

**DIRECTORATE OF CIVIL AVIATION**  
**GOVERNMENT OF UTTAR PRADESH**  
**LUCKNOW AIRPORT, LUCKNOW**



**TENDER FORM FOR COMPREHENSIVE OPERATION & MAINTENANCE OF SCREW TYPE CENTRAL AIR CONDITIONING PLANT & ITS ASSOCIATED SYSTEM AT DIRECTORATE OF CIVIL AVIATION, GOVERNMENT OF UTTAR PRADESH, LUCKNOW AIRPORT, LUCKNOW**

**TENDER NO: 07/CAD/2017-18**

**Cost of the tender form : Rs. 500.00 ( By cash)  
: Rs. 600.00 (By Post)**

**Last date of receipt : 18.07.2017 Upto 13:00 hrs.**

**Date of opening : 18.07.2017 Upto 15:00 hrs.**

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**E-Mail : dsca@bsnl.in**

## **BILL OF QUANTITY**

1. Name of Work: COMPREHENSIVE OPERATION & MAINTENANCE OF SCREW TYPE CENTRAL AIR CONDITIONING PLANT & ITS ASSOCIATED SYSTEM WORK AT DIRECTORATE OF CIVIL AVIATION, GOVERNMENT OF UTTAR PRADESH, LUCKNOW AIRPORT LUCKNOW
2. Date of opening tender: -18.07.2017 at 15:00 hrs
3. Cost of tender form: - Rs. 500.00
4. Earnest money: 2% of quoted price through FDR/TDR pledged in favour of Director, Civil Aviation, Uttar Pradesh, Lucknow Airport, Lucknow
5. Period: One year

### **Necessity of staff for the A.C. maintenance (Three shift 24 hours)**

1.	Expert work supervisor	01 no. (General shift)
2	Qualified A. C. Operator	04 nos. (Three shift 24 hrs.)
3	Helpers	03 nos. (Three shift 24 hrs.)
Notes: 1.	One A. C. operator & one helper in each three shifts of 8 hrs. & one no. releaver for weekly off & holidays.	

#### **A. Specification/information about Air Conditioning Plant and its accessories**

This plant was commissioned in 2011-12 comprises the following equipments and other accessories:-

01. 100 TR x 2 Nos. capacity Hitachi brand AC Screw Compressor with double cylinder with automatic monitoring display including all accessories make: - 100QRP3E/WCH1204003,WCH.
02. AC Cooling Tower with 1000 lit. Tank, motor, exhaust, Mihir branded F115, 116 including all accessories Qty – 2 Nos.
03. Chiller motor 10 HP x 3 Nos. including all accessories etc.
04. Condenser Pump 10 HP x 2 Nos. including all accessories etc.
05. Electrical Panel full size Larsen & Turbo Ltd. 1000 amp x 1 no.

06. Change over panel with OB panel including loose box etc. Qty: - 2 Nos.
07. A.H.U Unit – 4 Nos. with DB Board, Exhaust fan, controls Panel, butterfly valves, switches & misc.
08. FCU- 35 Nos in Hanger with exhaust fan & required accessories.
09. Distribution panel with FCU panel for operation incl. all accessories- 48 Nos.
10. Control Panel in VIP lounge / PSR room/Stanger- 3 Nos.

## **B. Scope of the Work**

- 1- The successful tenderer shall undertake the operation & maintenance of the AC Plant and its associated system which will be for 12 calendar months from the date of order. The AC Plant will be operated in three shifts of 8 hours of each and at least one single operator and one helper is required in every shift incl. reliever and one supervisor in general shift. In case of non working days and other holidays the AC system shall be functional. The maintenance service shall be comprehensive including repair/supply of spare parts, electrical equipments and parts, Mechanical equipments and parts, V belts, supply of R-22 refrigerant gas, compressor oil and labour and minor painting work of equipments in plant room. Tools and any other equipment needed for maintenance and operation shall not be provided by the Directorate.
2. An attendance register shall be maintained by the officer-in-charge at Directorate for operation. A complete day to day operational log books has to be maintained by the officer-in-charge.

## **C. Maintenance Schedule**

A routine preventive maintenance schedule shall be submitted to the concerned Engineer (Electric) of the Directorate before starting the job. The Engineer (Electric) of Directorate of Civil Aviation will approve the same, which shall be followed during the AMC to minimize the break down. Following points should be included in the maintenance schedule:

### **Compressor:**

- Oil replacement at 4000 hours running or once in a year as requirement.
- Filter replacement at 4000 hours running or once in a year as requirement.
- Checking of bearings, Oils pump etc at 4000 hours running.
- Refrigerant leak check from system at least in one shift daily.

### **Condenser:**

- Cleaning at every 6 month. (Brushing)
- Di-scaling by chemical at every 6 month or as per requirement.

**Chillier:**

- Defrosting of Chillier (tube side, Refrigerant side) at every 6 Months or as per requirement.
- Cleaning of chillier shall (water side) at every 6 month or as per requirement.

**Pump:**

- Check lubrication daily.
- Check alignment.

**Cooling Tower:**

- Cleaning of sump every Month and as per requirement.
- Cleaning of stainer daily. It should be in proper condition.
- Daily water quality monitoring for TDS, PH, Hardness.
- Checking of FRP fan, motor and its lubrication.

**Controls:**

- Monthly checking of all controls.
- DPS of HP/LP, Oil, Water/Chillier, T-State, Antifreeze.

**Operation Log books to be maintain:**

- Daily parameter log book.
- Control checks record.
- Cooling tower daily log book.
- Condenser cleaning, Schedules/Chillier defrosting schedules.
- Compressor maintenance schedules.
- Pump maintenance record.
- Fan Coil units' preventive maintenance records.

Every break down is to be attended within the shortest possible time, so that 90% monthly average plant availability is obtained. It may be noted that every type of break down is to be attended and every damaged parts is to be replaced immediately.

**D. Commercial**

The monthly pro-rate payment for each month shall be made in the next month, after satisfactory clearance from the officer-in-charge of the system and complete deduction of the penalty for break down hrs, if any.

The monthly plant availability is calculated as below:

$$\frac{24 \times \text{total no. of days of the month.}}{100}$$

In case of break down more than 10% and up to 20% or monthly plant availability the rate of penalty is calculated as below:

$$\frac{1 \times \text{break down hrs} \times \text{no of compressor break down.}}{4}$$

In case of break down more than 20% and up to 30% of monthly plant availability the rate of penalty is calculated as below:

$$\frac{2 \times \text{break down hrs} \times \text{no of compressor break down}}{4}$$

In case of break down more than 30% of monthly plant availability the rate of penalty is calculated as below and AMC shall be terminated:

$$\frac{3 \times \text{break down hrs} \times \text{no of compressor break down}}{4}$$

### **Security Forfeiture**

In case of failure in carrying out AMC as per laid down terms and conditions of the tender, the AMC shall be terminated and the security deposit of the service provider shall be forfeited.

### **E. Work out of the scope of the tender**

Any alteration or addition or subtraction or modification or up-gradation will be carried out separately if required.

### **Terms and conditions for comprehensive operation & maintenance of Air Conditioning Plant and its associated**

1 Directorate of Civil Aviation, UP, Lucknow Airport, Lucknow invites sealed tenders for the operation and maintenance of its Air Conditioning Plant with associated system installed at office premises of Directorate of Civil Aviation, UP, Lucknow Airport, Lucknow. The tender for the proposed work shall be submitted in two envelopes marked as

- (A) "TECHNICAL BID"
- (B) "FINANCIAL BID".

### **2. SPECIAL CONDITIONS**

The following conditions along with the conditions of the tender notice shall be the part of the contract:-

- I. An earnest money of amount equal to 2% ( two percent ) of the quoted price shall be submitted along with Financial Bid in the form of FDR/TDR duly pledged in favour of Director, Civil Aviation, Uttar Pradesh, Lucknow.
- II. The successful tenderer would be required to furnish a Security deposit equivalent to 10% of the total value of the work in the form of FDR/TDR duly pledged in favour of Director, Civil Aviation, UP , Lucknow Airport, Lucknow payable at Lucknow. This security deposit shall be in addition of the earnest money deposit, which shall also be deemed as security money.

- III. The tender documents can be obtained from Office of the undersigned on payment of a non-refundable fee Rs 500/- either cash or through a demand draft drawn in favour of Director, Civil Aviation, UP, Lucknow Airport, Lucknow payable at Lucknow on any working day between 10:00 hrs to 15:00 hrs. on 17.07.2017. Tender documents can also be obtained by post on payment of Rs 600/- only through demand draft drawn in favour of Director, Civil Aviation, UP, Lucknow Airport, Lucknow payable at Lucknow.
- IV The tender document can also be downloaded from our website <http://civilaviation.up.nic.in> However in this case, the tenderer would be required to submit the tender document fee of Rs 500/- through demand draft. The draft shall be drawn in favour of Director, Civil Aviation, U.P. , Lucknow Airport, Lucknow payable at Lucknow.
- V The offer on the attached prescribed tender form must reach the Directorate of Civil Aviation, Lucknow Airport, Lucknow latest by 13:00 hrs. on 18.07.2017. Tenders received on the documents not procured from the Directorate or not downloaded from our website will be outright rejected.
- VI. The Directorate of Civil Aviation shall not be responsible for any postal delay or non receipt of the tender.
- VII The tender should be sent in a sealed cover super scribed with Tender for Comprehensive operation and maintenance of AC Plant & its associated system operation due on 18.07.2017 in prescribed form.
- VIII The received tender shall be opened at 15.00 hrs. on 18.07.2017 at Directorate of Civil Aviation, UP, Lucknow Airport, Lucknow in presence of the undersigned or any other officer authorized by him. The tenderer who have sent their offers may also be present at the time of opening of the offers should they desire to do so.
- IX The undersigned reserves the right to alter the date mentioned above and to reject any or all offers without assigning any reason to the bidders.
- X Incomplete tenders are liable to be rejected.
- XI Payment to the tenderer shall be made as per mutually agreed terms & conditions. Payment shall be released on receipt of the bills in triplicate complete in all respect.
- XII In case of any dispute during the award of order and/or execution of the same the Principal Secretary, or Secretary (as the case may be) Directorate of Civil Aviation, Government of Uttar Pradesh shall act as arbitrator and his decision shall be final and binding on both the parties.
- XIII The service provider has to provide photo Identity Card to person so employed by him.

- XIV The tenderers must have a valid Electrical License issued by the Directorate of Electrical Safety, Government of Uttar Pradesh. The copy of Electrical Licence must be attached with Technical Bid .
- XV The service provider shall be responsible for any kind of accident, if and any during the AMC and necessary action such as Insurance etc shall be carried out by the Service Provider at their own cost and expense. Settlement of claims with regard to the above shall be the responsibility of the service provider and Directorate shall not be responsible for any type of claim/compensation.
- XVI The service provider shall be responsible for adequate safety and security to prevent any loss/damage/theft of the materials and equipments of the plant and its associated system during AMC.
- XVII The whole process of awarding and execution of the order shall be under the Lucknow Jurisdiction only.
- XVIII Director, Civil Aviation, UP, Lucknow Airport, Lucknow reserves the right to reject any or all the tender with or without any reason.

Director,  
Civil Aviation UP

## TECHNICAL BID

**Technical Bid – shall include the following information along with attested copies of the relevant documents:-**

1	Name of Firm/Company	
2	Full Postal Address of Firm/Company for Communication	
3	Nature of Business viz Manufacturer Trader or Service Provider	
4	Date of incorporation/inception of the Business along with relevant Supporting documents	
5.	ESI Registration Number	
6.	EPF registration Number	
7.	Service Tax registration number	
8.	PAN Number	
9.	Labour Act Registration Number	
10.	Electrical Licence Number issued by the Directorate of Electrical Safety, Government of Uttar Pradesh.	
11.	Details of tender fee deposit	
12.	Details of Past working Experiences (a) Name and agency where worked (b) Address and telephone numbers of the agency where worked	
13.	Type of AC Plant on which worked	
14.	Nature of work undertaken i.e. operation or maintenance or both.	
15	Brief description of the jobs done earlier	
16	Period of work undertaken along with copy of agreements and work orders received from the agencies	
17	Other relevant information, if any	



**FINANCIAL BID**

**FINANCIAL BID** - The second envelop marked as '**Financial Bid**' shall contain the following document.

**Financial Bid signed & duly filled in figures and words ( page no. 8 & 9).**

**Financial Bid (A)**

<b>SI. NO.</b>	<b>Description of Items</b>	<b>Unit</b>	<b>Qty.</b>	<b>Rate in words</b>	<b>Rate in figure</b>	<b>Amount INR</b>
1	Annual Operation charges of 100 TR x 2 Nos. capacity Hitachi brand AC Screw Compressor with double cylinder with automatic monitoring display including all accessories (as per financial bid 18 (5)).	Yearly	01			
2	Annual Maintenance charges of 100 TR x 2 Nos. capacity Hitachi brand AC Screw Compressor including repairing and replacement of all electrical and mechanical spares, refrigerant, compressor oil bearings, v-belts, rewinding of motors, filters, starters and fuses, gauges, thermometers, indicator lamps, overload protection relay etc.	Yearly	01			
				<b>Total INR</b>		

**Amount in Words :-**

Signature of Tenderer  
with Rubber Stamp

**Financial Bid (B).**

	Amount payable to worker deputed by the tenderer for the job (s) as per minimum Wages Act.	Wages per day (to be filled by tenderer)
(i)	One supervisor (skilled) experience field of HVAC system.	
(ii)	Four Nos. A. C. Operator (skilled).	
(iii)	Three nos. helpers (un skilled).	

Amount quoted by the tenderer for payment of wages to the deputed manpower	Work supervisor (skilled) per day (supervisor-01)	A. C. operator (skilled) per day (operator S/k-04)	Helpers (un skilled) per day (Helpers U/S-03)
(i) Amount INR			
(ii) ESI contribution			
(iii) EPF contribution			
(iv) Total (per day) INR			
(v) Total (iv) X 30 days INR			
(vi) Grand total (v) X 12 months			

I	Service tax if any on amount quoted	
II	Any additional payment if any	
III	Total expected amount to be received	

Signature of Tenderer  
with Rubber Stamp