

**GOVERNMENT OF INDIA
MINISTRY OF EARTH SCIENCES
Prithvi Bhavan, Lodi Road,
New Delhi**



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Tender for

**OPERATION AND MAINTENANCE OF
EXTERNAL/INTERNAL ELECTRICAL SYSTEMS, DIESEL GENERATOR SET,
HVAC SYSTEM INCLUDING CHILLERS, WATER SOFTENING PLANT, FIRE
FIGHTING SYSTEM AND PLUMBING WORKS
AT PRITHVI BHAVAN, LODI ROAD, NEW DELHI**

Last date of tender 20th February, 2013

**GOVERNMENT OF INDIA
MINISTRY OF EARTH SCIENCES
Prithvi Bhavan, IMD Campus,
Lodi Road, New Delhi**

Phone :011-24669596
Website:www.moes.gov.in

TENDER FOR OPERATION AND MAINTENANCE OF EXTERNAL/INTERNAL ELECTRICAL SYSTEMS, DIESEL POWER GENERATING SET, HVAC SYSTEM INCLUDING CHILLERS, WATER SOFTENING PLANT, FIRE FIGHTING SYSTEM AND PLUMBING WORKS AT PRITHVI BHAVAN, LODI ROAD, NEW DELHI.

Part-1: OPERATION AND MAINTENANCE OF HVAC SYSTEM, INCLUDING CHILLERS, WATER SOFTENING PLANT.

Part-2: EXTERNAL/INTERNAL ELECTRICAL SYSTEMS, DIESEL POWER GENERATING SET, FIRE FIGHTING SYSTEM AND PLUMBING WORKS.

The Ministry of Earth Sciences invites Sealed tenders from experienced firms/agencies/contractors in the prescribed format for Operation and maintenance of external/internal electrical systems, diesel power generating set, HVAC system including chillers, Water Softening Plant, Fire Fighting System and Plumbing Works at Prithvi Bhavan, Lodi Road, New Delhi.

The bidders are required to visit Prithvi Bhavan to see the actual installations to assess the quantum of work involved before submitting the tender. Once the tender is submitted, it will be deemed that the bidder has seen and understood the complete work involved for each of the systems.

2. Pre-qualification

2.1 Pre-qualification will be based on meeting the following minimum criteria regarding the Applicant's experience, personnel and financial position, as demonstrated by the Applicant's responses in various forms attached along with the Letter of Application (**Annexure – G**).

2.2 The Applicant has to meet the following minimum criteria for pre-qualification:

(a) Average annual financial turnover for related works during the last three financial years, ending March 31st, 2012 should be Rs.45,00,000.00 (Forty five lacs only). Fill enclosed **ANNEXURE – A**.

(b) Experience of having successfully completed similar works during last 05 (five) years ending last day of month previous to the one in which applications are invited should be either of the following;

(i) Three similar completed works costing not less than the amount equal to Rs.15.00 lacs.

or

(ii) Two similar completed works costing not less than the amount equal to Rs.20.00 lacs.

or

(iii) One similar completed work costing not less than the amount equal to Rs.40.00 lacs.

1	Supervisor	-	-	-	1	Degree/Diploma Holders in Electrical/Mechanical Engineering	At least five years experience of carrying out similar work
2	DG /Electrical Operator	3	2	2	7	ITI certificates/valid license issued by competent authority	At least two years experience after acquiring professional certificate/licence.
3	Fire Fighting Operator cum Fire Alarm System Operator	1	1	--	2	ITI certificates/valid license issued by competent authority	At least two years after acquiring professional qualification
4	Plumber	1	1	--	2		At least one year experience of carrying out similar work
5	Helper	--	--	--	2		At least one year experience of carrying out similar work

The rates quoted shall be inclusive of cost towards deployment of above stated manpower. The employees deployed shall have neat/clean/washed uniforms with visible identification badge.

3. Sale of Tender

3.1 Non transferable tender document containing requirements, terms, conditions and technical specifications etc. can be obtained from the General Section, MoES on all working days from the date of advertisement in the national newspapers on a written request on the letter head of the firm and on payment of Crossed demand Draft/Banker's cheque (non refundable) of **Rs. 1000/-** (Rupees One Thousand Only) in favour of the DDO, MoES payable at NEW DELHI as **Tender Fee**. The tender document can also be downloaded from the Ministry's website (www.moes.gov.in) and Tender Fee can be deposited with the technical bid. **Tender/Bid received without tender fee shall be rejected.**

3.2 Before buying the tender document, tenderer should see the document for details of the tender conditions and pre-qualification criteria in their own interest at our website which will be available from the date of publication of tender notice in leading newspapers.

4. Earnest Money Deposit (EMD) & Contract Performance Guarantee

The tenderers can participate in both parts or in any one part as per their expertise. The tenderers are required to deposit Demand Draft of **Rs.50,000.00 (Rupees Fifty Thousand only) for part-1 and Rs.50,000.00 (Rupees Fifty Thousand only) for part -2**, in favour of the DDO, MoES, payable at New Delhi as **Earnest Money Deposit (EMD)** along with the original tender document. EMD will be returned to the unsuccessful tenderers after award of the contract to the successful tenderer. No interest shall be payable by MoES on EMD. On award of the contract, a security deposit of an amount equivalent to **5% of the total annual contract value in the form of Bank Guarantee with a validity for a period of more than two months beyond the expiry of contract period** from Nationalized Bank shall be deposited with MoES as **Contract Performance Guarantee** which shall be refunded within two months from date of successful completion of the contract. After depositing the amount of the security deposit, the EMD amount would be released to successful tenderer. In the event of the contractor failing to comply with any provision of the contract, the Performance Guarantee shall be forfeited.

5. The complete tender, is to be submitted by **using three sealed envelopes** containing the following documents:-

5.1 TECHNICAL– BID (Envelope No.1 duly super-scripted as “Technical Bid”)

- (a) The tender document in original including the **unfilled PRICE-BID Proforma (ANNEXURE - E)** duly signed and stamped as a token of acceptance, along with deviation if any, from particular tender conditions in a separate sheet **(ANNEXURE - F)**.
- (b) Documents as mentioned in **pre-qualification conditions at 2.2, 2.3 and 2.4** including attested copies of Registration Certificate, PAN/TIN No., Service Tax No., experience certificates of carrying out similar work, latest ITCC certificate, balance sheets/audited statements of account or any other relevant document to prove the annual turnover as per pre-qualification condition.
- (c) Crossed demand Draft(s) of **Rs. 50,000.00/-** (Rs. Fifty Thousand only) for each part in favour of the DDO, MoES, payable at NEW DELHI, from any nationalized Bank, as **Earnest Money Deposit (EMD)**.
- (d) **The firm will put page number and authorized signature on every page(both sides) compulsorily and in absence of it, the bids will be rejected summarily.**

5.2 PRICE - BID (Envelope No. 2 duly super-scripted as “Price Bid”)

The **Duly Filled PRICE-BID** as per Proforma given in the tender document at **ANNEXURE - E** shall be submitted separately in Envelope No.2. Conditional price bid shall be summarily rejected.

5.3 Submission of Bid (Envelope No.3)

The Envelopes No.1 & 2 shall be sealed separately and should be placed in a third envelope which also shall be sealed and duly super-scripted as

“OPERATION AND MAINTENANCE OF HVAC SYSTEM INCLUDING CHILLERS, WATER SOFTENING PLANT AT PRITHVI BHAVAN, LODI ROAD, NEW DELHI.”

OR

“OPERATION AND MAINTENANCE OF EXTERNAL/INTERNAL ELECTRICAL SYSTEMS, DIESEL GENERATOR SET, FIRE FIGHTING SYSTEM AND PLUMBING WORKS AT PRITHVI BHAVAN, LODI ROAD, NEW DELHI”

Sealed tenders in the prescribed form as per above addressed to the Administrative Officer (Gen.), Ministry of Earth Sciences, Prithvi Bhawan, IMD Campus, Lodi Road, New Delhi-110003 and to be dropped in the sealed Tender Box kept in the General Section, Ground Floor, Room No.1, Ministry of Earth Sciences, Prithvi Bhawan, IMD Campus, New Delhi-110003 latest by 3.00 p.m. on 20/02/2013. Any request for extension of submission date will not be considered.

6. Pre-Bid Meeting and Clarification of Bids

- 6.1 A Pre-Bid meeting will be held on 11/02/2013 at 11.30 at Prithvi Bhavan, IMD Campus, Lodi Road, New Delhi. **Bidders may seek clarifications if any, from MoES on their written request regarding the tender document.**
- 6.2 During evaluation of bids Ministry may, at its own discretion ask the bidder (s) for clarification on their bid. The request for clarification and the response shall be in writing and no change in prices or substance of the bid shall be sought, offered or permitted.

7. Opening of Bids

- 7.1 The Tenders & TECHNICAL-BID (Envelope No.1) shall be opened first at 3.30 P.M on 20/02/2013 in which the tenderers or their representative can participate. The PRICE-BID (Envelope No.2) will be opened only of those tenderers whose TECHNICAL-BID is found to be technically qualified. Such technically qualified tenderers shall be intimated about date and time for opening of price bid (envelope No.2).
- 7.2 Successful firm/agency/contractor will be intimated and the contract agreement will be entered into initially for a period of two years. The preparation of the contract agreement with proper seal and signature etc. would be done by the tenderer in consultation with MoES.
- 7.3 Foreclosure of contract due to abandonment or reduction in scope of work - If at any time after acceptance of the tender, the Ministry shall decide to abandon or reduce the scope of work for any reason whatsoever and hence not required by MoES, the whole or any part of the works to be carried out, the MoES shall give notice in writing to that effect to the contractor and the contractor shall act

accordingly in the matter. The contractor shall have no claim to any payment of compensation or otherwise whatsoever, on account of any profit or advantage which the contractor might have derived from the execution of the work in full but not in consequence of the foreclosure of the whole or part of the work.

7.4 Subletting - Subletting of the contract to any other party is not permitted.

7.5 The contractor is also required to submit the price break up of manpower and other major works as mentioned in the tender along with price-bid. (The minimum wages as applicable shall be followed in respect to the manpower).

8. Right to accept or reject any or all tenders

The MoES reserves the right to accept or reject any or all tenders, or to annul the bidding process at any time prior to award of contract, without thereby incurring any liability to the affected bidder or bidders or any obligation to inform the affected bidder or bidders for the grounds for such action.

9. Terms of payment

9.1 Contractor will submit, quarterly Pre Receipt bills (affixing a Revenue Stamp) bills dully supported with necessary check list, log sheets etc. along with proof of payment of salary to the deployed manpower, deposit of ESI, PF and Service Tax (if applicable). MoES will make payment to the contractor within 15 days after receipt of the bills after deduction of applicable taxes/TDS etc.

9.2. In case of short deployment of manpower as given in the contract MoES will make suitable deductions from the bills on the basis of minimum wages as applicable.

9.3 The contractor shall be responsible for proper maintenance of decorum, punctuality, discipline and work output. The personnel so deployed will be in proper neat & clean uniform. Provision of uniform etc to be made to deployed staff shall be the responsibility of the contractor. Nothing extra shall be paid on this account.

9.4 Levy/Taxes payable by contractor - Sales Tax/ VAT or any other tax on materials in respect of this contract shall be payable by the contractor and it shall be deemed to have been included in the quote.

All tender rates shall be inclusive of all taxes and levies payable except Service Tax under respective statutes. However, pursuant to the Constitution (46th Amendment Act, 1982), if any further tax or levy is imposed by Statute, after the last stipulated date for the receipt of tender, including extensions if any and the contractor thereupon necessarily and properly pays such taxes/levies, the contractor shall be reimbursed the amount so paid.

10. Applicable Law

10.1 The contract shall be interpreted in accordance with the Laws of the Union of India. Contractor shall be solely responsible for compliance of all labour laws, payment of fair wages/ salaries and allowances to his personnel that might become applicable under any new act, law or order of Government of State /

Centre. Ministry shall have no liability whatsoever in any manner. The Contractor has to show the proof of payment of fair wages to his workers as and when asked for the same by Ministry.

- 10.2 Minimum wages Act to be complied with - The contractor shall comply with all the provisions of the Minimum Wages Act, 1948, and Contract Labour (Regulation and Abolition) Act, 1970, amended from time to time and rules framed there under and other labour laws affecting contract labour that may be brought into force from time to time.

11. Resolution of Dispute

All disputes arising out of this contract shall be referred to the sole arbitrator of a person selected by the contractor out of a panel of three persons nominated by the MoES, and its decision /award shall be final and binding on both the parties. The Arbitration shall be governed under the Indian Arbitration Act 1996 or any statutory modifications or re-enactment thereof and rules made there under and for the time being in force shall apply to the arbitration proceedings under this contract.

12. Force Majeure

- 12.1 Notwithstanding the provisions stated above, the service provider shall not be liable for forfeiture of its performance security, penalty or termination for default, if and to the extent that, its delay in performance or other failure to perform its obligations under the contract is the result of an event of force majeure.
- 12.2 For purposes of this clause, "Force Majeure" means an event beyond the control of the contractor and not involving the contractor/service provider's fault or negligence and not foreseeable. Such events may include, but not be limited to, wars or revolutions fires, floods, epidemics, quarantine restrictions and freight embargoes.
- 12.3 If a "Force Majeure" situation arises, the contractor/ service provider shall promptly notify the Ministry in writing of such conditions and the cause thereof. Unless otherwise directed by the employer in writing, the service provider shall continue to perform its obligations under the contract as far as is reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the force majeure event.

13. General

The Ministry of Earth Sciences is situated at Prithvi Bhavan, IMD Campus, Lodi Road, New Delhi.

Power Supply to Prithvi Bhavan is provided from NDMC. Incoming power supply has been taken to the HT Switch gear room through underground buried 800 KVA 300 sq.mm. cables. Voltage of 800 KVA supply is step-down through 1000 KVA indoor type two transformers. There is a provision of standby, captive power generation through Diesel power Generating set to meet the requirement due to non-availability of grid power.

Water supply to the Prithvi Bhavan is through NDMC. An independent bore well has also been constructed to augment the water supply and meet fire fighting water requirement.

14. Terms and Conditions of contract

- 14.1 The contractor shall be initially awarded the work for a period of two years and extendable up to further two years on mutual consent of the two parties and at the discretion of the competent authority.
- 14.2 The work shall be done as per standard specification of Bureau of Indian Standards, other National /International Standards, IE rules and statutory requirement of Govt. of India as may be applicable at the work site from time-to-time.
- 14.3 All parts of the specification shall be read in conjunction with each other. In case where requirements given in different parts differ, the most stringent shall govern.
- 14.4 Any work/equipment or technical requirement not mentioned in the scope of work but required to make the system operative shall be deemed to be included in the offer.
- 14.5 The contractor shall provide all necessary manpower, tools and tackles, consumables, transport, instruments etc. required to carry out work as per this document/direction of nodal officer (MoES).
- 14.6 All the manpower deployed will work as per the schedule mentioned in para 2.5 for 365 days in the year and 24 hours a day. Manpower deployed in shifts shall not leave unless manpower for next shift arrives to relieve them. Further, manpower of previous shift shall continue the duty of next shift In case manpower for the next shift either does not report or any other alternative arrangement is not made. In all these cases overtime shall not be paid by MoES.
- 14.7 Where proper execution of work depends upon the performance of other agencies or where the bidder considers that his work is being unreasonably interrupted by the activities of other agencies he shall so notify to MoES immediately. If the bidder fails to do so, it shall be deemed that he is satisfied with the prevailing conditions/situations.
- 14.8 All work shall be carried out to the entire satisfaction of the supervising personal of MoES. Any work found to be carried out without the approval of the Nodal officer (MoES) or work which is considered to be unsatisfactory and of poor quality, shall be rectified by the contractor without any additional cost to MoES.
- 14.9 The requirements about shutdown to carryout the work shall be optimally planned and shall be informed in writing to the Nodal officer of MoES, well in advance and approval obtained. The responsibility of co-ordination with other agencies sharing the work shall also be sole responsibility of the contractor.
- 14.10 Work permits shall be issued while giving shut downs to other agencies/deputing the persons for carrying out job taking full care of safety and security of equipment and personnel. Records of issue of work permits and their release shall be maintained.

- 14.11 Care shall be taken not to expose panels, static converters and sensitive electronic equipment to undue vibration during handling.
- 14.12 Care shall be taken so that during welding and/or high voltage testing, current does not pass or voltage do not appear across terminals/components either directly or otherwise which may cause damage to them.
- 14.13 The contractor shall complete and fulfill all formalities with the statutory authorities having jurisdiction in the area.
- 14.14 The contractor shall attend review meetings and all other meetings called by the MoES.
- 14.15 The contractor shall provide monthly progress report in duplicate. The report shall clearly define all major activities completed during the previous month and identify programs that are proposed to be undertaken in coming month etc. The report format shall be finalized after discussion with the nodal officer (MoES).
- 14.16 The contractor shall be given all project drawings with "As Built" information to the extent possible and shall maintain the installation accordingly. Modification made, if any, shall be recorded.
- 14.17 All faults, discrepancies failure shall be promptly attended to and preventive and periodic maintenance shall be done regularly so that break-downs are minimized. Response time should be less than one hour. Preventive Maintenance schedule to be workout out after discussion with the nodal officer (MoES).
- 14.18 In case of non-deployment of manpower and/or service is not provided to the satisfaction of MoES, MoES reserves the rights to rectify the problem through other agency at the risk and cost of the contractor and suitable amount shall be deducted from the payment of the contractor.
- 14.19 Rates of Items quoted shall be inclusive of all taxes, duties, levies, payments etc. Also the rates quoted by the bidder shall be inclusive of all payments to be made by the contractor to all manpower and all costs toward workmen compensation, PF, insurance etc.
- 14.20 There should be no delay in making the system functional for want of spares. The responsibility of spares planning rests with the contractor.
- 14.21 No Sales Tax exemption forms shall be issued by Ministry to the successful contractor.
- 14.22 The Unit rates shall remain firm for a period of two years from the date of order and also in case the next extension for the work is given to contractor on mutual consent of both parties and at the discretion of the competent authority.
- 14.23 Assessment of performance will be ascertained on mutually agreed terms and conditions separately on the outcome of services. Based on this mutually agreed verifiable indicators performance assessment, liquidated damages or termination of contract as per the stipulations in contract will be applicable.

- 14.24 The cost of coolant, Engine oil, any spare parts (if required) shall be reimbursed by MoES. MoES shall reimburse at prevailing CPWD/DSR rates wherever applicable. In case such rates are not available the bidder should provide spares at the OEM rates. **Consumable material like Cleaning cloth, , PVC Tape, fuses & cable joint kits of various ratings, and Blower & Tools & tackles etc. will be deemed to be included under the charges as quoted and will be supplied by the contractor for maintenance job and MoES shall not be liable for any additional payment.**
- 14.25 The contractor is liable to perform all the work mentioned at “**Scope of Work**” in the tender document.

15. Scope of Work

The scope of work/ services to be provided by the contractor shall be inclusive of the following but not limited to:-

- 15.1 Setting up furnished office/storage facilities at space provided by Ministry for manpower, drawings, documents, tools and tackles, spares etc.
- 15.2 Transport facilities for attending the work, arranging resources, coordinating with concerned official of Ministry, Power and Water Supply Authorities/State Administration and meeting emergencies round the clock.
- 15.3 Operation, switching & preventive maintenance as per recommendation of manufacturer/operation & maintenance manual and direction of supervising personnel. Breakdown maintenance and modification to installation as and when required. The work shall also include temporary lighting and any other arrangement as per direction of nodal officer (MoES)
- 15.4 Planning, scheduling and carrying out preventive maintenance of works in consultation with nodal officer (MoES)
- 15.5 Attending to breakdowns, faults and restoring the operation of works within minimum possible time.
- 15.6 Repair/replacement of faulty/unusable items and keeping record thereof.
- 15.7 Advising of procurement of spares in time so that maintenance/operation is not held up for want of spares.
- 15.8 Contractor shall note that the systems of the complex which are to be operated have been designed to operate at the rated parameters as per the drawing and documents available with Ministry and the performance test.
- 15.9 Co-ordination with Power/Water Supply Authorities/Telephone Authority/ Statutory Authorities/State Administration and other agencies working in the area/having jurisdiction in the area.
- 15.10 Watering of earth electrodes checking earth resistances and checking earth continuity periodically every six months and report should be made available to MoES.

15.11 Oiling, greasing and lubricating all the moving parts, valves, fittings and mechanical equipments etc. as per instruction of Operating Manual and Schedules. In case the contractor is advised to provide any material the contractor shall be paid cost of material on actual basis.

15.12 Instructions for deployment of manpower on all days, holidays, weekly off days and beyond normal working hours, etc. shall be entered in the log book. Weekly holidays and working beyond office hours is the contractor's programme. As far as MoES is concerned the deployment should be uniform throughout.

15.13 Any other minor works requested by the MoES.

15.14 Documents to be maintained by the contractor :-

- log book of daily events
- Complaints registers
- Planning and scheduling of preventive maintenance
- Reports of preventive maintenance done
- Daily breakdown maintenance/status reports
- Work permit issue/released
- reports of testing/checking done
- Consumables & spares consumption register/reports
- **Reports** of modification done
- Attendance sheet.
- Details of plant record book
- Fuel consumption record

Formats for above report shall be finalized in consultation with supervising personnel of MoES.

15.15 List of Equipment Included in Scope of Work

• **Part-1**

The scope of work to carry out operation and maintenance **HVAC system**, & its General Housekeeping, at MoES premises the following but not limited to:

PROVISION OF AIR CONDITIONING SYSTEM AT Ministry of Earth Sciences, Prithvi Bhavan, IMD Campus, Lodi Road, New Delhi – 110 003.		
DESCRIPTION OF ITEM	UNIT	QTY.
<u>Chilling Units Make: Carrier</u>		
175 TR Water Cooled Screw Chillers	Nos.	3
150 TR Capacity Water Boiler	Nos.	2
200 TR Cooling Towers	Nos.	3
The units is complete with chiller, condenser, capacity control, purge unit, vibration isolation arrangement, control console, gear unit, motor, starter, all controls and instruments, first charge of refrigerant and oil, all accessories as specified with following characteristics.		

Semi hermetic / hermetic Screw type Compressors with motor & capacity control assembly		
Unit mounted Micro Processor panel having menu driven digital display including operating data points for chilled water set point, leaving chilled water & condenser air temperatures, refrigerant pressures at condenser & chillers, Heat control status, system operating schedule and current consumption data, remote operation ports etc.		
AHU's		
17000 CFM	No.	12
12000 CFM	No.	2
5000 CFM	No.	5
2000 CFM	No.	1
HRW Units		
800 CFM	No.	1
2000 CFM	No.	1
4500 CFM	No.	1
17000 CFM	No.	1
20000 CFM	No.	1
VFD		
9.3 KW	No.	6
VA V's	No.	11
Axial Flow Fans	No.	21
High Speed Blowers	No.	6

To carry out operation and maintenance (on 24x7 basis) of **Water Softening Plant & its General Housekeeping**, at MoES premises the following but not limited to:-

- i) All overhead tanks
- ii) All Water Pumps
- iii) Sensor System of water tanks
- iv) Softening vessel
- v) Flow valves
- vi) Any other accessories/equipments related to Fire Safety

List of Equipment Included in Scope of Work

Part-2

To carry out operation and maintenance (on 24x7 basis) of **Electrical Systems** at MoES premises the following but not limited to:-

- i) VCB panel (Three Panel Set), Siemens Make -- 1 Set.
- ii) 11 KV-415V Transformer oil cooled indoor 1000 KVA, Kirloskar make – 2 Nos.
- iii) Main LT Panel Adlec make (2000 A, 415 V, TPN)
- iv) Capacitor Panel (475 KVAR), Adlec Make – 2 Nos.
- v) Battery charger 230 V single phase 50HZ Ac operated 24V DC – 1 No.
- vi) Bus Duct sandwich type Schneider (1 Lot) Transformer 1 & 2 LT, Capacitor 1 & 2 LT
- vii) 800 Amp Feeder Panel Adlec Make – 2 Nos.
- viii) 200 Amp Feeder Panel Adlec Make – 2 Nos.
- ix) External Lighting Panel Adlec Make – 2 Nos.
- x) Lift Panel Adlec make (3 Nos.)
- xi) AMF Panel for auto/manual 500 KVA DG Set – 1 No.
- xii) All internal and external lights in and around the building
- xiii) Earthing Grid and Earthing stations in entire building complex
- xiv) Bore well pump and its cabling alongwith panel
- xv) Power Factor Controller
- xvi) LT Cabling and Cable tray etc.
- xvii) Overhead Bus Ducting
- xviii) 415 V Motors of different capacities.
- xix) LT panels in HVAC room and AHU rooms.
- xx) Exhaust Fans in AC Plant Room and Electrical Plant Room
- xxi) The MoES has atleast 20 nos. of split/Tower/Window AC located at different parts of the building. Electrical Maintenance of these A/Cs shall be contractor's responsibility.

The scope of work to carry out operation and maintenance (on 24x7 basis) of **DG SETs** & its General Housekeeping, at MoES premises the following but not limited to:-

- a. AC DG Set 500 KVA Cummins make, Alternator - Standford -- 1 set
- b. A.V.R.
- c. Control panel
- d. Fuel tank
- e. Radiator
- f. Silencer
- g. Cooling fans
- h. 180 AH Standard Battery
- i. & other accessories of 500 KVA DG SET.

The scope of work to carry out operation and maintenance (on 24x7 basis) of **Fire Fighting Equipment, Fire Alarm System, All plumbing works** & its General Housekeeping, at MoES premises the following but not limited to:-

- i) Fire Pumps alongwith all accessories
- ii) Jokie Pump alongwith all accessories
- iii) Pump Room DG Set
- iv) External hydrant units in and around the building – 09 Nos.
- v) FHCs – 24 Nos.
- vi) All main headers, branches NRVs, flow valves, suction points

- vii) All accessories within FHCs and FHUs
- viii) All sprinklers in various parts of the building
- ix) Addressable fire alarm system
- x) All smoke detectors and heat sensors
- xi) PA System
- xii) All fire cylinders of various classes
- xiii) Any other accessories/equipments related to Fire Safety

15.16 Drawings/documents of existing installation to be maintained:-

One set of following “As built” drawings/documents shall be handed over to successful bidder. The successful bidder shall maintain these drawings /documents in proper manner in bound volumes duly numbered & indexed and use for operation & maintenance as reference documents. These documents shall be returned to Ministry on expiry of the contract period or termination of contract whichever is earlier.

- GA drawings
- Single line diagrams

15.17 Required standards for air-conditioning

All weathers : $24 \pm 2^{\circ}\text{C}$
Relative Humidity $55\% \pm 5\%$

15.18 Checks

Daily operation of the AC plants as per the requirements of MoES /the instructions of the nodal officer. The Operation of individual equipment shall be strictly as per manufactures recommendations.

Before starting the AC plant, the agency shall ensure that

- (i) All the valves in the chiller system, Condenser water and chilled water lines are open except those of the stand by equipment.
- (ii) There is sufficient water supply to the cooling towers & make-up water system is working satisfactorily.
- (iii) The make-up water system to the expansion tank of the chilled water system is working and there is regular water supply.
- (iv) All the air filters & strainers are cleaned to restrict the pressure drop within permissible limits.
- (v) All the doors and windows of the air-conditioned area to be kept closed to prevent air infiltration.
- (vi) The supply of voltage is within permissible limits for operation of all the equipment including chillers, pumps, AHUs.

Daily Checks

1. Daily operation of all AHUs and other equipment as per the requirements of MoES and the nodal officer.
2. The agency shall maintain detailed log books and other necessary records as per the requirements of MoES and instructions of officer In-charge.
3. The agency shall carry out cleaning of plant room, AHUs rooms including motors, starters, compressors, pumps, panels, pipe racks etc. All machines installed in the plant room and AHUs will be kept dust free and clean in all respect.
4. The agency shall carry out checking for over heating/abnormalities of bearings terminals connection, cables of all motors, fans, pumps compressor, starters, panels etc. and to take necessary action, if any.
5. The agency shall carry out daily psychrometer reading at different places of the air-conditioned space in all premises and record.
6. The agency shall carry out any other work required for proper functioning of the system and instructions of Officer In charge.
7. Leakage testing of refrigeration system.
8. Checking of alignment/looseness of the entire belt driven equipment and to rectify if required, and also testing of nuts & bolts of mechanical equipment.
9. Checking of coupling rubber bushes of pumps.
10. Checking of pump gland/seal for leakage.
11. Checking of all drain points in plant rooms/AHU rooms.
12. Checking of leakage and operation of all valves installed in condenser/chilled water line.
13. Check oil level in the compressor.
14. Check liquid sight glasses to determine any refrigerant shortage.
15. Check oil pump discharge pressure.
16. Any other work specified by officer In-charge.
17. Any other work required for proper O&M.

Monthly Checks

1. Checking of gland/seal, coupling of pumps and cooling towers, its filters, spray nozzles, sumps piping and general area, and to take necessary action if any.
2. Checking of all safety control, operation and also the set points of all controls.
3. Greasing of all fans, blowers and other rotary equipment.
4. Checking & setting of all fresh air dampers installed in AHU rooms.
5. Checking & settings of all Fire Dampers installed in AHU rooms.
6. Cleaning of air-filters of all AHUs.
7. Cleaning of pot/Y-strainers.
8. Any other work specified by officer In-charge.
9. Any other work required for proper O&M.

Quarterly Checks

1. Inspect the unit piping and cool for visible signs of leaks.
2. Inspect entire system for any unusual condition such as noise, vibration etc.
3. Check the system operating pressure and temperatures to ensure proper operating conditions.
4. Check chilled water flow by checking pressure drop across the chiller.
5. Compare the chilled water temperature at full load with the chilled water temperature control.
6. Inspect and adjust all safety controls.
7. Inspect all operating controls and sequence of operating.
8. Check the foundation bolts of pumps and motors and to take necessary action if any.
9. Check the quantity of airflow from various supply grills in each rooms/areas, as per design and to adjustment of dampers etc. when required.
10. Any other work required for proper O&M.

Other works

1. Oil & Refrigerant to be provided as and when required for proper functioning of the HVAC system.
2. Any other requirement to keep the whole system in proper condition.
3. Carry out O&M in accordance with Instructions/Manuals of equipment suppliers/manufacturers. Submit Maintenance Schedule to MoES. Record the schedules Maintenance carried out in standardized format including the no. and category of personnel required and actually deployed, time taken, consumables/spares used and signature of technician & engineer carrying out the work & present it to nodal officer MoES every month for his perusal.

16. Commencement of the Contract:-

This contract will come into force for a period of 2 year initially, after signing an agreement between the two parties. But it can be terminated by giving 1 month notice without assigning any reason by the MoES.

17. Termination of the contract:-

This contract may be terminated on any one of the following reasons by giving one month notice by the Ministry due to:

- i) The contractor not performing his duties properly and
- ii) For committing breach of contract of any of other terms & conditions of the agreement on assigning the contract or any part thereof or benefit or interest therein or hereunder by the contractor to any third party for subletting whole or part of the contract to any third party

Yours faithfully

Director (Admin)

ANNUAL TURN OVER

YEAR	ANNUAL TURNOVER AS PER AUDITED BALANCE SHEET (in Rupees)
2009-2010	
2010-2011	
2011-2012	
Average Annual Turnover	

Note: The above data is to be supported by Audited Balance Sheets.

* If not audited till the date of submission of tender, a certificate from the Chartered Accountant may be submitted, along with un-audited accounts.

Seal & Signature of Tenderer
(Name & Designation of the authorized signatory)

DETAILS OF COMPLETED WORKS OF SIMILAR NATURE(During last five years ending March 31st 2012)

S.No.	Name of the contract	Name of the client	Brief Description of the contract	Date of Start	Date of completion as per contract	Date of actual completion	Value (Rs.)
1.							
2.							
3.							
4.							

Note: Please attach supporting documents for the above furnished information.

Seal & Signature of Tenderer
(Name & Designation of the authorized signatory)

Details of Registration with State/Central/PSU Departments

Name of the Authority/Department with whom registered	Class in which registered	Amount for which eligible to work	Date of Registration	Validity period	Whether registration

Note: Please attach supporting documents for the above furnished information.

Seal & Signature of Tenderer
(Name & Designation of the authorized signatory)

PERSONNEL CAPABILITIES

S.No.	Name & Address of the Employee	Technical Qualifications	Post Held	Date of Employment

Seal & Signature of Tenderer
(Name & Designation of the authorized signatory)

PROFORMA FOR PERFORMANCE BANK GUARANTEE
(On stamp paper of appropriate value from any Nationalized Bank)

To,

Ministry of Earth Sciences,
Prithvi Bhavan, IMD Campus,
Lodi Road,
New Delhi – 110 003

Dear Sir,

In consideration of Ministry of Earth Sciences (hereinafter called as the Employer which expression shall include his successor and assigns having awarded to

.....
..... (here in after referred to as the said Contractor or Contractor' when expression shall wherever the subject of context so permits include its successors and assigns) a contract No. In terms inter alias, of the MoES's Letter No. dated. and the General Conditions of Contract and upon the condition of the contractor's furnishing security for the performance of the contractor's obligations and discharge of the contractor's liability under in connection with the said contract up to a sum of Rs..... (Rupees..... Only) amounting to 10 % (Ten) percent of the total contract value.

1. We. (here in after called "The Bank which expression shall include its successors and assigns) hereby jointly and severally undertake to guarantee the payment to The Employer in rupees forthwith on demand in writing and without protest of demur or any and all moneys anyway payable by the contractor to The Employer in respect of or in connection with the said contract inclusive of all The Employer's losses and damages and costs, (inclusive between attorney and client) charges and expenses and other moneys anyway payable in respect of the above to this guarantee up to an aggregate limit of Rs. (Rupees.....only).

2. We Bank further agree that The Employer shall be sole judge of and as to whether the said contractor has committed any breach or breaches of any of the terms and conditions of the said contract and the extent of loss, damage, cost, charges and expenses caused to or suffered by or that may be caused to or suffered by the Employer on account there of and the decisions of the Employer that the said Contractor has committed such breach or breaches and as to the amount or amounts of loss,

damage, costs, charges and expenses caused to or suffered by the Employer from time to time shall be final and binding on us.

3. The Employer shall be at liberty without reference to the bank and without affecting the full liability of the bank hereunder to take any other security in respect of the Contractor's obligations and liabilities hereunder or to vary the contract or the work to be done there under vis-à-vis the Contractor or to grant time or indulgence to the Contractor or to reduce or to increase or otherwise vary the prices of the total contract value or to release or to forbear from enforcement of all or any of the security and/ or any other security (ies) now or hereafter held by the Employer and no such dealing (s) reduction (s) increase (s) or other indulgence (s) or arrangements with the Contractor or release or forbearance whatsoever shall absolve the Bank of the failed liability to the Employer hereunder or prejudice the rights of the Employer against the bank.
4. This guarantee shall not be determined or affected by the liquidation or winding up, dissolution, or change of constitution or insolvency of the Contractor but shall in all respects and for all purposes be binding and operative until payment of all monies payable to the Employer in terms thereof.
5. The bank hereby waives all rights at any time inconsistent with the terms of this guarantee and the obligations of the bank in terms hereof shall not be anyway affected or suspended by reason of any dispute or dispute having been raised by the Contractor stopping or preventing or purporting to stop or prevent any payment by the bank to the Employer in terms hereof.
6. The amount stated in any notice of demand addressed by the Employer to the bank as liable to be paid to the Employer by the Contractor or as suffered or incurred by the Employer on account of any losses or damages of cost, costs, charges and / or expenses shall be conclusive evidence of the amount so liable to be paid to The Employer of suffered or incurred by The Employer as the case may be and shall be payable by the bank to the Employer in terms hereof.
7. This guarantee shall be a continuing guarantee and shall remain valid and irrevocable for all claims of the Employer and liabilities of the contractor arising up to and until midnight of.....
8. This guarantee shall be in addition to any other guarantee or security whatsoever that The Employer may now or at any time anyway may have in relation to the contractor's obligations/ or liabilities under and/ or in connection with the said contract, and The Employer shall have full authority to have recourse to or enforce this security in preference to any other guarantee or security which The Employer may have or obtain and no forbearance on the part of The Employer in enforcing or requiring enforcement of any other security shall have the effect or releasing the Bank from its full liability hereunder.
9. It shall not be necessary for the Employer to proceed against the said Contractor before proceeding against the Bank and the Guarantee herein contained shall be enforceable against the bank notwithstanding that any security which the Employer may have obtained or obtain from the contractor shall at the time when proceedings are taken against the said bank hereunder be outstanding or unrealized.

10. We the said Bank undertake not to revoke this guarantee during its currency except with the consent of the Employer in writing and agree that any change in the constitution of the said contractor or the said Bank shall not discharge our liability hereunder.
11. We.the said Bank further state that we shall pay forthwith the amount stated in the notice of demand notwithstanding any dispute/ difference pending between the parties before the arbitrator and/ or that any dispute is being referred to arbitration.
12. Notwithstanding anything contained herein above, our liability under this guarantee shall be restricted to Rs. (Rupees.....) and this guarantee shall remain in force tilland unless a claim is made on us within 3 months from that date, that is before all the claims under this guarantee shall be forfeited and we shall be relieved of and discharged from our liabilities thereunder.

Datedday of2013.

For and on behalf of Bank.

Issued Under Seal

PRICE-BID

[This part should be photo copied and then fill-up with the prices quoted on the photocopy only and shall be duly signed and stamped by the authorized signatory and enclosed in Price-Bid (Envelope No.2). This ANNEXURE in original without price duly signed and stamped shall be enclosed in Technical-Bid (Envelope No.1) as a token of acceptance of this Performa.]

PRICE QUOTED FOR	Tick the appropriate Check Box
PART – I : “OPERATION AND MAINTENANCE OF HVAC SYSTEM INCLUDING CHILLERS, WATER SOFTENING PLANT AT PRITHVI BHAVAN, LODI ROAD, NEW DELHI.”	<input type="checkbox"/>
PART – II : “OPERATION AND MAINTENANCE OF EXTERNAL/INTERNAL ELECTRICAL SYSTEMS, DIESEL GENERATOR SET, FIRE FIGHTING SYSTEM AND PLUMBING WORKS AT PRITHVI BHAVAN, LODI ROAD, NEW DELHI”	<input type="checkbox"/>
PART I & II BOTH	<input type="checkbox"/>

	Description of Work	Amount (in Rupees)
1.	Part - I “OPERATION AND MAINTENANCE OF HVAC SYSTEM INCLUDING CHILLERS, WATER SOFTENING PLANT AT PRITHVI BHAVAN, LODI ROAD, NEW DELHI.” Service Tax @ _____%	Rs. _____ Rs. _____
2.	Part – II “OPERATION AND MAINTENANCE OF EXTERNAL/INTERNAL ELECTRICAL SYSTEMS, DIESEL GENERATOR SET, FIRE FIGHTING SYSTEM AND PLUMBING WORKS AT PRITHVI BHAVAN, LODI ROAD, NEW DELHI” Service Tax @ _____%	Rs.----- Rs. _____
3.	TOTAL	Rs. _____
4.	% Overhead over the bill value to be charged by the bidder in case he needs to procure spare/consumable from the market on specific instructions of Ministry. The bill value will not exceed the MRP of the item brought and supporting documents for MRP including rebate if any will need to be submitted for claiming reimbursement of the bill.(Please note that all charges like procurement cost, cartage, insurance etc. will be deemed to be covered under the.....% overheads to be charged by the contractor).	10% over the bill value

The total amount (Rupees in figures).....per year.

The total amount (Rs in words).....per year.

Note:

1. The bidders offering rates for only one part, they should quote the price for that particular part and clearly mention “NOT PARTICIPATING” in the another part.
2. The quoted prices/rates are inclusive of all taxes & duties etc. as per aforesaid tender document including Annexure – A,B,C,D, E & F.
3. **The quoted prices/rates are valid for 120 days from the due date of opening of the tender.**
4. **The tender not fulfilling the minimum wages criteria shall stand rejected.**
5. The contract period will be initially for TWO years period unless prematurely closed. The contract can be extended for a further period of one year based on satisfactory performance of the contractor and on mutual agreed terms and conditions.
6. It may here be noted specifically that the **discretion to award the work** ie. Operation & Maintenance – Non-Comprehensive contract will **VEST ENTIRELY AT THE DISCRETION OF MoES** and the contractor will have no say whatsoever in the matter.
7. In this Non-Comprehensive Maintenance contract all Routine consumables like Cleaning cloth, , PVC Tape, fuses & cable joint kits of various ratings, and Blower & Tools & tackles etc. will be deemed to be included under the charges as quoted above and will be supplied by the contractor.
8. MoES has the authority to periodically appoint Technical Auditor or some other agency to evaluate the maintenance work done by the contractor and recommendations made thereof shall be completed with by the contractor in letter and spirit. This is primarily to ensure that the reliability of the system is not compromised with due to lack of Maintenance.

Seal & Signature of Tenderer
(Name & Designation of the authorized signatory)

DEVIATION SHEET**SCHEDULE OF DEPARTURE FROM SPECIFICATIONS**

(Deviation from tender conditions may be mentioned clearly giving clause number of items and ANNEXURE number to co-relate. Major deviations may cause rejection of tender.)

S. No.	Item Number	Details of Departure	Reason for departure

Seal & Signature of Tenderer
(Name & Designation of the authorized signatory)

LETTER OF APPLICATION

[NOTE: This Letter of Application is to be given on the letter head paper of the Applicant including full postal address, telephone no., fax no., and E-mail address]

To,
The Director
Ministry of Earth Sciences
Prithvi Bhavan, IMD Campus,
New Delhi – 110 003

Sir,

1. Being duly authorized to represent and act on behalf of (hereinafter referred to as "the Applicant"). and having reviewed and fully understood all the Pre-qualification information provided, the undersigned hereby apply for the following scope of work:

**“OPERATION AND MAINTENANCE OF OF EXTERNAL/INTERNAL ELECTRICAL SYSTEMS, DIESEL GENERATOR SET, HVAC SYSTEM INCLUDING CHILLERS, WATER SOFTENING PLANT, FIRE FIGHTING SYSTEM AND PLUMBING WORKS AT PRITHVI BHAVAN, LODI ROAD, NEW DELHI”
(Please Specify the PART of the job)**

2. Attached to this letter are copies or original documents defining:
 - (a) the Applicant's legal status;
 - (b) the principle place of business; and
 - (c) the place of incorporation (for applicants who are corporations) or the place of registration and the nationality of the owners (for applicants who are partnerships or individually-owned firms).
3. Your office and its authorized representatives are hereby authorized to conduct any inquiries or investigations to verify the statements, documents and information submitted in connection with this application, and to seek clarification from our bankers and clients regarding any financial and technical aspects. This Letter of Application will also serve as authorization to any individual or authorized representative or any institution referred to in the supporting information, to provide such information deemed necessary and requested by yourselves to verify statements, and information provided in this application, or with regard to the resources, experience, and competence of the Applicant.

4. Your office and its authorized representatives may contact the following persons for further information.

General, Personnel, Technical and Financial Enquiries	
TARUN SOOD	24669596

5. This application is made in the full understanding that:

(a) Bids by pre-qualified applicants will be subject to verification of all information submitted for Pre-qualification at the time of bidding:

(b) Your office reserves the right to:

Amend the scope and value of the contract/bid. In such event, bids will only be called from pre-qualified bidders who meet the revised requirements and reject or accept any application, cancel the Pre-qualification process, and reject all application without assigning any reason thereof; and

(c) Your office shall not be liable for any such action and shall be under no obligation to inform the Applicant.

6. Appended to this application, we give details of the participation of each party including capital contribution and profit/loss agreements, to the joint venture or association. We also specify the financial commitment in terms of the percentage of the value of the contract, and the responsibilities for execution of the contract.

7. The undersigned declare that statements made and the information provided in the duly completed application are complete, true, and correct in every detail.

Signed
Name
For and on behalf of

GENERAL INFORMATION:

All individual firms applying for tender are requested to complete the information in this form. Information to be provided for all owners or applicants who are partnerships or individually-owned firms.

1.	Name of firm:	
2.	Head office address:	
3.	Registered office address:	
4.	Telephone:	Contact:
5.	Fax :	E-mail:
6.	Place of incorporation/ Registration No.	Year of incorporation / registration

STRUCTURE AND ORGANIZATION

1. The applicant is
 - (a) an individual
 - (b) a proprietary firm
 - (c) a firm in partnership
 - (d) a Limited Company or Corporation.

2. Attach the Organization Chart showing the structure of the organization, including the names of the Heads and position of officers.
3. Have you ever left the work awarded to you incomplete: (If so, give name of project and reasons for not completing the work.)

Seal & Signature of Tenderer
(Name & Designation of the authorized signatory)