
- 3) V-grooves of the drive pulley.
- 4) Condition of drive belts
- 5) Tension of drive belts.
- 6) Proper drive alignment.
- 7) Gear box lubricant level.
- 8) Shaft seals in the drive gear box
- 9) Coupling bolts and alignment.
- 10) Starter for proper functioning.
- 11) Cleaning the unit.
- 12) Cable termination.
- 13) Run and check for undue vibration & noise.
- 14) Clean air filters.
- 15) Lubricate motor bearings.
- 16) Adjust tension of drive belts if required.
- 17) Inspect blower shaft, bearings, scroll & wheel.
- 18) Clean blower switches & scroll.
- 19) Run the unit and ensure its proper working.
- 20) Motor current in Amperes.
- 21) Inspect the microbe filters and record condition.
- 22) Repair and replacement of all Electrical components from panel.
- 23) Complete overhauling of all above equipment and repair and replacement of all part.

COOLING TOWER

INCLUSION:-

- 1) Four preventive services as per checklist.
- 2) Rewinding & repairing of motor.
- 3) Repairing and replacement motor pulley / belts, etc.
- 4) Repairing and replacement motor pulley / belts, etc.
- 5) Repairing and replacement of CT Fan.
- 6) Replacement of nozzle, air washer, pipe.
- 7) 100 % fill replacement if water quality maintained as per standard
- 8) If water quality not maintained 30% fill replacement to be done at the time of fills cleaning.
- 9) Fill cleaning once in year.
- 10) Cooling Tower cleaning 4 times in year.
- 11) All louvers are in position.
- 12) Proper position of the float valve.
- 13) Drive motor.
- 14) Fan blades and their fasteners
- 15) V-grooves of the drive pulley. Condition and tension of drive belt.
- 16) Gear box lubricant level.
- 17) Shaft seals in the drive gear box.
- 18) Honeycomb for scales and sludge.
- 19) Electric cables terminations and proper operation of starter.
- 20) Run and check for undue vibration & noise
- 21) Clean / remove algae & other sludge from all surface
- 22) Clean the cooling tower sump, sump outlet strainer, lubricate all valves, spray nozzle.
- 23) Lubricate motor bearings.
- 24) Check and record the sump water temp in deg. F/C.
- 25) Check and record the ambient dry and wet bulb temp in deg. F/C.
- 26) Check and record the motor current in Amperes.

LIST OF GADGET TO BE MAINTAINED UNDER AMC

SN	DISCRIPTION	NOS. OF UNIT
1	Chiller Plant 300 TR	3
2	Chiller Plant 80 TR	1
3	Cooling Tower 400 TR	3

4	Condenser Pump 40 HP	3
5	Secondary Pump 30 HP	3
6	Primary Pump 20 HP	3
7	AHU	19
8	Ceiling suspended AHU	8
9	FCU	12
10	Exhaust Fan (Toilets)	4
11	Cooling Towers	3
12	Filters	

Signature and Seal of Vendor