

# **TENDER DOCUMENTS**

**FOR**

**OPERATION, MAINTENANCE, SERVICING  
AND OVERHAULING WORK**

**OF**

**AIR-CONDITIONING PLANTS AND ALLIED EQUIPMENT  
INSTALLED AT STATE LIFE BUILDING NO. 1,  
AND SPLIT / WINDOW A/C INSTALLED AT LIFT  
MACHINE ROOM SLB #. 1, 1-A, 1-B & ANNEXE,  
I. I. CHUNDRIGAR ROAD KARACHI.**

**STATE LIFE INSURANCE CORPORATION OF PAKISTAN**

# **CONTENTS**

<b>SR. No.</b>	<b>CONTENTS</b>	<b>INDEX</b>
<b>01.</b>	Tender.	Section - 1
<b>02.</b>	Instructions to Tenderers.	Section - 2
<b>03.</b>	Conditions of Contract.	Section - 3
<b>04.</b>	General Requirements.	Section - 4
<b>05.</b>	Scope of Work.	Section - 5
<b>06.</b>	Part-A, List of Minimum Operation & Maintenance Staff. Part-B, Required Qualifications & Experience of Operation & Maintenance Staff.	Section - 6
<b>07.</b>	List of Air-conditioning Plants and Allied Equipment. List of Tools & Instruments.	Section - 7
<b>08.</b>	Contract Agreement.	Section - 8

# INDEX

CLAUSE	TITLE	PAGE
	<b><u>SECTION - 1</u></b>	
	Tender	<b>06 - 07</b>
	Memorandum	<b>08</b>
	Schedule of Prices	<b>09</b>
	Appendix-1, List of Proposed Operation & Maintenance Staff	<b>10 - 11</b>
	<b><u>SECTION - 2</u></b> <b><u>INSTRUCTIONS TO TENDERERS</u></b>	<b>12</b>
<b>01.</b>	Documents.	<b>12</b>
<b>02.</b>	Tenderers to be Conversant with the Documents.	<b>12</b>
<b>03.</b>	Addenda.	<b>12</b>
<b>04.</b>	Documents to be Submitted with Tender & General Conditions Applicable to Tender.	<b>12</b>
<b>05.</b>	Submission of Tender.	<b>13</b>
<b>06.</b>	Bid Security.	<b>13</b>
<b>07.</b>	Formal Contract and Performance Bond.	<b>13</b>
<b>08.</b>	Visit to Site.	<b>13</b>
<b>09.</b>	Constitution of Organization Tendering.	<b>14</b>
<b>10.</b>	Tenderers Address to be Supplied.	<b>14</b>
<b>11.</b>	Acceptance.	<b>14</b>
<b>12.</b>	Taking Over of Plants, Equipment and Systems and Commencement of Work.	<b>15</b>
<b>13.</b>	Rights.	<b>15</b>

<b>CLAUSE</b>	<b>TITLE</b>	<b>PAGE</b>
	<b><u>SECTION - 3</u></b> <b><u>CONDITIONS OF CONTRACT</u></b>	<b>16</b>
<b>01.</b>	Definition and Interpretation.	<b>16</b>
<b>02.</b>	Extent of Contract.	<b>17</b>
<b>03.</b>	Assignment and Sub-Letting.	<b>18</b>
<b>04.</b>	Contract Documents.	<b>18</b>
<b>05.</b>	General Obligations.	<b>18</b>
<b>06.</b>	Powers of the Employer's Representative. Duties of Engineers Representative	<b>19</b>
<b>07.</b>	Contractor's Superintendence, Agent & Employees.	<b>20 - 21</b>
<b>08.</b>	Watch and Care of Works.	<b>22</b>
<b>09.</b>	Protection of Works and Materials.	<b>23</b>
<b>10.</b>	Compliance with Statutes, Regulations, etc.	<b>23</b>
<b>11.</b>	Instruments and Tools.	<b>23</b>
<b>12.</b>	Laborer / Workers.	<b>23</b>
<b>13.</b>	Factory Acts and Labour Laws.	<b>24</b>
<b>14.</b>	Bills, Certificates and Payments.	<b>24</b>
<b>15.</b>	Deduction of Amount from Monthly Bill	<b>25</b>
<b>16.</b>	Income Tax	<b>25</b>
<b>17.</b>	Insurances.	<b>26</b>
<b>18.</b>	Special Obligations of the Contractor.	<b>26</b>
<b>19.</b>	Issue of Notices.	<b>27</b>
<b>20.</b>	Termination.	<b>27</b>
<b>21.</b>	Force Majeure.	<b>27</b>
<b>22.</b>	Settlement of Disputes.	<b>28</b>

<b>CLAUSE</b>	<b>TITLE</b>	<b>PAGE</b>
	<b><u>SECTION - 4</u></b>	<b>29</b>
<b>01.</b>	General Requirements.	<b>29 - 32</b>
<b>02.</b>	Major Repairs	<b>33</b>
	<b><u>SECTION - 5</u></b>	<b>34</b>
<b>01.</b>	Scope of Work.	<b>34</b>
<b>02</b>	Plants Operation	<b>35</b>
<b>03.</b>	Servicing & Maintenance	<b>36 - 39</b>
	<b><u>SECTION - 6</u></b>	<b>40</b>
<b>01.</b>	List of Minimum Operation & Maintenance Staff.	<b>40</b>
<b>02.</b>	Required Qualifications & Experience of Operation & Maintenance Staff.	<b>41 - 42</b>
	<b><u>SECTION - 7</u></b>	<b>43</b>
<b>01.</b>	List of Air-conditioning Plants and Equipment.	<b>43 - 50</b>
<b>02.</b>	List of Tools & Equipments.	<b>51</b>
	<b><u>SECTION - 8</u></b>	<b>52</b>
<b>01.</b>	FORM OF CONTRACT AGREEMENT	<b>52 - 53</b>

## **SECTION – 01**

### **OPERATION, MAINTENANCE, SERVICING & OVERHAULING WORK OF AIR-CONDITIONING PLANTS AND ALLIED EQUIPMENT INSTALLED AT STATE LIFE BUILDING NO. 1, AND SPLIT / WINDOW A/C INSTALLED AT LIFT MACHINE ROOM SLB #. 1, 1-A, 1-B & ANNEXE, I. I. CHUNDRIGAR ROAD KARACHI.**

## **T E N D E R**

(The Tenderers are required to fill in all the blank spaces in the Tender, Memorandum, Appendix-1 and various Schedules which form part of this tender)

**To,**

State Life Insurance Corporation of Pakistan,  
Real Estate Division  
5<sup>th</sup> Floor, Principal Office,  
Dr. Ziauddin Ahmed Road,  
Karachi.

Dear Sir,

1. Having examined the tender documents, schedules, site conditions and addenda Nos. \_\_\_\_\_ for the above named works, we, the undersigned offer to carry out the said works, in accordance with the said tender documents, schedules, site conditions and addenda Nos. \_\_\_\_\_ and in all respects in accordance with the conditions as for as applicable for the sum named in the Memorandum annexed hereto or such other sum as may be ascertained in accordance with the conditions of contract.
2. In consideration of your agreeing to examine this tender, we undertake if our tender is accepted:
  - a) To commence the work within the period named in the Memorandum on written orders to commence.
  - b) To sign the formal Contract Agreement within 14 (Fourteen) Days of the issue of the Letter of Award of work and to pay all costs towards the preparation of Contract Agreement.
  - c) To abide by and fulfill all the terms and provisions of the said conditions of contract.

3. The bid security has been tendered as per details given in the Memorandum, the full value of which is to be absolutely forfeited by you, without prejudice to any other rights and remedies which you may have, should we fail to commence the work or execute the formal Contract Agreement, within the periods specified above, otherwise the said sum of bid security shall be repaid by you when formal Contract Agreement has been duly entered into and executed by us on acceptance of our tender.
4. We hereby confirm that we have examined the tender documents and schedules, have inspected the site and have obtained all the information which may affect this tender. We understand that no claim will be admitted by you which may arise from our pleading ignorance of the nature of works.
5. We agree to abide by this tender for the period stated in the Memorandum from the date of opening of the tenders and it shall remain binding upon us and may be accepted at any time before the expiration of that period.
6. Unless and until a formal Contract Agreement is prepared and executed this tender together with your written acceptance thereof and tender documents shall constitute a binding contract between us and shall be deemed for all purposes to be the Contract Agreement.
7. We understand that certain information applicable to the contract which is the subject of this tender is set forth for ease of reference in the Memorandum annexed hereto.
8. We understand that you are not bound to accept the lowest or any tender you may receive, and that you will not defray any expenses incurred by us in tendering.

Dated this \_\_\_\_\_ day of \_\_\_\_\_.

Signature \_\_\_\_\_

in the capacity of \_\_\_\_\_

duly authorized to sign tenders for and on behalf of \_\_\_\_\_

(Full address) \_\_\_\_\_

Witness \_\_\_\_\_

Address \_\_\_\_\_

Occupation \_\_\_\_\_

## **MEMORANDUM**

(Black to be filled in by the Tenderer)

<b>a.</b>	Title of work to be endorsed on the sealed package of the tender	Operation, Maintenance, Servicing & Overhauling Work of Air-Conditioning Plants And Allied Equipment Installed at State Life Building No. 1, And Split / Window A/C Installed At Lift Machine Room SLB #. 1, 1-A, 1-B & Annexe, I. I. Chundrigar Road Karachi.
<b>b.</b>	Tendered Price of the Work.	<b>Rs. _____ Per month.</b> <b>(Rupees _____).</b>
<b>c.</b>	Validity of the tender	Ninety (90) Days from Tender Date
<b>d.</b>	Amount of Bid Security in the form of Pay Order/Bank Draft	2% sum of One (01) Year Contract Value in favour of State Life Insurance Corporation of Pakistan
<b>e.</b>	Commencement of work	Not later than Three (03) Days from the Date of Issuance of Letter of Award of Work.
<b>f.</b>	Amount of third party insurance (minimum for any one accident for loss of property and/ or life)	Rs. <u>500,000.00</u>
<b>g.</b>	Workmen's compensation policy	As per the requirement of workmen's compensation Act.
<b>h.</b>	Venue of Attribution	Karachi.
<b>i.</b>	Working days	Six (06) working Days except Gazette holiday (08:00 Hrs to 17:00 Hrs)
<b>j.</b>	Retention Money	<b>5% Retention Money</b> will be deducted from each monthly bill and shall be released after satisfactory completion of the contract period.
<b>k.</b>	Period of Contract	<b>One (01) Year</b>

Dated this \_\_\_\_\_ day of \_\_\_\_\_.

Signature \_\_\_\_\_

in the capacity of \_\_\_\_\_

duly authorized to sign tenders for and on behalf of \_\_\_\_\_

\_\_\_\_\_  
(Full address) \_\_\_\_\_

Witness \_\_\_\_\_

Address \_\_\_\_\_

Occupation \_\_\_\_\_



## **SCHEDULE OF PRICES**

**1.** Charges for Operation, Maintenance, Servicing & Overhauling Work of Air-Conditioning Plants And Allied Equipment Installed at State Life Building No. 1, And Split / Window A/C Installed At Lift Machine Room SLB #. 1, 1-A, 1-B & Annexe, I. I. Chundrigar Road Karachi., according to Conditions of Contract, General Requirements and Scope of Work etc, as detailed in the tender documents.

Rs. \_\_\_\_\_ Per Month

(Rupees \_\_\_\_\_  
\_\_\_\_\_ Per Month).

**2.** Charges for additional operation of the Plants & Emergency requirement works.

**a)** Beyond normal operating hours on a working day.

Rs. 500/- Per Hour

(Rupees Five Hundred Per Hour).

**b)** On Sundays and Public Holidays.

Rs. 600/- Per Hour

(Rupees Six Hundred Per Hour).

Minimum Payment for Four Hours.

Dated this \_\_\_\_\_ day of \_\_\_\_\_.

Signature \_\_\_\_\_

in the capacity of \_\_\_\_\_

duly authorized to sign tenders for and on behalf of \_\_\_\_\_

\_\_\_\_\_  
(Full address) \_\_\_\_\_

\_\_\_\_\_  
Witness \_\_\_\_\_

\_\_\_\_\_  
Address \_\_\_\_\_

\_\_\_\_\_  
Occupation \_\_\_\_\_

## APPENDIX - 1 TO TENDER

### LIST OF OPERATION & MAINTENANCE STAFF REQUIRED

SR. NO.	NO. OFF	DESIGNATION / NAME	QUALIFICATIONS	EXPERIENCE
1.	01	Site Engineer	D.A.E. (Mech. Or RACT)	Minimum 06 Years In Respective Field
2.	01	Air - Conditioning Supervisor	- DO -	3 - 5 Years In Respective Field + including BMS System
3.	03	A. C Plant Operators	Matric + Technical Course	3 - 5 Years In Respective Field + including BMS System
4.	02	Air - Conditioning Mechanics	Matric + Technical Course	3 - 5 Years In Respective Field
5.	01	Industrial Electrician	Matric + Supervisor License	05 Years In Respective Field
6.	01	Electrician	Wireman License	03 Years In Respective Field
7.	01	General Fitter	At least literate	05 Years
8.	02	Semi - Skilled Workers/Helper	At least literate	03 Years

**Total      12**

Dated this \_\_\_\_\_ day of \_\_\_\_\_.

Signature \_\_\_\_\_

in the capacity of \_\_\_\_\_

duly authorized to sign tenders for and on behalf of \_\_\_\_\_

\_\_\_\_\_  
(Full address) \_\_\_\_\_

Witness \_\_\_\_\_

Address \_\_\_\_\_

Occupation \_\_\_\_\_

## APPENDIX – 2 TO TENDER

**SALARY OF OPERATION, MAINTENANCE, STAFF FOR SERVICING & OVERHAULING WORK OF AIR-CONDITIONING PLANTS AND ALLIED EQUIPMENT INSTALLED AT STATE LIFE BUILDING NO. 1, AND SPLIT / WINDOW A/C INSTALLED AT LIFT MACHINE ROOM SLB #. 1, 1-A, 1-B & ANNEXE, I. I. CHUNDRIGAR ROAD KARACHI.**

(TO BE FILLED IN BY THE TENDERER)

SR. NO.	NO. OFF	DESIGNATION/ NAME	QUALIFICATIONS	EXPERIENCE	Rate Per Person (Rs.)	Total Rate (Rs.)
01.	01	Site Engineer	D.A.E. (Mech. Or RACT)	5 – 6 Years In Respective Field		
02.	01	Air-Conditioning Supervisor	D.A.E. OR Technical Course	3 – 5 Years In Respective Field + including BMS System		
03.	03	A.C Plant Operator	Matric + Technical Course	3 – 5 Years In Respective Field + including BMS System		
04.	02	A.C Mechanics	Matric + Technical Course	3 – 5 Years In Respective Field		
05.	01	Industrial Electrician	Matric + Supervisor License	05 Years In Respective Field		
06.	01	Electrician	Wireman License	03 Years In Respective Field		
07.	01	General Fitter	Matric At least literate	05 Years		
08.	02	Semi-Skilled Workers/Helper	Matric At least literate	03 Years		
<b>Total</b>	<b>12</b>	<b>Grand Total Rs.</b>				

**Note:-** In addition to the Tender Terms & Conditions, Contractor shall adhere to the minimum wages as announced by Government, in case of failure;

- a. The contract will not be awarded.
- b. The contract will be terminated at any stage, if contractor is found at default.

## **SECTION – 02**

### **INSTRUCTIONS TO TENDERERS**

**01. ADDENDA:**

Addenda may be issued, prior to the date set for submission of tenders, to clarify the tender documents or to effect modifications in the contract terms or scope of work. Every addendum issued will be distributed on equal opportunity basis and shall become a part of the tender documents.

**02. DOCUMENTS TO BE SUBMITTED WITH TENDER AND GENERAL CONDITIONS APPLICABLE TO TENDER:**

- a)** The Tenderer is required to complete/submit the following with his Tender:-
- i.** Form of Tender and Memorandum.
  - ii.** Schedule of Prices.
  - iii.** Appendix-1 to Tender i.e. List of Operation & Maintenance Staff. Including qualifications and experience of personnel to be deputed by him for the work.
  - iv.** Tenderer's constitution.
  - v.** Proposed organization chart.
  - vi.** Proposed methodology for the Operation, Maintenance and Servicing of complete Plants and allied equipment as per the scope of work and other conditions detailed in the Tender Documents.
  - vii.** Tenderer's official address.
  - viii.** Bid Security.
- b)** The Tenderer shall not make any alteration in the form of devised Tender Documents.
- c)** The Tenderer shall keep his bid/offer firm and final in all respects and open for acceptance for the period stated in the Memorandum.
- d)** Tenders which are incomplete, conditional obscure or containing uncalled additions, erasures, alterations, over writings or irregularities may be rejected.
- e)** The Tenderer must submit to the Employer's Representative the tender documents on or before the tender due date.

**03. SUBMISSION OF TENDER:**

- a) The set of complete tender documents and addenda addressed to \_\_\_\_\_, must be delivered in person or sent by registered mail to \_\_\_\_\_, in plain sealed in an envelope endorsed on the outside with the words "Tender for \_\_\_\_\_ due on \_\_\_\_\_ at \_\_\_\_\_" so as to reach up to \_\_\_\_\_ on \_\_\_\_\_ and the tenders will be opened at the same place on the same day in the presence of those Tenderers who may be present at the time of tender opening.

**04. BID SECURITY:**

- a) In order to secure the due performance by the Tenderer of the obligations undertaken by him, the tender must be accompanied by a deposit as mentioned in the Memorandum of the Tender.
- b) Tender deposit must be made in the form of Pay Order / Bank Draft of a Scheduled Bank in favour of the Employer i.e. State Life Insurance Corporation of Pakistan.
- c) Tender will not be considered unless it is so secured. This deposit shall be refunded to the Tenderers whose tenders are not accepted, on acceptance of tender or award of such work to lowest bidder.
- d) The Bid Security provided by the Tenderer whose tender is accepted shall be retained by the State Life for full period of Contract as Performance Guarantee
- e) If the Tenderer whose tender is accepted fails to execute the formal Contract Agreement at his own expense within fifteen days of being requested to do so, the full amount of his bid security shall stand forfeited, without recourse, and shall be the absolute property of the Employer.

**05. FORMAL CONTRACT & PERFORMANCE BOND:**

The Tenderer whose tender is accepted will be required to enter into a Contract Agreement in accordance with the Conditions of Contract.

**06. VISIT TO SITE :**

The Tenderers should visit the site and satisfy themselves as to the local conditions and occupation of the Buildings, the full extent and nature of the operations, the conditions affecting the execution of the work and execution of the contract generally. Claims on the grounds of want of knowledge in such respects or otherwise shall not be admitted.

**07. CONSTITUTION OF ORGANIZATION TENDERING :**

- a) The Tenderer must deliver to the Employer with his tender, copies naturally authenticated of the documents defining the constitution of the company or firm by which the tender is submitted, so as to show by what persons and in what manner a contract may be entered into by the company or firm and what persons would be directly responsible for the due performance of the contract and can give valid receipt on behalf of the company or firm. The tender shall be signed only by such persons.
- b) Any correction or alteration in the tender must be signed in full by the same person who is signing the tender for and on behalf of the Tenderer.
- c) Tender must be signed or sealed or otherwise executed in such a manner that it will be binding on the Tenderer. Tenders not so executed may be rejected.

**08. TENDERER'S ADDRESS TO BE SUPPLIED:**

The Tenderer must give with his tender the address at which notice may validly be served on him.

**09. ACCEPTANCE:**

Promptly after opening of the tenders, the Employer will undertake a detailed study and appraisal of the tenders submitted. The Employer does not bind himself to award the contract to the lowest or to any Tenderer but will take into careful consideration the Tenderer's price and such other factors as are deemed to be applicable. Once the Employer has arrived at a decision regarding the award of the contract, successful Tenderer will be informed in writing of the Employer's intent to enter into a contract for the performance of the works. The successful Tenderer will be required to attend the office of the Employer's Representative within specific time as mentioned in clause –e of Memorandum.

**10. TAKING OVER OF PLANTS, EQUIPMENT AND SYSTEMS AND COMMENCEMENT OF WORK:**

- a)** The proposed strategy for taking over of the Plants, and commencement of work is as under :-

The Contractor shall commence mobilization of his staff and stores within 03 days of the issuance of Letter of Award of Work and submit the list of proposed staff for approval by the Employer's Representative. The Contractor will immediately arrange suitable replacement for the staff not approved by the Employer's Representative.

- b)** On direction by the Employer's Representative, the present Contractor will commence handing over of the Plants to the Contractor and start demobilization of his staff on mobilization of Contractor's staff. Proper detailed lists of plants shall be prepared for record of "Taking Over" / "Handing Over" signed by both Contractor's Representative and Employer's Representative, the Contractor ensuring that the taking over is completed within 10 days of the issuance of Letter of Award of work.

- c)** The Contractor shall coordinate his mobilization plan including taking over of the Plants with the demobilization plan of the present Contractor and ensure that the smooth operation and maintenance of the Plants is not effected in any manner during this transition period of 07 days.

- d)** The aforementioned transition period of 07 days is intended to facilitate the Contractor to make himself fully conversant with the operation, maintenance and servicing of the Plants so that no interruption is caused when the present Contractor has completely demobilized. The full staff strength shall become available at Site before the end of the transition period. The regular payments as per Contract shall commence after complete taking over of the Plants and commencement of operation, maintenance and servicing work independently by the Contractor.

**11. RIGHTS:**

The Employer reserves the right to reject any or all tenders as per PPRA rules/regulations.

## **SECTION – 03**

### **CONDITIONS OF CONTRACT**

#### **1. DEFINITION AND INTERPRETATION:**

- a) In construing the contract, these conditions, other documents and the interpretations, the following words and expressions shall have the meaning herein assigned to them, except where the subject or context otherwise requires.
- b) “Employer” / “Owner” means State Life Insurance Corporation of Pakistan (SLIC) and shall include their administrative and legal representatives, assigns or successors.
- c) “Employer’s Representative” means The Representative of State Life Insurance Corporation of Pakistan or such other person(s) for the time being or from time to time duly appointed by the Employer to perform the duties set forth in Clause-7 hereof and notified in writing to the Contractor.
- d) “Contractor” means the Tenderer/bidder whose tender bid has been accepted by the Employer and shall include his legal and personal representative(s), successors and permitted assigns.
- e) “Contractor’s Agent” means the person or Site Engineer duly appointed by the Contractor and approved by the Employer’s Representative to perform the duties set forth in Clauses – 8(b) & 8(C) hereof.
- f) “Contract” means the Agreement contained in the Contract Agreement and the documents set out in the Contract Agreement as forming part thereof.
- g) “Contractor Price/Bid” means the total price/bid of all material, manpower for operation, maintenance, servicing, overhauling, supervision and services required for the works and all cost in connection with the fulfillment of all conditions and performances under the Contract.
- h) “Works” means all the operation, maintenance, servicing and overhauling works to be executed in accordance with the Contract and includes the whole of the works, materials, matters and things required to be done, furnished and performed by the Contractor under the Contract.
- i) “Plant” means all the plants, equipment and systems as detailed in these documents for which the work is to be executed by the Contractor.
- j) “Site”/“Building” means the Building wherein the works are to be performed and executed by the Contractor.



- k) "Specifications" means the specifications provided in the operation and maintenance manuals, directive by Employee's representative and other documents relating to the Plants, allied equipment and systems installed in the Building.
- l) "Drawings" means the drawings referred to in the operation and maintenance manuals etc., and any other drawings including As-built pertaining to the Plants, allied equipment and systems installed in the Building.
- m) "Tender Date" means the date by which the tender/bid is required to be delivered to the Employer.
- n) "State Laws" has the meaning assigned in Clause-11 hereof.
- o) "Approved" means approved in writing including subsequent written confirmation of previous oral approval, and "Approval" means approval in writing including such written confirmation.
- p) "Notice in Writing" has the meaning assigned in Clause-19 hereof.
- q) "Month" means a calendar month.
- r) The singular includes the plural and vice versa. The masculine includes the feminine and vice versa. Words importing persons include firms, companies or other bodies corporate.

**2. EXTENT OF CONTRACT:**

- a) The Contract comprises the operation, maintenance, servicing and overhauling of the complete Plants, Allied Equipment and Systems as detailed elsewhere in the contract documents. Any additional works other than above requiring additional manpower at site will be paid at **20%** overhead profit on production or original invoices of the material / parts if not supplied by State Life.
- b) And except in so far as the contract otherwise provides the provision of all labour, materials, tools, instruments and everything whether of incidental nature required in and for operation, maintenance, servicing and overhauling of the complete Plants, Equipment and Systems, so far as the necessity for providing the same is specified in or can reasonably be inferred from the contract.

**3. ASSIGNMENT AND SUB-LETTING:**

- a) The Contractor shall not assign the whole of the contract or any part thereof or any benefit or interest therein or there under without the prior written consent of the Employer.
- b) The Contractor shall not sub-let the whole or any part of the contract without the prior written consent of the Employer.

**4. CONTRACT DOCUMENTS:**

- a) The contract shall be read, construed and interpreted according to the English language and shall operate in conformity with the laws of the Islamic Republic of Pakistan.
- b) Except if and to the extent otherwise provided by the contract the provisions of these conditions of contract shall prevail over those of any other documents forming part of the contract. Subject to the foregoing the several documents forming the contract are to be taken as mutually explanatory of one another but in case of ambiguities or discrepancies the same shall be explained and adjusted by the Employer's Representative who shall thereupon issue to the Contractor instructions directing in what manner the work is to be carried out.
- c) None of the documents herein before mentioned shall be used by either of the parties hereto for any purpose other than the contract and neither the Employer nor the Contractor shall divulge or use except for the purpose of this contract any information in the priced Schedule of Prices.

**5. GENERAL OBLIGATIONS:**

- a) The Contractor shall when called on to do so enter into and execute a Contract Agreement in the form annexed with such modifications as may be approved by the Employer.
- b) The Contractor shall provide a surety or sureties approved by the Employer to be jointly and severally bound with the Contractor to the Employer for the due performance of the contract by the Contractor under the terms of a Performance Bond, specimen annexed and approved by the Employer in the amount specified in the Memorandum of the tender.
- c) The Contractor shall be deemed to have satisfied himself before tendering as to the correctness and sufficiency of his tender and the rate and price shall except in so far as it is otherwise expressly provided in the contract cover all his obligations under the contract and all matters and things necessary for the proper execution of the works.

- d) The Contractor shall execute the works in strict accordance with the contract to the satisfaction of the Employer's Representative and the whole of the labour, materials, tools and instruments, other things to be provided by the Contractor pursuant to the contract and the mode, manner and speed of execution of the works are to be of a kind and conducted in a manner to the satisfaction of the Employer's Representative.
- e) The Contractor shall comply and adhere strictly to the Employer's Representative's instructions and directions on any matter (whether mentioned in the contract or not) touching or concerning the works. The Contractor shall take instructions and directions only from the Employer's Representative **OR** (Subject to the limitations of the Clause 7-i) from the Engineer of SLIC Pakistan.

**7. POWERS OF THE EMPLOYER'S REPRESENTATIVE :**

- a) The Contractor shall carry out the works under the directions of the Employer's Representative and to his satisfaction.
- b) The Employer's Representative's decision in respect of materials and workmanship and interpretation of the specifications will be final and shall be accepted by the Contractor. Any other matters may be referred to arbitration by the Contractor if he wishes to dispute the Employer's Representative's decision upon such matters.
- c) The Employer's Representative may from time to time give further instructions and directions as may be necessary for the guidance of the Contractor and the proper execution of the works. The Employer's Representative may later the form or character of any of the work in the contract or omit or add to the works.
- d) If any verbal instructions, directions or explanations involving a variation are given to the Contractor or his Agent upon the works by the Employer's Representative, such instructions, directions or explanations shall be confirmed in writing by the Contractor to the Employer's Representative within seven days and, if not dissented from in writing by the Employer's Representative to the Contractor within a further seven days, shall be deemed to be the Employer's Representative's instructions.
- e) If compliance with the Employer's Representative's instructions involve the Contractor in loss or expense beyond that provided for in or reasonably contemplated by the contract, then, unless such instructions were issued by reason of some breach of the contract by the Contractor, the amount of such loss or expense shall be ascertained by the Employer's Representative and shall be paid to the Contractor.

- f) If within seven days after receipt of a written notice from the Employer's Representative requiring compliance with the Employer's Representative's instructions, the Contractor does not comply therewith, the Employer may employ and pay other persons to execute any work whatsoever which may be necessary to give effect to such instructions and all costs incurred in connection therewith shall be recoverable from the Contractor by the Employer as a debt or may be deducted by him from any monies due or to become due to the Contractor under the contract.
- g) Such variations, omissions or additions resulting from instruction of the Employer's Representative will not vitiate the contract and will be the subject of adjustment to the contract price if it is the cause of any difference in expense.
- h) The Employer's Representative will have the power to withhold the issue of any certificate for monthly or other payments if the works are not being carried out to his satisfaction.
- i) In devaluing, deciding or certifying, the Employer's Representative is not intended to act as an arbitrator, but as an Engineer acts by his skill and from his knowledge of the facts and incidents connected with the contract and in so far as any facts are not within his own knowledge, the Employer's Representative shall be at liberty to inform himself by inquiry of any other person or as he may consider necessary. The Employer's Representative shall at all times be considered to be aware of all facts necessary for him to form his own opinion, make his evaluations, give his decisions and order, make his requisitions or give or refuse his certificate and he shall be at liberty to certify at such times and in such manner as in his discretion he may think proper and he shall not be bound to give any reason for or any particulars of his certificate or any reason for his not certifying.

**8. CONTRACTOR'S SUPERINTENDENCE, AGENT AND EMPLOYEES:**

- a) The Contractor shall give or provide all necessary superintendence for the proper fulfilling of the Contractor's obligations under the contract.
- b) A competent and duly authorized Agent (Site Engineer) of the Contractor approved by the Employer's Representative (which approval may at any time be withdrawn) and who shall have full authority to act for and bind the Contractor is to be constantly at the site of work and shall give his whole time to the superintendence of the works.
- c) The Agent shall receive on behalf of the Contractor directions and instructions from the Employer's Representative.
- d) Correspondence between the Contractor or the Agent and the Employer's Representative shall be in English.

- e)** The Contractor shall provide and employ on the site for the purpose of or in connection with the contract:
- i.** Only such Engineers, Supervisors, Foremen, Technical Assistants as are skilled and experienced in their respective callings and are competent to give proper supervision to the work they are required to supervise, and
  - ii.** Such skilled, semi-skilled and unskilled labour as is necessary for the proper and timely performance of the contract.
- f)** The Employer's Representative shall be at liberty to object to and require the Contractor to remove forthwith from the site the Agents or any other person employed by the Contractor or any sub-contractor who in the opinion of the Employer's Representative mis-conducts himself or is incompetent or negligent in the proper performance of his duties or whose employment is otherwise considered by the Employer's Representative to be undesirable and such person shall not be again employed for the purpose of or in connection with the contract without the written permission of the Employer's Representative. Any person so removed shall be replaced immediately by a competent substitute approved by the Employer's Representative. No action as aforesaid in this clause taken by the Employer or the Employer's Representative shall relieve the Contractor of any of his liabilities under the Contract or give rise to any right to compensation or to any other claim.
- g)** For the purpose of identification and security, all employees of the Contractor, who may be, from time to time, detailed to work within the premises of the Building, in connection with rendering of the agreed services as per connected contract agreement;
- i.** Shall be issued with proper identity cards by the Contractor duly countersigned by the Employer's Representative. These cards shall be withdrawn and returned to the Employer's Representative, on discharge of any employee from service by the Contractor. A penalty of Rs 200.00 (Rupees Two Hundred Only) per card shall be charged from the Contractor in case the card is lost or is not returned to the Employer's Representative on discharge of any employee from the Contractor's service.
  - ii.** All employees (excluding Site Engineer & A.C Supervisor) regularly working in the Building shall wear proper uniforms (with firm's name label thereon) provided by the Contractor. The employee's identity Card of the Contractor shall display the I.D. Card (Clause "a") shall be pinned with the uniform.

- h)** The Contractor shall submit to the Employer's Representative certified photocopies of National Identity Cards of all employees employed by him for performance of services under this contract.
- i)** The Contractor shall submit medical fitness certificate of all employees employed by him for performance of service under this contract.
- j)** The Contractor shall maintain daily attendance register of his employees and workers engaged in providing operation, servicing and maintenance service & overhauling works. This attendance register shall be submitted each day to the Employer's Representative and the same may be subject to verification by physical head count. The object of providing attendance record to the Employer's Representative is to enable him to monitor that the required work force of the Contractor is available to provide effective and satisfactory operation, maintenance, servicing and overhauling services.

**9. WATCH AND CARE OF WORKS:**

- a)** Except as otherwise specifically provided in the contract the Contractor shall make all arrangements for the security and protection of persons and property or for the safety or convenience of persons it is necessary or required by the Employer's Representative or by any duly constituted authority, and provide and maintain all lights and watching.
- b)** For the duration of the contract, the Contractor shall take full responsibility for the care of complete plants, equipment and systems (works), materials, tools instruments, and other things brought on the site by the Contractor for the purposes of the contract and in case any damage loss or injury shall happen to the works or any such materials or tools or instruments or other things from any cause whatsoever (save and except the expected risks e.g. outbreak of war or act of invasion) he shall at his own cost replace, repair and make good the loss or damage so that the complete plants, equipment and systems are restored to the original condition in conformity in every respect with the requirements of the contract and the Employer's Representative's instructions. In the event of any such damage loss or injury happening from any of the excepted risks the Contractor shall, if and to extent required by the Employer's Representative, replace repair and make good the same as aforesaid at the cost of the Employer.
- c)** The Contractor shall indemnify and keep indemnified the Employer against all losses and claims for injuries or damages to any person or any property whatsoever which may arise out of or in consequence of the performance of the contract and against all claims, demands, proceedings, damages, costs, charges and expenses, whatsoever in respect of or in relation thereto.

**10. PROTECTION OF WORKS AND MATERIALS:**

- a) The Contractor shall be responsible for any damage caused by his workers, operatives or agents to the Building, complete plants, equipment and systems, works being executed under this contract, or the contents of the Building, and shall make good such damage at his sole expense.
- b) Any damage(s) as may occur through negligence of the Contractor his agents or employees will be corrected and / or made good at his own expense.

**11. COMPLIANCE WITH STATUTES, REGULATIONS ETC:**

The Contractor shall confirm in respects rules with the provisions of all federal, provincial and local laws, rules, regulations or orders or other laws for the time being in force in Pakistan including all regulations and by-laws, if any, of local or other duly constituted authority within Islamic Republic of Pakistan which may be applicable to the performance of the contract and the rules and regulations of all public bodies and companies whose property or rights are affected or may be affected in any way by the works (which are herein referred to as "State Laws") and shall give all notices and pay all fees, charges, rates and taxes (collectively referred herein as fees) required to be given or paid thereby and shall keep the Employer indemnified against all penalties and liability of any kind for the breach of any of the same provided that such fees shall be reimbursed by the Employer to the Contractor on demand.

**12. INSTRUMENTS AND TOOLS:**

The Contractor shall supply and maintain such sufficient instruments, tools and equipment for the use of his staff that are required to enable him to fulfill his obligations under the contract.

**13. LABORERS / WORKERS:**

- a) The Contractor shall make all arrangements in connection with the recruitment, supervision, transport, accommodation, quarantine and all other matters whatsoever in connection with the employment of laborers and supervisory staff provided that the Contractor shall not recruit or attempt to recruit persons in the service of the Employer.
- b) The Contractor shall at all times take all requisite precautions and use his best endeavors to prevent any riotous or unlawful behavior by or amongst the laborers and others employed by him or his sub-Contractors for the purpose of or in connection with the contract and for the preservation of the peace and the protection of the inhabitants and the security of property on or in the neighborhood of the site.

- c) In respect of all laborers directly or indirectly employed by the Contractor for the performance of the works, he shall comply with or cause to be complied with, all rules framed by the Federal and Provincial Governments and any local body from time to time for the employment of labour including the protection of health and sanitary arrangements for the workers.
- d) The Contractor shall maintain at site proper attendance registers to record the attendance of his employees and submit a return in detail at the end of every week to the Employer's Representative showing:
  - i. The numbers of several classes of labour employed by him on the works during the period.
  - ii. Their working hours, and
  - iii. Details of any accidents during the period indicating extent of damage and injury.
- e) The Contractor's Agent shall show the attendance registers to the Employer's Representative whenever called upon to do so.

**14. FACTORY ACTS AND LABOUR LAWS:**

The Contractor shall, in relation to the works to be executed under this contract, comply with the provisions of the Factories Act 1937 and 1984 and West Pakistan Industrial and Commercial Employment (Standing Orders) Ordinance 1968, and other Federal and Provincial Laws concerning employment of workers, and statutory amendments or additions thereof, and any regulations or orders made there under affecting the works.

**15. BILLS, CERTIFICATES AND PAYMENTS :**

- a) The Contractor shall submit his Bills to the Employer's Representative during 1<sup>st</sup> week of every month for the work carried out during the preceding month and the Contractor shall be paid monthly on the certificate of the Employer's Representative.
- b) The Employer's Representative shall have the power to make necessary adjustments in the Bill and issue his certificate within a week of the receipt of the Bill by him.
- c) The Contractor shall submit his Bill in the prescribed form duly approved by the Employer's Representative.
- d) The Employer's Representative may make any correction or modification in any previous certificate which shall have been issued by him and shall have power to withhold any certificate if the works or any parts thereof are not being carried out to this satisfaction.



- e) No claim from the Contractor on account of fluctuations in the market rates shall be entertained during the currency of this contract agreement for any item of work executed under this contract.
- f) The amount due to the Contractor under any certificate issued by the Employer's Representative shall be paid by the Employer to the Contractor within 15 days after such certificate has been delivered to the Employer.

**16. DEDUCTION OF AMOUNT FROM MONTHLY BILL:**

- a. Lump sum amount accessed by employer's representative in case of unsatisfactory services provided by Contract.
- b. 1.5 times of amount / worker will be deducted in case of absence of contractor's staff. Salary in the light of details given in price schedule of required employees [Only One (01) Day leave will be allowed to each worker of contractor in each calendar month].
- c. 1.5 of salary of contractor's staff will be deducted in case of shortages of staff as per salary / price schedule submitted by contractor.
- d. Frequent shortage/absence of contractor's staff will invite penalty that is absolutely at discretion of Employer's Representative

**17. INCOME TAX AND REIMBURSEMENTS:**

- a) The Contractor shall be responsible for the payments of all Pakistani Taxes i.e. Income Tax, super tax, SST (SRB) etc, on income arising out of the contract and the rate/price stated in the tender and schedule of prices shall be deemed to cover all such taxes.
- b) The Contractor shall pay directly royalties, rent and other payment or compensation (if any) for getting any materials, plant, equipment, tools and instruments etc, required for the works.
- c) Any element of Federal, Provincial or local duty or tax inherent in the price of locally procured items required for the work shall be deemed to be included in the rates and prices stated in the priced tender and schedule of price and will not be separately reimbursable.

**18. INSURANCE:**

The Contractor shall furnish the following insurance policies to the Employer within 15 days of the issuance of Letter of Award of work. The Contractor must keep the

policies in force during the entire contract period and produce to the Employer's Representative the receipts for payment of the premiums:

- i. Workmen's Compensation Policy based on the total wages / salary and to that limit required by the Law of Pakistan for the workers and other persons in the employment of the Contractor.
- ii. Third Party Liability Policy up to the limits specified in memorandum of the tender.

**19. SPECIAL OBLIGATIONS OF THE CONTRACTOR :**

a) The Contractor is bound to pay the salaries to his workers / employees employed for the works regularly within 1<sup>st</sup> week of each month positively. If the Contractor fails to make payment to his workers / employees by 7<sup>th</sup> of each month the Employer's Representative may on receipt of such written complaint from the workers / employees pay the salaries to the workers / employees of the Contractor and the amount so incurred by the Employer's Representative, shall be deducted from the bill of the Contractor. If the Contractor is late in making payments to his workers / employees for any two consecutive months, the Employer's Representative may terminate this contract in terms of Clause 21(iii) herein.

b) The Contractor shall liaise and co-ordinate with the other Contractors working at the site so that the performance of his and other Contractor's work is not affected in any way.

If any dispute and difference arises between the Contractors working at the site, the same shall be referred to the Employer's Representative in writing, whose decision shall be treated final, conclusive and binding on all the parties.

c) The Contractor shall be responsible and shall make good any loss, damage, theft and pilferage during the period his employees are working in the premises of the Building and for which their responsibility is proved.

d) The Contractor shall sign the inventory for all Plants, Equipment, fittings and fixtures etc. Any loss or damage to any Plants, Equipment, Fittings and fixtures etc., shall be the responsibility of the Contractor.

e) The Contractor shall ensure that the manpower once provided for the works would not be ordinarily changed from the site.

f) The Contractor shall make himself available to the Employer's Representative whenever asked for and shall reply all communications issued within two days of their receipt.

**20. ISSUE OF NOTICES:**

- a) Any notice to be given to the Contractor under the terms of the contract shall be served by sending the same by registered post to or delivering the same at the Contractor's Principal Office.
- b) Any notice to be given to the Employer under the terms of the contract shall be served by sending the same by registered post to or delivering the same at the Employer's Principal Office.
- c) Any notice to be given to the Employer's Representative under the terms of the contract shall be served by sending the same by registered post to or delivering the same at the Employer's Representative's Office.

**21. TERMINATION:**

- a) The Employer shall have the right to terminate the Contract wholly or partly by giving a notice of 30 (thirty) days to the Contractor :
  - i. In the opinion of the Employer's Representative the Contractor's performance is unsatisfactory.

**OR**
  - ii. The Contractor fails to abide by any of the conditions of the contract or the instructions of the Employer's Representative.

**OR**
  - iii. The Contractor fails to fulfill his obligations regarding payment of salaries to his workers/employees as mentioned in Clause-19(a) herein.
- b) The Employer shall also have the right to terminate the Contract by giving a notice of 30 (Thirty) Days if he decides to discontinue the services of the Contractor due to any reasons other than those mentioned above. However, in such a case the Employer shall not invoke / forfeit the Performance Bond of the Contractor and shall make a fair assessment of the payments due to the Contractor and release the same in full and final settlement of the accounts under the Contract.

**22. FORCE MAJEURE:**

Any delay in or failure of performance of Contractor or in fulfillment of any obligation by the Employer hereto shall not constitute default hereunder or give rise to any claim for damages if and to the extent such delay or failure of performance is caused by occurrence beyond the control of the party affected including natural calamities, acts of war, rebellion or sabotage or damage resulting there from, fire or explosions, accidents, breakdown, riots, commotion, strikes (excluding the strike of the employees of the Contractor) epidemic or any other causes whether or not of the same class or kind as those specifically stated above, which are not within the control of the party affected and which by the exercise of reasonable diligence the party affected is unable to prevent.

**23. SETTLEMENT OF DISPUTES:**

- a)** All questions and disputes between the parties to the contract other than those in which the decision certificate and / or opinion of any person is expressed by the contract to be final and conclusive, shall be referred to the arbitration and final decision of a single arbitrator agreed and appointed by both the parties, or in case of disagreement, to the arbitration of two arbitrators one to be appointed by each party which arbitrators shall before proceeding with the reference, appoint an umpire.
- b)** The arbitrator, the arbitrators, or umpire shall have power to open up, review and revise any certificate, opinion, decision, requisition or notice save is regard to the accepted matters referred in clause-h of Memorandum hereof, and to determine all matters in dispute which shall be submitted to him or them and of which notice shall have been given, and his / their award shall be final, conclusive and binding on the parties.
- c)** Unless the parties otherwise agree such reference shall not take place until after the substantial completion or abandonment of the works or determination of the contract.
- d)** The provisions of Arbitration Act 1940 and any statutory modification thereof and rules framed there under shall be deemed to apply to and be incorporated in this contract.
- e)** The cost of every reference and award respectively shall be in the discretion of the arbitrator or arbitrators or the umpire, who shall determine the amount thereof, and shall direct by whom and to whom and in what manner the same shall be borne and paid.
- f)** Reference to the Employer for arbitration shall be made in writing by the Contractor specifying clearly all such questions and disputes not later than three months after the completion of the works. Failure to make such a reference shall be deemed that the Contractor has waived all claims in this respect. The parties shall appoint the arbitrator / arbitrators within two months of such reference being made.
- g)** The Employer and the Contractor hereby also agree that arbitration under this clause shall be condition precedent to any other action at law. The venue of arbitration and any other action shall be the city named in the Memorandum of the tender.

## **SECTION - 04**

### **GENERAL REQUIREMENTS**

1. The Contract shall be awarded for a period of **One (01) Year**.
2. The Employer will facilitate the working of the Contractor by providing adequate facility particularly a suitable office for the Contractor's Site Engineer within or close to the central plant room with a telephone extension from the existing intercom system during working hours for easy communication by the Contractor's Supervisor Engineer with the Employer's Representative.
3. The Contractor will operate the Air-conditioning Plants, Allied equipment and Systems (hereinafter collectively referred as the Plants), providing effective air-conditioning in the Building and satisfactory operation of all equipment. The plants operating hours shall be to suit the working hours of the Employer. According to current Employer's working hours (Monday to Saturday ), the plants operating hours shall be as follows :-
  - ◆ Monday to Friday - From 8:30 A.M. to 5:30 P.M.
  - ◆ Saturday - From 8:30 A.M. to 3:00 P.M.

On Saturdays the Contractor's Staff will attend and carry out the required servicing, maintenance and repair works for the equipment. The Employer's Representative may give prior instructions to operate any specific equipment.

The Plants will not normally be operated on Sundays and listed Public Holidays.

4.
  - a). The Contractor will operate the Plants on year-round basis, the periods of cooling-ventilation would depend on the weather conditions which decision will be at the discretion of the Employer's Representative.
  - b). The normal servicing, maintenance, repairs and overhauling of the Plants shall be carried out in a manner that the normal operation of the Plants is not disrupted.
  - c). Normally the cooling cycle shall not be operated during November 15 to March 15 every year and the Contractor must complete the work of annual servicing, maintenance, overhauling and repairs during this period so that the Plants are in full working order by March 15.

5.
  - a). The Contractor will be required to physically check the Engineering Stores of the Employer to determine the availability of imported and indigenous spare parts.
  - b). The Contractor will submit a complete list of spare parts and materials required for the operation, maintenance and servicing of the Plants and for the annual servicing, maintenance, overhauling and repairs to the Employer's Representative as per following time schedule.
  - c). The Contractor shall give following minimum time Notice to the Employer's Representative for procurement of spare parts and materials :
    - i. 09 months time for imported spare parts and materials.
    - ii. 04 months time for locally available spare parts and materials.
  - d). In case the Employer's Representative instructs the Contractor to supply any item to be procured from the local market, the Contractor will be paid (Twenty Percent) **20%** of the cost of the item as handling and overhead charges to cover the procurement expenses. The Bill of the Contractor will be supported by the cash memos or bills of the Suppliers for the items purchased and supplied by the Contractor.
6.
  - a). The Contractor shall detail experienced and qualified staff for the operation, servicing and maintenance of the plants who will work exclusively in the Building and shall not be diverted to the Contractor's other installation(s) while operation, servicing, maintenance, minor repairs and overhauling of the plants is carried out. The staff must remain at the site of work during their working hours and should have required qualifications and experience in their respective trades.
  - b). The Contractor shall depute additional staff as required from his central workshop for carrying out the work of servicing, maintenance and minor repairs, particularly annual servicing, maintenance and overhauling.
  - c). The Contractor shall prepare sample Log Sheets for daily recording the observations of the operation of the Plants, testing of water samples and temperatures in the occupied/conditional areas of the Building, etc., and submit the same to the Employer's Representative for scrutiny, amendment and approval.

Contractor's Site Engineer shall ensure that the approved Log Sheets are accurately and methodically maintained and take confirmatory signatures of the Employer's Representative every day. Two sets shall be prepared and one set handed over to the Employer's Representative every day.

**d). THE CONTRACTOR SHALL PREPARE:**

- i. Schedule of routine servicing and maintenance, and
- ii. Schedule of annual servicing, maintenance and overhauling, and submit the same to the Employer's Representative for scrutiny, amendment and approval in October each year.

The Contractor shall maintain a Register in the form of Charts for each Equipment and System and record with dates the work of servicing, maintenance and overhauling as carried out. The Contractor shall take confirmatory signatures from Employer's Representative for the work done.

- e). The Contractor shall arrange periodic site visits, at least once in the last week of every month, of his Senior Engineer from his Head Office to check the operation of the Plants and servicing, maintenance, minor repairs and overhauling work carried out by the Contractor's staff. The Contractor will submit the Inspection Report of his Senior Engineer to the Employer's Representative in first week of every month for the preceding month. The Report shall also highlight the overall performance of the plants and pinpoint any actions to be taken by the Employer's Representative.
  - f). Section-6 of tender documents, list of Operation & Maintenance Staff, specifies the minimum full time staff (along with qualifications & experience) to be employed by the Contractor at site without limitation. The Contractor must employ sufficient staff to satisfactorily fulfill his obligations under the contract. Replacement staff shall be immediately arranged by the Contractor if any staff cannot attend to his duties.
- 7.
- a). The Contractor must ensure regular attendance of the approved staff for the work and maintain an Attendance Register for the staff and take signature from the Employer's Representative every day.
  - b). Replacement staff shall be immediately arranged by the Contractor if any staff cannot attend to his duties. The bio-data of replacement staff shall be immediately submitted to the Employer's Representative for approval.
  - c). The Employer reserves the right to make deductions on pro-rata basis, of which the Employer shall be the sole judge, if the attendance of Contractor's Staff is irregular.

- 8. a).** The Contractor shall ensure that the spare parts etc., are replaced only when it is considered essential. Maximum care shall be exercised for economy and all efforts should be made to repair the old part for its reuse. New part should only be substituted when the old part cannot be satisfactorily repaired and reused.
  - b).** The Contractor shall hand over the defective part to the Employer's Representative. The Contractor shall maintain a Register to record the new parts taken from Employer's Store and defective parts handed back and take confirmatory signature from the Employer's Representative against each entry.
- 9.** The Contractor may carry out the regular servicing and maintenance work on Holidays to avoid interruption to regular operation of the Plants. The Contractor's Supervisor / Engineer shall inform the Employer's Representative on a Wednesday (or 02 days before the Holiday) regarding the servicing and maintenance work to be carried out on next Holiday so that the Employer's Representative can arrange necessary security and access for the Contractor's staff.
- 10.** In case any equipment or parts of the Plants are damaged or destroyed as a result of negligence on the part of the Contractor, his agent or employees, the Contractor shall be liable to pay for rectification and making good of all such damages or losses.
- 11.** The Employer reserves the right to make deduction for the periods of interrupted operation of the Plants on pro-rata basis where the cause of interruption is attributable to the negligence of the Contractor, his agent or employees, of which the Employer shall be the sole judge.
- 12.** The Contractor must ensure good behavior by his staff and the Contractor's Site Engineer should liaison with and follow the instructions of the Employer's Representative, particularly regarding the entry of the Contractor's staff to the Building occupied areas.
- 13 a).** The Employer's Representative may instruct the Contractor's Site Engineer to operate the Plants :
  - i.** Beyond normal hours on a working day, or
  - ii.** On a Sunday or Public Holiday by giving notice two days before the holiday. Contractor's Site Engineer will take certificate in writing from the Employer's Representative regarding the date and the period of the additional operation.
- b).** The Contractor shall be paid charges for the additional operation of the Plants as provided in the Contract.



14. Section-7 of tender documents, list of air-conditioning plants and equipment and list of tools & instruments, briefly details the main items of the plants without limitation. It is to be noted that the plants are complete in all respects with all accessories and controls and the Tenderer should visit the site and familiarize himself with the installation before submitting his tender.

15. **Major Repairs:**

- a) In case any major repairs become necessary to the plants in normal course of operation but not due to any negligence or default of the Contractor, his agent or employees of which the Employer shall be the sole judge, the Contractor shall immediately inform the Employer's Representative about such requirement and the Employer will invite quotations for the work of major repairs from different Contractors including the Contractor and award the same as per PPRA Rules / regulations with concept of value of money.
- b) If the work of any major repairs is awarded to the Contractor, he shall depute additional staff from his workshop to carry out this work.
- c) If the work of any major repairs is awarded to any other Contractor(s) by the Employer, the Site Engineer of the Contractor (thru operators designated for such equipment) shall constantly watch the work of such other Contractors and provide necessary information for the guidance of such other Contractors and make log book entries about the defects rectified and repairs / replacement work carried out by such other Contractors and record the progress of repairs / replacement work.

The Contractor shall not be required to lend any tools, etc., and make any labour available to such other Contractors for their work.

16. The Contractor must ensure the proper functioning of the plants. In case of unsatisfactory functioning or failure of the plants on account of negligence of the Contractor, of which the Employer shall be the sole judge, the Employer shall have the right to terminate this Agreement by giving a written notice of Contradictory (Clause – 21-b Page No. 27) 30 (thirty) days. This is without prejudice to any other rights which the Employer may have against the Contractor under the terms of the contract.

## **SECTION – 05**

### **SCOPE OF WORK**

1. The Contractor shall be responsible for the operation of the complete Air-conditioning Plants, Allied equipment and Systems including automatic and safety controls, components and accessories (collectively referred herein as the Plants), complete servicing and maintenance of the Plants including minor repairs, annual overhauling and servicing.  
Major repairs, when required, are not included in the scope of work.
2. **THE EMPLOYER SHALL BE RESPONSIBLE FOR THE FOLLOWING:**
  - a) Electricity, gas and water supply.
  - b) Spares and materials, chemicals and paints required for operation, maintenance, servicing, minor repairs and overhauling excluding miscellaneous items listed in Clause-3 (C).
  - c) Water treatment chemicals, lithium bromide, inhibitor, glycol, refrigerants and special lubricants or oils.
  - d) Suitable working space for the Contractor's staff to carry out minor repairs.
3. **THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE FOLLOWING :-**
  - a) All staff required for the work and as listed elsewhere in the documents.
  - b) All tools, cleaning brushes, instruments and equipment required to carry out the work.
  - c) Supply of miscellaneous items required for work such as cotton waste and cloth, grease and kerosene oil.
  - d) To keep the plant rooms and spaces, equipment rooms and spaces, adjoining passages and cooling tower terraces clean and neat. Cleaning to be done every day.
4. The Contractor shall ensure that the plants are operated, maintained and serviced efficiently to avoid breakdown during normal operation. The Contractor shall also ensure economical consumption of the materials and spare parts supplied by the Employer.
5. **THE CONTRACTOR SHALL:**
  - a) Record twice daily the temperatures on each floor at different locations designed by the Employer's Representative.
  - b) Record plants and equipment operational data at suitable intervals.
  - c) Record all observations in printed log sheets approved by the Employer's Representative. Two sets to be prepared and one set supplied to the Employer's Representative everyday.

6. The work of routine servicing and maintenance as required must be completed by the Contractor's staff every day.
7. The Operation and Maintenance work to be carried out by the Contractor is briefly detailed in Clause 8, 9, 10 and 11 for reference only without any limitation.
8.
  - a). The Contractor's Site Engineer and other supervising staff shall study manufacturer's technical catalogues for the plants and familiarize themselves with the operation, maintenance and servicing of the plants to ensure trouble free operation of the plants.
  - b). The Contractor / Contractor's Site Engineer shall immediately report any malfunctioning of the plants to the Employer's Representative.
  - c). The Contractor's staff will attend promptly to complaints of malfunctioning of any HVAC System / equipment made by the Employer's Representative to the Site Engineer of the Contractor and rectify the same on priority basis. A log book will be maintained to record the date and time of each complaint and date and time of its rectification.
  - d). The Contractor shall coordinate with the Employers water supply services to ensure that sufficient make up water is available for the operation of HVAC Plants.  
In case of unusual water requirements such as filling of the entire system, the Contractor's Site Engineer will inform the Employer's Representative at least 02 days in advance.

9. **PLANTS OPERATION:**

- a) Check for the working of all electrical and mechanical components of the plants.
- b) Regular dosing of chemicals for effective treatment of cooling chilled water systems. Taking of samples and testing with Test Kits and recording the results daily for city water supply, cooling tower and weekly for chilled water.

Two sets of Chemical Treatment Reports shall be prepared indicating the quantities of chemicals added and results of samples tested for each system. One set shall be supplied to the Employer's Representative every day.

Complete chemical analysis tests shall be arranged from a reputable Laboratory in first week of every quarter. Two copies of Lab Report shall be prepared, one copy supplied to Employer's Representative and 2<sup>nd</sup> copy to be kept in Contractor's Site Office.

- c) Maintains the daily operation log sheets required as per Section-04, Clause 6(C).
- d) Any servicing or running repairs required during the operation of the plants.

**10. WEEKLY / FORTNIGHTLY / MONTHLY SERVICING & MAINTENANCE:**

- a) Washing and cleaning of air filters.
- b) Flushing and cleaning of strainers in the water systems.
- c) Cleaning of air devices.
- d) Servicing of automatic and safety controls of the plants.
- e) Checking of oil and other lubricants levels and changing the same when required.
- f) Adjustment and lubrication / greasing of bearings and glands.
- g) Checking of belt driven equipment and adjustment of belt tension and alignment.
- h) Checking and adjustment of all pressure and safety devices and controls.
- i) Periodic servicing of the plants including topping up of refrigerant, lithium bromide, chromate, alcohol, etc.
- j) Checking and adjustment of all pressure and safety devices and controls.

**11. ANNUAL SERVICING, MAINTENANCE AND OVERHAULING:**

- a) The work to be carried out between December 01 to February 28/29 under the supervision of a Senior Engineer to be deputed by the Contractor. Parts to be changed where necessary. Instructions given in the Manufacturer's Manuals to be followed. Record of various checks and tests to be maintained for future reference.

Immediately on shut down of the plants for annual servicing, etc., the Contractor shall open all components of the equipment and prepare a list of major repairs required within one week of the shut down. The opened equipment shall be shown to the Employer's Representative to check the list of major repairs prepared by the Contractor.

**b) DIRECT FIRED ABSORPTION TYPE WATER CHILLERS**

- i. Chemical and mechanical cleaning of generator, condenser, absorber and evaporator tubes.
- ii. Servicing of pumps.
- iii. Servicing of purge units.
- iv. Adjustment and calibration of automatic and safety controls.

**c) COOLING TOWERS**

- i. Cleaning of gear boxes and changing of oil.
- ii. Cleaning and adjustment of fan blades.
- iii. Removing of scale on cooling tower fill checking and adjustment of fill levels.
- iv. Cleaning of louvers and metering orifices.
- v. Cleaning of basin and sumps.

**d) WATER PUMP-MOTOR SETS**

- i. General servicing.
- ii. Adjustment of glands and bearings.

**e) AIR HANDLING UNITS**

- i. Flushing and cleaning of fins' surfaces and water tubes of cooling coils.
- ii. Checking and adjustment of dampers.
- iii. Checking and adjustment of fan bearings.
- iv. Checking of belts alignment and tension and mounting bolts.

**f) FANS.**

- i. Cleaning of fans.
- ii. Checking and adjustment of bearings.
- iii. Checking of belts alignment and tension and mounting bolts.

**g) AIR FILTERS.**

Cleaning and repair of air filters.

**h) AUTOMATIC CONTROLS.**

Checking of setting and calibration of the automatic temperature, humidity and level controls.

**i) Electric Motors.**

- i. General servicing.
- ii. Checking and tightening of wire connections.
- iii. Checking of earthing.
- iv. Checking and lubrication of bearings.
- v. Checking of motor winding insulation with a meggar.

**j) ELECTRIC CONTROL BOARDS.**

- i. Checking and servicing of all MCCBs, disconnect switches, fuses, contactors, starters, relays, overload cutouts and other safety devices, checking and cleaning of contact surfaces.
- ii. Tightening of wiring connections.
- iii. Checking of wiring insulation.
- iv. Checking of earthing.

**k) AIR DISTRIBUTION SYSTEMS.**

- i. Cleaning of all air devices. Removal, cleaning and re-fixing of exceptionally dirty air devices.
- ii. Internal cleaning of air ducts as required and directed by the Employer's Representative. Cleaning is to be programmed to ensure internal cleaning of 25% air ducts every year.
- iii. Repair of exposed ducts, duct insulation, jacketing and covering.
- iv. Removal and re-fixing of false ceiling tiles as required by the Contractor for carrying out his work. The Contractor shall be responsible for any damage to the false ceiling framing and tiles, which will be caused due to his work.

**l) PIPING SYSTEMS.**

- i. Cleaning and flushing of all piping systems including chemical cleaning when required.
- ii. Servicing of all valves, strainers, specialties, etc.
- iii. Repair of insulation, jacketing and covering of all insulated piping.

**m) PAINTING.**

- i. Painting of all equipment, exposed ducting and piping, if the previous paint has been scratched or has deteriorated.
- ii. Painting of air devices is excluded and shall be considered a major repair work.

- n) Removal of damaged insulation (significant portions) of equipment, ducting and piping and replacement with new insulation, jacketing, covering, finishing and painting shall be considered a major repair work.**

**SCOPE OF WORK FOR BMS (SYSTEM):**

The Contractor shall be responsible for Operation & Maintenance of all equipment of BMS control units throughout the contract period.

The Contractor shall engage a well trained and skilled instrument technician for the site who will perform regular service for 8-Hours on daily basis.

In case of emergency Senior Engineer of M/s. I&MS will attend problem/complain within the same day.

To attend all emergency works, if any material/parts replaced will be by State Life separately on actual cost.

During preventive maintenance (shutdown period) staff of M/s. I&MS systematically examine and adjust the system where every necessary.

Technician & M/s. &MS will perform scheduled preventive maintenance inspections and will conduct its work during normal working hours at intervals determined by manufacturer's recommendations.

Preventive maintenance of equipment will be provided in order to maintain the system at maximum performance and reliability levels and may include but not limited to the following:

- i.** Examine and clean the thermostats, humidity controls, temperature controls, pressure control relays, damper actuators, instrumentation and accessories directly pertaining to the BMS Control equipment.
- ii.** Check and confirm control system sequence of operation to ensure optimum system efficiency and economy.
- iii.** Lubricate as required, control valve,-packing glands, damper bearings and linkages and other accessories directly pertaining to the BMS Control Units.
- iv.** Inspect automatic temperature control valves for proper stroke, close off and packing condition.

**NOTE:**

Service charges of M/s. I&MS are included in the Tender/Bid price and shall not be paid separately.

## SECTION – 06

### LIST OF MINIMUM OPERATION & MAINTENANCE STAFF

Site Engineer	01 No.
Air-conditioning Supervisor	01 No.
Chiller/Plant Operators/BMS Technician	02 + 01= 03 Nos.
Air-conditioning Mechanic/Technician	02 Nos.
Industrial Electrician	01 No.
Electrician	01 No.
General Fitter	01 No.
Helper	02 Nos.
<b>Total</b>	<b>12 Nos.</b>

**NOTE:**

**BMS SYSTEM:**

1. On Saturdays the duty timings may be from 8:00 A.M. to 3:00 P.M.
2. The Contractor must ensure that work of servicing and maintenance is satisfactorily and regularly completed, if necessary by extending the working hours of his staff or by deputing more staff for the work or by working on Sundays OR Holidays.



## **REQUIRED QUALIFICATION AND EXPERIENCE OF OPERATION & MAINTENANCE STAFF**

### **1. SITE / ENGINEER:**

Must have at least Diploma of Associate Engineer in Mechanical or Air-conditioning & Refrigeration Technology from a Government College of Technology or Government Polytechnic with minimum 6-7 years experience in installation, operation, maintenance, servicing, overhauling and repairs of 500 TR capacity and above central type Air-conditioning Plants including Reciprocating & Centrifugal Type Water Chillers, Cooling Towers, Air handling Units, Electric/Electronic Automatic Controls and Electrical Systems.

Must have capability as independent charge of operation, maintenance, servicing, overhauling and repairs of 500 TR capacity and above central air- conditioning type plants.

Higher Technical Education (such as B.E. OR B.Tech Hons.) will be plus point qualification.

### **2. AIR CONDITIONING SUPERVISOR:**

Must have a Diploma of Associate Engineer in Mechanical / Electrical / Air conditioning & Refrigeration Technology from a Government College of Technology or Government Polytechnic with minimum 3-5 years experience in operation, maintenance, servicing, overhauling and repairs of 400 TR capacity and above Central Air Conditioning type plants.

Must have capability as independent charge of Operation & Maintenance work of Central Air Conditioning type plants.

### **3. PLANT OPERATOR:**

Must have passed Matric Examination of Secondary Board of Education and have a Certificate in Air conditioning Technology from a recognized Technical Institute and minimum 03-5 years experience in operation, maintenance, servicing, overhauling and repairs of plants according to duties to be assigned including central type air conditioning plants with direct fire / absorption type water chillers of 400 TR capacity and above, air handling units, cooling towers, etc.

### **4. AIR-CONDITIONING MECHANIC:**

Must have passed Matric Examination of Secondary Board of Education and have a Certificate in Air conditioning Technology from a recognized Technical Institute and minimum 05 years experience in operation, maintenance, servicing, overhauling and repairs of plants according to duties to be assigned including central type air conditioning plants with absorption type water chillers of 400 TR capacity and above, air handling units, cooling towers, etc.,

5. **INDUSTRIAL ELECTRICIAN:**

Must have passed Matriculation Examination of Secondary Board of Education and have an Electrical Wireman Licence and minimum 05 years experience in operation, maintenance, servicing and repairs of Industrial electrical installations and equipment and electrical systems and equipment of central type air conditioning plants including electric / electronic automatic controls.

6. **ELECTRICIAN:**

Must have passed matriculation Examination of Secondary Board of Education and have an Electrical Wireman Licence and minimum 03 years experience in operation, maintenance, servicing and repairs of industrial type electrical installations and equipment including electrical systems and equipment of central type air conditioning plants, packaged air conditioners, etc.

7. **GENERAL FITTER:**

Must be at least literate and has minimum 05 Years experience as a fitter in different central type air-conditioning plant or mechanical installations.

8. **SEMI SKILLED WORKER:**

Must be at least literate and has minimum 03 years experience as a helper in different central type air conditioning plant installation or similar mechanical systems installations.

9. **AUTOMATIC CONTROLS & INSTRUMENTATION WATER CHEMICAL TREATMENT:**

Amongst the staff listed above Sr. Nos. 02, 03, 04 & 05, at least one person each should have had specialized training and minimum 03 years experience respectively in following trades :

- a) Operation, maintenance and servicing of pneumatic/electric/ electronic automatic controls and instruments.
- b) Chemical dosing and testing of water systems of cooling towers and chilled water.

## **SECTION – 07**

### **LIST OF AIR-CONDITIONING PLANT & EQUIPMENT AND SPLIT / WINDOW A/C INSTALLED AT LIFT MACHINE ROOM SLB #. 1, 1-A, 1-B & ANNEXE, I. I. CHUNDRIGAR ROAD KARACHI.**

#### **GROUND FLOOR UTILITY PLANT ROOM**

<b>SR. NO.</b>	<b>DESCRIPTION</b>	<b>CAPACITY</b>	<b>QTY.</b>
01.	Sanyo make direct gas fired absorption water chiller TSA-DE 41E8-G	350 Tons	02 Nos.
02.	Shinwa makes in Deuced Draft Cross Flow Square Type Cooling Tower Complete with Fan Motor Accessories (Gear Drive) Model – SNC 4640 ASSD	2227 KW Water Flow 6384L/Min	02 Nos.
03.	Chiller Water Pumps with Motor and Starter (Pump KSB Motor Siemens)	37 KW	03 Nos.
04.	Condenser Water Pumps with Motor and Starter (Pump KSB Motor Siemens)	60 HP	03 Nos.
05.	Expansion Tank Automatic System		02 Nos.
06.	Automatic Chemical Feeder for Cond. System		02 Nos.
07.	Wall Exhaust Fans		03 Nos.
08.	FCU/2 interklima Made Greece Model DA-024-4R (Ground Floor Plant Rom Office)		01 No.

**LIST OF AIR-CONDITIONING PLANT & EQUIPMENT AND SPLIT / WINDOW A/C  
INSTALLED AT LIFT MACHINE ROOM SLB #. 1, 1-A, 1-B & ANNEXE,  
I. I. CHUNDRIGAR ROAD KARACHI.**

**UPPER PLANT ROOM (10<sup>TH</sup> FLOOR)**

<b>SR. NO.</b>	<b>DESCRIPTION</b>	<b>CAPACITY</b>	<b>QTY.</b>
01.	York Reciprocation Electric operated Chiller with Accessories M/N, YCW T18/50 PD with main Circuit Breaker & Control Penal	230 Tons	01 No.
02.	York Reciprocating Electric operated Chiller with Accessories M/N, YCWJ 99 MH/50 PA with main Circuit Breaker & Control Penal	200 Tons	01 No.
03.	Kingsun Cooling Towers complete with Fan Motor Reducing Gear and accessories	350 Tons	02 No.
04.	Kingsun Cooling Towers complete with Fan Motor Reducing Gear and accessories	400 Tons	01 No.
05.	Chilled Water Pumps with Motor and Starter (Pumps KSB Motors Siemens)	30 HP 25 HP	02 Nos. 02 Nos.
06.	Chilled Water Pumps with Motor and Starter (Pumps KSB Motors Siemens)	30 HP 37 KW 30 KW	01 No. (1989) 01 No. (2009) 01 No. (2009)
07.	Make up water pumps with motor and starters Jawed	20 HP	01 No.
08.	Expansion Reser water Tanks with accessories	500 G	03 Nos.

**LIST OF AIR-HANDLING UNITS EQUIPMENTS INSTALLED  
AT STATE LIFE BUILDING NO. 1, I. I. CHUNDRIGAR ROAD,  
KARACHI.**

**SOUTH WING**

SR. NO.	DESCRIPTION	CAPACITY	QTY.
01.	<b>9<sup>TH</sup> FLOOR (INTERKLIMA)</b> <b>Made in Greece</b> Unit Type MD-24 REF AHU 15 Motor 11 KW-4P Fan Speed 1260 RPM Air Flow 21481 M3/H	Two AHU's are installed at 9 <sup>th</sup> Floor. This unit is Feeding to 9 <sup>th</sup> Floor  Cooling Capacity 143298	01 No.
02.	<b>8<sup>TH</sup> FLOOR (INTERKLIMA)</b> <b>Made in Greece</b> Unit Type MD-24 REF AHU 14.5 Motor 11 KW-4P Fan Speed 1260 RPM Air Flow 21420 M3/H	This units is installed at 9 <sup>th</sup> Floor Feeding to 8 <sup>th</sup> Floor  Cooling Capacity 136516W	01 No.
03.	<b>7<sup>TH</sup> FLOOR (INTERKLIMA)</b> <b>Made in Greece</b> Unit Type MD-24 REF AHU 14.4 Motor 11 KW-4P Fan Speed 1260 RPM Air Flow 21420 M3/H	Two AHU's are installed at 7 <sup>th</sup> Floor. This unit is Feeding to 7 <sup>th</sup> Floor  Cooling Capacity 136516W	01 No.
04.	<b>6<sup>TH</sup> FLOOR (INTERKLIMA)</b> <b>Made in Greece</b> Unit Type MD-24 REF AHU 14.4 Motor 11 KW-4P Fan Speed 1260 RPM Air Flow 214201 M3/H	This units is installed at 7 <sup>th</sup> Floor Feeding to 6 <sup>th</sup> Floor  Cooling Capacity 136516W	01 No.
<b>5<sup>TH</sup> FLOOR AIR HANDLING ROOM</b>			
05.	<b>5<sup>TH</sup> FLOOR (INTERKLIMA)</b> <b>Made in Greece</b> Unit Type MD-24 REF AHU 14.2 Motor 11 KW-4P Fan Speed 1260 RPM Air Flow 21420 M3/H	Two AHU's installed at 5 <sup>th</sup> Floor, this units is Feeding to 5 <sup>th</sup> Floor  Cooling Capacity 136516W	01 No.

**LIST OF AIR-HANDLING UNITS EQUIPMENTS INSTALLED  
AT STATE LIFE BUILDING NO. 1, I. I. CHUNDRIGAR ROAD,  
KARACHI.**

**SOUTH WING**

SR. NO.	DESCRIPTION	CAPACITY	QTY.
06.	<b>4<sup>TH</sup> FLOOR (INTERKLIMA)</b> <b>Made in Greece</b> Unit Type MD-24 REF AHU 14.5 Motor 11 KW-4P Fan Speed 1260 RPM Air Flow 7643 M3/H	This Units is installed at 5 <sup>th</sup> Floor Feeding to 4 <sup>th</sup> Floor  Cooling Capacity 47366W	01 No.
<b>3<sup>RD</sup> FLOOR AIR HANDLING ROOM</b>			
07.	<b>3<sup>RD</sup> FLOOR (INTERKLIMA)</b> <b>Made in Greece</b> Unit Type MD-09 REF AHU 11 Motor 04 KW-4P Fan Speed 1352 RPM Air Flow 7643 M3/H	Feeding to 2 <sup>nd</sup> Floor  Cooling Capacity 47380675W	01 No.
08.	<b>2<sup>ND</sup> FLOOR (INTERKLIMA)</b> <b>Made in Greece</b> Unit Type MD-16 REF AHU 12 Motor 5.5 KW-2P Fan Speed 1962 RPM Air Flow 12502 M3/H	Feeding to 1 <sup>st</sup> Floor & 2 <sup>nd</sup> Floor  Cooling Capacity 80675W	01 No.
09.	<b>3<sup>rd</sup> FLOOR (SABRO OLD)</b> <b>Made in Pakistan</b> Model 224-MZDT-DS-M Motor 20HP Fan Speed 678 RPM Air Flow Rate 19200 CFM	Feeding to 3 <sup>rd</sup> Floor Only  Cooling Capacity 576000 BTU/HR	01 No.

**LIST OF AIR-HANDLING UNITS EQUIPMENTS INSTALLED  
AT STATE LIFE BUILDING NO. 1, I. I. CHUNDRIGAR ROAD,  
KARACHI.**

**NORTH WING (9<sup>TH</sup> FLOOR) AIR - HANDLING ROOM**

SR. NO.	DESCRIPTION	CAPACITY	QTY.
01.	<b>9<sup>TH</sup> FLOOR (INTERKLIMA)</b> <b>Made in Greece</b> Unit Type MD-30 REF AHU 9.5 Motor 11 KW-4P Fan Speed 1242 RPM Air Flow 23043 M3/H	Two AHU's are installed at 9 <sup>th</sup> Floor. This unit is Feeding to 9 <sup>th</sup> Floor  Cooling Capacity 154700W	01 No.
02.	<b>8<sup>TH</sup> FLOOR (INTERKLIMA)</b> <b>Made in Greece</b> Unit Type MD-30 REF AHU 10.4 Motor 11 KW-4P Fan Speed 1292 RPM Air Flow 24679 M3/H	This Unit are installed at 9 <sup>th</sup> Floor. This unit is Feeding to 8 <sup>th</sup> Floor  Cooling Capacity 161955W	01 No.
03.	<b>7<sup>TH</sup> FLOOR (INTERKLIMA)</b> <b>Made in Greece</b> Unit Type MD-30 REF AHU 9.5 Motor 11 KW-4P Fan Speed 1242 RPM Air Flow 23043 M3/H	Two AHU's are installed at 7 <sup>th</sup> Floor. This unit is Feeding to the Floor  Cooling Capacity 154700W	01 No.
04.	<b>6<sup>TH</sup> FLOOR (INTERKLIMA)</b> <b>Made in Greece</b> Unit Type MD-30 REF AHU 10.2 Motor 11 KW-4P Fan Speed 1242 RPM Air Flow 24679 M3/H	This Unit is installed at 7 <sup>th</sup> Floor Feeding to 6 <sup>th</sup> Floor  Cooling Capacity 161955W	01 No.
05.	<b>5<sup>TH</sup> FLOOR (INTERKLIMA)</b> <b>Made in Greece</b> Unit Type MD-30 REF AHU 9.2 Motor 11 KW-4P Fan Speed 1242 RPM Air Flow 23043 M3/H	Two AHU's are installed at 5 <sup>th</sup> Floor. This unit is Feeding to 5 <sup>th</sup> Floor  Cooling Capacity 161955	01 No.

**LIST OF AIR-HANDLING UNITS EQUIPMENTS INSTALLED AT  
STATE LIFE BUILDING NO. 1, I. I. CHUNDRIGAR ROAD, KARACHI.**

**NORTH WING (9<sup>TH</sup> FLOOR) AIR - HANDLING ROOM**

<b>06.</b>	<b><u>4<sup>TH</sup> FLOOR</u></b> (INTERKLIMA) <b>Made in Greece</b> Unit Type MD-30 REF AHU 101 Motor 11 KW-4P Fan Speed 1299 RPM Air Flow 24679 M3/H	Two AHU's are installed at 9 <sup>th</sup> Floor. This unit is Feeding to 9 <sup>th</sup> Floor  Cooling Capacity 161955W	01 No.
<b>07.</b>	<b><u>3<sup>RD</sup> FLOOR</u></b> (INTERKLIMA) <b>Made in Greece</b> Unit Type MD-30 REF AHU 9.1 Motor 11 KW-4P Fan Speed 1242 RPM Air Flow 23043 M3/H	Feeding same floor  Cooling Capacity 154700W	01 No.
<b>08.</b>	<b><u>2<sup>ND</sup> &amp; 3<sup>RD</sup> FLOORS</u></b> (INTERKLIMA) <b>Made in Greece</b> Unit Type MD-24 REF AHU 08 Motor 705 KW-4P Fan Speed 1454 RPM Air Flow 19533 M3/H	3 <sup>rd</sup> Floor & 2 <sup>nd</sup> Floor  Cooling Capacity 128784W	01 No.
<b>09.</b>	<b><u>2<sup>ND</sup> FLOOR</u></b> (SABRO OLD) <b>Made in Pakistan</b> Model 224-MZBT-DS Motor 15 HP Fan Speed 615 RPM Air Flow 16000 CFM	One same Floor  Cooling Capacity 4800000 BTU/HR	01 No.
<b>10.</b>	<b><u>1<sup>ST</sup> FLOOR</u></b> (SABRO OLD) <b>Made in Pakistan</b> Model 224-MZBT-DS Motor 20 HP Fan Speed 589 RPM Air Flow 24000 CFM	One same Floor  Cooling Capacity 7200000 BTU/HR	01 No.



**LIST OF AIR-HANDLING UNITS EQUIPMENTS INSTALLED AT  
STATE LIFE BUILDING NO. 1, I. I. CHUNDRIGAR ROAD, KARACHI.**

**NORTH WING (9<sup>TH</sup> FLOOR) AIR - HANDLING ROOM**

<b>11.</b>	<b><u>INTERMEDIATE (INTERKLIMA)</u></b> (Not Connected for Duct) <b>Made in Greece</b> Unit Type MD-16 REF AHU 02 Revised Motor 04 KW-4P Fan Speed 1417 RPM Air Flow 13637 M3/H	Not Commissioning Yet  Cooling Capacity 85052W	01 No.
<b>12.</b>	<b><u>PANT HOUSE (INTERKLIMA)</u></b> (Not Connected for Duct) <b>Made in Greece</b> Unit Type MD-16 REF AHU 02 Revised Motor 04 KW-4P Fan Speed 1417 RPM Air Flow 13637 M3/H	Not Commissioning Yet  Cooling Capacity 85052W	01 No.
<b>13.</b>	<b><u>7.6.5.4.3 &amp; LOBBY (INTERKLIMA)</u></b> Installed in Lift Lobby <b>Made in Greece</b> Unit Type TM-MD-112-D-4C-AL Fan Speed 930 RPM (3 Speed) Air Flow 4175 M3/H Max Current 7.1 Ampere (Each 02 FCU Lobby)REF AHU 15	Two AHU's are installed in each Lobby  Cooling Capacity 85052W	01 No.
<b>14.</b>	Building Manage System (BMS)		01 Lot
<b>15.</b>	Main Fan & Condenser		01 Lot

**AIR-CONDITIONING PLANTS AND ALLIED EQUIPMENT  
INSTALLED AT STATE LIFE BUILDING NO. 1,  
AND  
SPLIT / WINDOW A/C INSTALLED AT  
LIFT MACHINE ROOM SLB #. 1, 1-A, 1-B & ANNEXE  
I. I. CHUNDRIGAR ROAD, KARACHI.**

<b>5.</b>	<b><u>DETAIL OF SPLIT / WINDOW A/C IN LIFT MACHINE ROOMS SLB #. 1, 1-A, 1-B  AND ANNEXE KARACHI.</u></b>		
		<b>Tons</b>	<b>Qty.</b>
	i. SLB #. 1	02 Tons & 1.5 Ton	03 & 01 = 04 Nos.
	ii. SLB #. 1-A,	1.5 Tons	01 No.
	iii. SLB #. 1-B	1.5 Tons (Window)	01 No.
	iv. SLB – Annexe	1.5 Tons	01 No.

## SECTION - 07

### LIST OF TOOLS & INSTRUMENTS REQUIRED FOR OPERATION & MAINTENANCE INSTALLED AT STATE LIFE BUILDING NO. 1, I. I. CHUNDRIGAR ROAD, KARACHI.

01.	Box Spanner. (Different Size).	02 Sets
02.	Ring Spanner. (Different Size).	02 Sets
03.	Fix Spanner. (Different Size).	02 Sets
04.	Philips Screw Driver. (Different Size).	01 Set
05.	Flat Screw Driver. (Different Size).	01 Set
06.	Pair Set (Grip, Nose, Long nose, Electric).	01 Set
07.	Wire Cutter.	01 No.
08.	Adjustable Wrench. (Different Size).	01 Set
09.	Pipe Wrench. (Different Size).	01 Set
10.	Gas Welding St (Oxy-Accetaline Plant). (Would be Provided as Site as when required).	01 Set
11.	Electric Arc Welding Plant. (With lead, holder). (Would be Provided as Site as when required).	01 Set
12.	Magger. (Would be Provided as Site as when required).	01 No.
13.	Nitrogen Cylinder (With Gauge and Adopter).	01 Set
14.	Vacuum Pump (Double Stage).	01 Set
15.	Gauge Manifold (Imperial USA).	02 Sets
16.	Die Set ½" to 2" Dia.	01 Set
17.	Chisels. (Different Size).	01 Set
18.	Flaring Tools.	01 Set
19.	Swaging Tool.	01 Set
20.	Hammer. (Different Weight).	01 Set
21.	Claw Hammer.	01 No.
22.	Gun Hammer.	01 No.
23.	Grease Gun.	01 No.
24.	Dust Blower.	01 No.
25.	Hand Grinder.	01 No.
26.	Bench Vice.	01 No.
27.	Pipe Vice (With Stand).	01 No.
28.	Tong Tester (USA).	01 No.
29.	Drill Machine (Hammering), ¼" - 1. (With Masonry & Steel Drill Bits).	01 No.
30.	Multimeter. (AVO Meter).	01 No.
31.	Valve Keys. (Different Size).	01 Set
32.	Rights Angle Triangle.	01 No.
33.	Allen Key Set. (Different Size).	01 Set
34.	Psychomotor.	02 Nos.
35.	Dry & Wet Thermometer.	02 Nos.
36.	Tachometer.	01 Set
37.	Sprit Level.	01 Set
38.	Speeds Meter.	01 No.
39.	Baval Protector with attachment	01 Set
40.	Acidizing Pump with complete system (01 H.P SS Boly Pump)	01 Set

**NOTE:** Contractor will also provide necessary tools & instruments at site, which are required for Operation & Maintenance.

## SECTION – 08

### FORM OF CONTRACT AGREEMENT

THIS AGREEMENT is made and entered at \_\_\_\_\_ on this \_\_\_\_\_ day of \_\_\_\_\_ by and between \_\_\_\_\_

\_\_\_\_\_ (hereinafter called the “Employer” which expression shall include its successors, legal representatives and assigns) of the one part and \_\_\_\_\_

\_\_\_\_\_ (hereinafter called the “Contractor” which expression shall include its successors, legal representatives and permitted assign) of the other part.

WHEREAS the Employer is desirous for the operation, maintenance, servicing and overhauling of Air-conditioning Plants, Equipment and Systems viz., \_\_\_\_\_

\_\_\_\_\_ (hereinafter called the “works”).

WHEREAS, under the procedure, tenders have heretofore been received by the Employer for the works and the tender of the Contractor for the works has been accepted by the Employer.

NOW THEREFORE, for and in consideration of the promises, covenants, agreements hereinafter contained and to be performed by the parties hereto, the said parties hereby covenant and agree as follows:-

1. In this Agreement words and expressions shall have the same meaning as are respectively assigned to them in the conditions of contract hereinafter referred to.
2. The following documents (This also means entire connected Tender/Bid Documents) shall be deemed to form and be read and constructed as part of this Agreement, viz.,
  - a) The said tender No. \_\_\_\_\_ dated \_\_\_\_\_ Memorandum and Appendix-I & II, as amended herein.
  - b) The schedule of prices.
  - c) The conditions of contract.
  - d) The general requirements.
  - e) The scope of work.
  - f) The list of Operation & Maintenance Staff.

- g) The list of air-conditioning plants and equipment.
  - h) The instructions to Tenderers.
  - i) Addenda Nos. (if any).
  - j) The Letter of Intent No. \_\_\_\_\_  
dated \_\_\_\_\_ and all related correspondence mentioned therein.
3. In consideration of the covenants and agreements to be kept and performed by the Contractor, and for the faithful performance of this contract and the works embraced therein, in conformity in all respects with the conditions herein contained and referred to, the Employer shall pay and all Contractor shall receive and accept as full compensation for everything furnished and done by the Contractor under this Agreement, the contract price at the time and in the manner prescribed by the contract.
  4. The Contractor, at his own proper cost and expense, shall do all work and furnish all labour, equipment, materials, instruments and tools, for the works as outlined and described in these documents except such spare parts and materials which are to be furnished by the Employer.
  5. This Agreement shall take effect from \_\_\_\_\_ and shall be initially for a period of One year up to\_\_\_\_\_.

IN WITNESS whereof the parties hereto or herein have hereinto set their respective hands and seals on the day the month and the year first above-mentioned.

**SIGNED, SEALED AND DELIVERED**

**SIGNED, SEALED AND DELIVERED**

By \_\_\_\_\_  
For and on behalf of

By \_\_\_\_\_  
For and on behalf of

\_\_\_\_\_  
**(EMPLOYER)**  
In the presence of

\_\_\_\_\_  
**(CONTRACTOR)**  
In the presence of

\_\_\_\_\_  
**(WITNESS)**

\_\_\_\_\_  
**(WITNESS)**

# RECEIPT

**TENDER FOR AIR-CONDITIONING PLANTS AND ALLIED EQUIPMENT**  
**INSTALLED AT STATE LIFE BUILDING NO. 1,**  
**AND**  
**SPLIT / WINDOW A/C INSTALLED AT LIFT MACHINE ROOM SLB #. 1,**  
**1-A, 1-B & ANNEXE I. I. CHUNDRIGAR ROAD, KARACHI.**

1. M/s. \_\_\_\_\_
2. Amount \_\_\_\_\_

**NOTE :**

Cost of this tender is Rs 1,000/- (Rupees One Thousand Only) which will be paid in cash at the time of collection of Tender Documents. This amount is non-refundable.

---

**SEAL & SIGNATURE OF THE CONTRACTOR**

**Dated : \_\_\_\_\_.**

**STATE LIFE INSURANCE CORPORATION OF PAKISTAN**  
**MECHANICAL ENGINEERING DEPARTMENT**  
**REAL ESTATE DIVISION**  
**PRINCIPAL OFFICE, KARACHI.**

**POST QUALIFICATION INFORMATION / DOCUMENTS FOR OPERATION,**  
**MAINTENANCE SERVICING & OVERHAULING WORKS OF AIR-CONDITIONING PLANTS**  
**AND ALLIED EQUIPMENT INSTALLED AT STATE LIFE BUILDING NO. 1, AND**  
**SPLIT / WINDOW A/C INSTALLED AT LIFT MACHINE ROOM SLB #. 1,**  
**1-A, 1-B & ANNEXE I. I. CHUNDRIGAR ROAD, KARACHI.**

**1. SCOPE OF EVALUATION CRITERIA ( AN INTEGRAL PART OF BID DOCUMENTS):**

There are no two views that Public procurements have become a specialized undertaking in the contemporary world. There is a strong relationship between transparent public procurements and economic development. So far an "Evaluation Criteria" is devised by Mechanical Section of Real Estate Division, Principal Office, Karachi to make sure to award the OPERATION, MAINTENANCE SERVICING & OVERHAULING WORKS OF HVAC SYSTEM INSTALLED AT STATE LIFE BUILDINGS to the "Lowest Evaluated Bidder" in line with PPRA Rules/Regulations 2004 with concept of "Value of Money".

**2. REGULATORY PROVISIONS:**

In line with PPRA Rules/Regulations 2004, specially clause – 4, 29, 30 & 36.

**3. SUBMISSION OF INFORMATION/DOCUMENTS:**

Interested firms should furnish the following information/documents for post-qualification;

**i) MANDATORY:**

- a) National Tax Number Certificate and active taxpayer evidence.

**ii) CAPACITY:**

- a) Registered name and address of the Company alongwith Phone / Fax Numbers and E – Mail Address (copy of registration to be furnished).
- b) Complete profile of the firm including details of present and past similar works with reference.
- c) List of Engineers, Technical Staff, their qualification / experience and details of in house facilities.
- d) Proof of registration with any other Professional Organization for similar works.
- e) Bank Statement / Sales Tax Certificate, SRB Registration Certificate, Professional Tax certificate & certificate of any other applicable tax.

**iii)  GROUNDS OF REJECTION OF BID:**

- a) Conditional/Ambiguous bid.
- b) Bid submitted after stipulated time period.
- c) Bid submitted without bid security.
- d) Bid submitted unsealed or sent through fax, e-mail etc.
- e) Bid without original Affidavit of Non Black Listing of firm from any govt. / semi govt. or private organization.



**ALLOCATION OF MARKS REGARDING EVALUATION CRITERIA FOR POST QUALIFICATION OF CONTRACTORS FOR OPERATION, MAINTENANCE SERVICING & OVERHAULING WORKS OF HVAC SYSTEM INSTALLED AT STATE LIFE BUILDINGS.**

<b>A.</b>	<b><u>COMPANY PROFILE:</u></b>	
	<i>i.</i> The company established more than 10 Years Marks (Full)	20 Marks
	<i>ii.</i> The company established within 1 to 10 Years (Proportionate)	
<b>B.</b>	<b><u>SIMILAR HVAC MAINTENANCE PROJECTS HANDLED:</u></b>	
	03 Marks per Contract	15 Marks
<b>C.</b>	<b><u>SIMILAR HVAC MAINTENANCE PROJECTS IN PROGRESS (Last 05 years)</u></b>	
	03 Marks per Contract	15 Marks
<b>D.</b>	<b><u>LIST OF ENGINEERS / TECHNICAL STAFF:</u></b>	
	<i>i.</i> Engineer E/M [Minimum Required – Two (02)] 05 Marks each	20 Marks
	<i>ii.</i> D.A.E E/M [Minimum Required – Four (04)] 02 Marks each	
	<i>iii.</i> Technician E/M 01 Marks each	
<b>E.</b>	<b><u>LIST OF TOOLS / EQUIPMENTS:</u></b>	
	<i>i.</i> Vacuum Pump 03 Marks	10 Marks
	<i>ii.</i> Welding plant 03 Marks	
	<i>iii.</i> Other Relevant Tools 04 Marks	
<b>F</b>	<b><u>ISO or UKAS CERTIFICATIONS:</u></b>	05 Marks
<b>G</b>	<b><u>PREVIOUS EXPERIENCE WITH STATE LIFE INSU. CORP.:</u></b>	
	<i>i.</i> Satisfactory 05 Marks	05 Marks
<b>H</b>	<b><u>REGISTERED PEC ME-01</u></b>	
	<i>i.</i> Non register in relevant field ME-01	Zero - Marks

**Note:** Minimum 70% Marks are required to be post qualified.

**TECHNICAL SCRUTINY DETAIL/RESULT**

*For*

**POST QUALIFICATION OF CONTRACTORS FOR OPERATION, MAINTENANCE SERVICING & OVERHAULING**

**WORKS OF HVAC SYSTEM INSTALLED AT STATE LIFE BUILDINGS.**

Sr. #.	Name of Firm & Address	Company Profile	Similar HVAC Maint./Projects Handled	Similar HVAC Maint. Work in Progress	List of Engrs./ Technical Staff Strength .	List of Tools/ Equipments	ISO or UKAS Certification	Previous Experience with State Life Ins. Corp.	PEC - Registered ME - 01	Total Marks Obtained	Remarks
		A	B	C	D	E	F	G	H	Max Marks: A+B+C+D+E+F+G+H=100	
		20	15	15	20	10	05	05	10	100	
01.									Proposed		
02.											
03.											
04.											
05.											
06.											
07.											
08.											
09.											
10.											

**Note:** Minimum 70% Marks are required to be post qualified.