

**M M T C L I M I T E D : M U M B A I**  
**‘MMTC HOSUE’ at C-22, E-Block, Bandra-Kurla Complex,**  
**MUMBAI 400 051**  
(A Government of India Enterprise)

**ADMINISTRATION DIVISION**

Tender No. MMTC/MUM/BKC/ELEC MAINT/2013

Date : 20/12/2013

**T E N D E R   D O C U M E N T**  
For  
**OPERATION AND MAINTENANCE OF ELECTRICAL INSTALLATIONS AT**  
**‘MMTC HOSUE’ at C-22, E-Block, Bandra-Kurla Complex,**  
**MUMBAI 400 051**

**I N D E X**

SECTION	DESCRIPTION	PAGE NOS
1	Tender details	2
2	Notice Inviting Tender	3 -5
3	Submission of Tender	6
4	Definition of terms	7 – 8
5	General Terms and conditions	9 – 14
6	Scope of work and specifications for water and sump pump motor sets	15 – 16
7	Scope of work and specifications for Electrical wiring and installations, electric substation, HT/LT switch gears and D.G. Set	17 – 20
8	Deployment of Staff - ANNEXURE – 1	21
9	List of Major Equipments – Annexure – 2	22
10	Schedule of Quantities	23

**MMTC LIMITED : MUMBAI**  
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Date : 20/12/2013

**Tender Details**

SL NO	Particulars	Details
1	Issue of tender document	With effect from 23rd December 2013 to 02 <sup>nd</sup> January 2014  (During working days I.e Monday to Friday from 10.00 AM to 5.00 PM)
2	Tender fee	Rs.1000/- (One Thousand only)
3	Earnest money deposit (EMD)	Rs.50,000/- only(Fifty Thousand only)
4	Due date of tender (two bids) submission	Upto 1500 Hours on 03/01/2014
5	Technical bid's opening date	1600 Hours on 03/01/2014
6	Price Bid's opening date	1500 Hours on 06/01/2014

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## SECTION – I

### NOTICE INVITING TENDER (NIT)

NAME OF WORK : Operation and Maintenance (O&M) of Electrical Services at “MMTC House” at C-22, E-Block, Bandra-Kurla Complex, Mumbai 400 051.

- 1.1. Sealed tenders are invited by MMTC Limited, MMTC House, Plot No.C-22, E-Block, Bandra-Kurla Complex, Bandra(East), Mumbai -400051 for the above cited work.
- 1.2. The stipulated period for the work is one year from the date of award of work. MMTC may at its discretion and subject to contractor’s satisfactory performance extend the period of contract by another one year.
- 1.3. Either MMTC or contractor can terminate the contract by giving two months prior notice without any liability of compensation on account of premature termination.
- 1.4. Tenderers are advised to inspect the site to study the details and nature of services and satisfy themselves before submitting their offer. E.g. to know the form and nature of work involved, the means and access to site, and in general shall obtain necessary information as to assess the risks involved, contingencies and other circumstances which may influence and affect their tender cost in any manner.
- 1.5. The tenderer shall be deemed to have the full knowledge of the site whether he inspects the same or not, and no extra charge/cost except for claim as provided for in the tender shall be allowed.
- 1.6. No alteration, addition or erasures in any of the tender documents are permitted. MMTC shall have the right to either disregard such alterations, additions, or erasures or to cancel the whole tender as it may decide. However, the tenderer must sign alteration, addition or erasures, if any, in the tender document.
- 1.7. Tenders must be filled in English only.
- 1.8. The rates must be quoted in words and figures both. Rates in words will be treated as correct in case of discrepancy between those in figures and words. Amount for such item will be calculated on the basis or rates entered in words. No change in the “units” in the bill of quantities is permissible.

- 1.9. The rates quoted by contractor shall be net. Sales Tax/any other tax or duties (except sales tax on works contract) including variations in taxes/duties, if any, in respect of this tender/works shall be payable by contractor within quoted rates and MMTC will not entertain any claim whatsoever in this regard.
- 1.10. However, sales tax on works contract, pursuant to the “Constitution (46<sup>th</sup> Amendment ) Act 1982, as applicable shall be reimbursed to the contractor on actual basis subject to submission of proof of having paid the same to the state Govt.
- 1.11. Proprietor, partner or an Authorised person holding the power of attorney shall sign the tender.
- 1.12. Each tenderer must deposit an Earnest Money Deposit (EMD) amounting to Rs.50000/- (Fifty Thousand Only) in the form of Demand Draft drawn in favour of MMTC Limited. Tender without EMD will not considered.
- 1.13. The EMD of the successful tenderer shall be treated as security deposit and shall not carry any interest thereon.
- 1.14. EMD of unsuccessful tender will be refunded within three months after opening of the tender.
- 1.15. Tenderer must quote rate in the specified column, in the form “Schedule of Quantities” (Section – 8) for each item of work.
- 1.16. The Tender documents duly completed and accompanied with the EMD are to reach the General Manager(A&E), MMTC Limited, MMTC House, Plot no. C-22, E-Block, Bandra-Kurla Complex, Bandra(E), Mumbai 400051 on or before 03/01/2014 upto 1500 Hrs duly superscribing on the sealed envelope the description of work and tenderer.
- 1.17. The Tender submitted by the Tenderer shall comprise the following:

**Envelope-1; Technical Bid :Part-I**

- a. Total tender document enclosed each page duly signed by the tenderer as token of acceptance. If any deviation is proposed by the tenderer the same must be clearly indicated and enclosed as deviation list but tenders with significant deviations list and merely enclosing tenderer’s printed conditions or their own terms and conditions will make the tender liable for rejection.
- b. Copy of the tenderer’s price schedule but without prices.
- c. Earnest money deposit as laid down in this instructions to tenderers.
- d. Constitution of the tendering firm
- e. List of last three years executed AMC works for Government along with Xerox copies of work orders /purchase orders.

- f. Statement showing the turn over during the past three years supported by balance sheets or income tax returns.
  - g. Current original solvency certificate from any nationalized bank.
  - h. Copies of APGST/VAT/W.C.T/Service tax registration certificates and PAN card.
  - i. Other State/Central Government agencies registration certificate.
  - j. Firm registration certificate (In case of Firm).
  - k. Latest profile of the contractor.
  - l. List of construction machinery owned by the contractor.
  - m. List of qualified engineers employed by the contractor.
  - n. The contractor should have all statutory government licenses i.e. supervisory 11kv and electrical work permit licenses.
- MMTC is not responsible for the loss of documents or for the delay transit  
All the above documents forming PART – I of the tender shall be kept in one envelope which shall be SEALED and super-scribed with as technical bid  
PART – I, Technical bid -Name of work &Due date

**Envelope-2; Price Bid :Part-II**

Part two of the tender shall contain only the price schedule with prices (both in words and in figures) strictly in accordance with the price schedule format of the tender document. Departure from the price schedule format may render the tender liable for rejection. Price schedule format (SECTION -8)

**THE ABOVE TWO SEPARATE SEALED ENVELOPES , ONE CONTAINING THE PART – I OF THE TENDER AND THE OTHER CONTAINING THE PART – II OF THE TENDER SHALL BE KEPT TOGETHER IN ANOTHER ENVELOPE WHICH SHOULD ALSO BE SEALED AND SUPER-SCRIBED WITH NAME OF WORK :-**

**THIS ENVELOPE SHOULD BE ADDRESSED TO:**

**THE GENERAL MANAGER(A&E), MMTC LIMITED, MMTC HOUSE, C-22, E-BLOCK, BANDRA-KURLA COMPLEX, BANDRA(E), MUMBAI 400051.**

1.18. Tenders shall be valid for a period of 60 days from the date of opening.

1.19. MMTC reserves the right to accept the tender in full or part or reject any or all the tenders without assigning any reason whatsoever, MMTC may reduce the scope of work as found suitable, without entertaining any claim from the tenderer/contractor.

GENERAL MANAGER(A&E)

MMTC LTD MUMBAI.

SECTION – 2  
SUBMISSION OF TENDER

General Manager(A&E)  
MMTC House,  
Plot No.-C-22, E-Block,  
Bandra-Kurla Complex, Bandra(East)  
MUMBAI 400051.

Name of work : Operation and Maintenance (O&M) OF Electrical Services at MMTC House” at C-22, E-Block, Bandra-Kurla Complex, Mumbai 400 051.

Sir,

Having carefully studied and fully understood the entire NIT, General Terms and Conditions, Scope and specifications of work(s) and having also investigated the working conditions on site, I/we hereby submit our tender, in duplicate, for the above mentioned work.

I/We enclose Demand Draft no.\_\_\_\_\_ dated \_\_\_\_\_ for Rs.\_\_\_\_\_ drawn on \_\_\_\_\_ by me/us towards EMD with MMTC.

Should this tender be accepted, I/we hereby agree to abide by all the terms and conditions of the tender and I/we understand that in case of our failure to commence work as stipulated, the Earnest Money shall be forfeited by MMTC.

I/We also understand that in case of my/our tender is accepted by MMTC, my/our EMD will be treated as interest free Security Deposit.

I/we declare that my firm or any of my/our JV Partner/associate firms do not have any business operation/firms directly or indirectly associated with business in MMTC House BKC or using MMTC House BKC Mumbai. I/we understand that my/our tender/contract is liable to be rejected/cancelled in the event it is proved otherwise at a later date.

My/our tender shall be valid for acceptance for a period of 60 days from the date of opening.

I/we are fully and legally authorized to sign this tender document.

Power of Attorney/Authorisation in the name of the undersigned is enclosed (applicable only in case of non-proprietary firms and persons holding power of attorney)

Signature of the Tenderer and Rubber stamp

Date :

Place :

### SECTION – 3

#### 3.1. DEFINITION OF TERMS :

- 3.1.1 In the tender/contract document as herein defined where the context so admits, the words and expression will have the following meaning :
- 3.1.2. 'MMTC' shall mean the 'MMTC Limited', having its Regional Office at MMTC House at Plot no.C-22, E-Block, Bandra-Kurla Complex, Bandra(E), Mumbai 400051 and includes its successors, assignees, etc., and represented by an official/officials duty authorized by its competent authority.
- 3.1.3. 'MMTC HOUSE' means multi-stories MMTC office building with basement located at C-22, E-Block, Bandra-Kurla complex, Mumbai 400051.
- 3.1.4. "Building" shall mean "MMTC HOUSE" wherever the context so refers in the tender/contract documents.
- 3.1.5. The 'work' means the works to be executed in accordance with the tender/contract or part thereof, as the case may be and shall include all extra, additional, altered, deviated or substituted works as required for the purpose of contract.
- 3.1.6. Tender shall mean the tender submitted by the Tenderer for acceptance by MMTC.
- 3.1.7. "tenderer" means any firm or any person who severally or jointly respond to the tender documents of this work and submits his offer against this tender invitation.
- 3.1.8. The "Contractor" shall mean the person (Proprietor/partner) or persons, firm or company whose tender documents of this work and submits his offer against this tender invitation.
- 3.1.9. The Engineer-In-Charge means, an official of MMTC of his successor in office, or the person or persons, authorized by MMTC to act on its behalf.
- 3.1.10 The 'Contract' shall mean the Agreement between MMTC and the Contractor for the execution of the works, in accordance with tender documents along with agreed variations, if any, and acceptance thereof.
- 3.1.11 "Site" means the "MMTC House" and places on/under, in or through which the works are to be executed or carried out and any place specified by MMTC for the purpose of this contract, together with such other places as may be specifically designated in the contract as forming part of the site.
- 3.1.12 "Workmen: shall mean the persons employed/hired/detailed by the Contractor for the purpose of execution of work as per the contractual terms and conditions.

- 3.1.13 “Contract Documents” means collectively the tender documents, agreed conditions/variations, if any, and such other documents constituting the tender and acceptance thereof.
- 3.1.14 “Specifications” shall mean the various technical specifications and scope of work attached and referred to in the tender documents. It shall also include relevant specifications of Bureau of Indian Standards (BIS) and or CPWD specifications as applicable.
- 3.1.15 “Schedule” shall mean schedule of quantities at section-9 of tender/contract document.
- 3.1.16 ‘CPWD’ shall mean Central Public Works Department, Govt of India and or Maharashtra State Public Works Department as the case may be.
- 3.1.17 ‘BIS ‘ shall mean Bureau of Indian Standard (formerly ‘ISI’) and ISI marking shall mean the quality marking of specified ‘BIS’ specifications.
- 3.1.18 ‘BMC’ shall mean Mumbai Municipal Corporation.
- 3.1.19 ‘BSES’ shall mean Mumbai Sub-urban Electric Supply.
- 3.1.20 ‘Shift’ shall mean shift, duty of 8 hours.

3.2 INTERPRETATION OF CONTRACT DOCUMENTS

- 3.2.1 A word imparting the singular also includes the plural and vice versa where the context requires.
- 3.2.2 Any discrepancy, inconsistency, error or omissions in the contract shall be referred to the General Manager (A&E- RO Mumbai),MMTC, whose decision on the matter shall be final and conclusive.



## SECTION - 4

### GENERAL TERMS AND CONDITIONS OF CONTRACT

- 4.1 The tenderer will have to enter into a prescribed service agreement with MMTC for the performance of work as per terms and conditions.
- 4.2 Notwithstanding anything contained, in contract documents, the workmen, supervisors and other employed by the contractor shall be regarded as contractors employees and MMTC shall not be liable to make any payment to them or any contribution on account of them.
- 4.3 The contractor shall be fully responsible for any or all acts of omissions and commission of workers engaged by him and shall indemnify and make harmless the MMTC from and against any and all losses and expenses thereby caused.
- 4.4 MMTC will not make available, any accommodation for contractors workmen.
- 4.5 MMTC shall have the right to adjust unpaid wages by contractor to workmen employed against the work, on receipt of written complaint in this regard and/ or any other recovery which the MMTC/State Govt may impose on the contractor on account of lapses on the part of contractor, from the sum available as security deposit with MMTC and/or from any other payment due to the contractor.
- 4.6 No claims for extra charges shall be entertained for any reason whatsoever, except mentioned in tenders, for carrying out emergency breakdown work as per MMTC's requirement.
- 4.7 The contractor shall abide by the security requirements of MMTC.
- 4.8 The contractor shall at their own cost and expenses furnish and provide all tools, tool-kits, safety and testing equipments, tackles, and and all equipments e.g. chain pully blocks, ladders, ropes, megers, torches, vaccum cleaners, blowers etc required in performance of their services.
- 4.9 All minor works such as cutting, making holes, preparation of surface, refinishing, leveling, dismantling/removing before commencement of work and or re-fixing/reinstalling after undertaking necessary repairs/replacement etc., shall have to be carried out by the contractor with in quoted rates.
- 4.10 Scope and specifications shall be read in conjunction with the General conditions of the Contract, any other documents forming part of this contract wherever the context so requires.
- 4.11 Except for material specifically mentioned for provision by the contractor, all other material required for repairs/maintenance work shall be issued at site "Free of Cost". In case MMTC is not in position to issue/arrange the required material fully or partly and orders the contractor to procure the material through his arrangement, then the contractor shall be reimbursed the cost

of material on the basis of supportive vouchers/bills. The contractor shall purchase the material from firms/suppliers indicated by MMTC.

- 4.12 The work shall be carried out as specified in the Schedule read with scope and specifications of work on all days including Sundays and Holidays.
- 4.13 The contractor should frequently visit the site and liaison with Engineer in-Charge to ensure smooth running of services and sort out pending complaints/issue(so, if any).
- 4.14 Contractor's workmen shall report to maintenance office well in advance preferably 30 minutes before the start of the shift timings.
- 4.15 If any workmen of the contractor fail to report for duty at the specified time, the contractor shall be informed on telephone by maintenance office. Contractor shall make alternative arrangement within one hour of receipt of such information within the quoted rates failing which, the work may be got executed at the risk and cost of the contractor.
- 4.16 While on duty, contractor's workmen are required to wear the uniform of colour and style approved by MMTC. The contractor shall provide the uniforms to his workmen at his own cost.
- 4.17 The contractor shall provide all his workmen with identification badges with photographs duly authenticated by MMTC. MMTC on specific request of the contractor shall issue identity card to his workers engaged after verifying their antecedents.
- 4.18 The workmen employed by the contractor shall wear these badges at all times while on duty within company's premises, clearly visible to the MMTC security Guard/Watchmen. Any such workmen, failing to do so, shall upon request of security/MMTC, be taken off the duties and shall not be allowed entry into the premises and those doing so habitually shall be withdrawn from this site upon MMTCs asking within 24 hours during which period contractor shall make alternative arrangement.
- 4.19 The contractor shall abide by all safety precautions required as per good engineering practice and as laid down by CPWD/BIS/State Govt for the specified works.
- 4.20 This is a labour contract which include effective maintenance of essential service water and electric supply and various other equipments in the building. Maximum care shall be taken to avoid breakdown(s) as far as possible.
- 4.21 The contractor shall co-operate with other agencies working in the building and shall carry out the work assigned to him with least possible inconvenience to the occupants of the building.

The following documents shall be maintained by the contractor in addition to other records required by statutory rules and regulations:

- Record Book – Indicating repairs and overhauling carried out in the sub station.
  - Details of workmen employed.
  - Details of material received from MMTC and its utilization.
  - Details of dismantled material handed over to MMTC.
  - Record of preventive maintenance
  - Record of all the periodical testing conducted as per provisions of contract/instructions of MMTC.
  - Daily complaint Register .
- 4.23 The blank registers/log books shall be issued by MMTC free of cost. The record so maintained by the contractor shall be handed over to MMTC when required.
- 4.23 The complaints shall be attended and signature with date is to be obtained from user/occupants clearly defining therein the repairs/replacement undertaken.
- 4.24 The workmen to be indicated in Annexure-I are only for guidance. The contractor shall arrange sufficient labour and supervisors as required to ensure efficient attending of complaints with least inconvenience to the occupants of the building.
- 4.25 In case of emergency, the contractor shall arrange the additional workmen for attending emergency faults at day time or night time including holidays within the quoted rates.
- 4.26 The contractor shall comply with all applicable labour laws, ordinances, EPF/ESI acts rules and regulations in respect of this contract and the employment of workmen, provided by him and shall obtain all such municipal and other govt. permits, licences and attend to inspections as may be necessary and shall pay at his own cost all charges in connection therewith. If MMTC is required to make any such payments initially in case of any default on any account, MMTC shall recover the same from the contractor immediately from his next monthly bills or any other payment due to him.
- 4.27 The contractor shall be governed under the contract labour (Regulation and abolition) Act 1970 and he should obtain the contract labour license from the labour commissioner's office within 15 days from the date of issue of the work order. The contractor shall get the renewal of the contract labour licence from time to time and inform MMTC accordingly.
- 4.28 Contractor's shall insure his workmen for the period of their deployment on the work and submit proof of the same to MMTC. The contractor shall be solely responsible for any payments whatsoever to be incurred in this connection. Any accident involving contractor's workmen while on duty or otherwise shall be exclusively at the contractors risk. MMTC shall be indemnified against claim/compensation on any account.

- 4.28 (a) The contractor shall ensure timely payment of wages workers as per the contract Labour (Regulation Abolition) Act 1970.
- (b)The contractor shall also comply all the provisions of provident fund and family pension act 1952 and submit the necessary documents to MMTC.
- (c)Contractor shall be liable for all claims under the workmen compensation Act of 1923 or other Acts and comply all the provisions of the Act.
- (d)If the contractor failed to comply in part or full i.e. provisions/Rules of the said Acts. MMTC reserves the right to summarily terminate the agreement and take such other actions as may be deemed necessary.
- 4.29 The contractor shall be liable for all penalties, claims, compensations, damages on account of electrical/fire accidents, if any, caused due to negligence of his workmen/non-compliance of safety requirement. The contractor shall indemnify MMTC from all such penalties, claims, compensations and damages etc. on this contract.
- 4.30 The contractor shall also ensure that the contract labour is medically fit and in sound mind and health.
- 4.31 The contractor shall also ensure that the workmen and the supervisors employed by him are not minors.
- 4.32 The contractor should ensure that all installations are in full working conditions and shortfalls, if any, is recorded to avoid future disputes. Similarly contractor shall be responsible to handover all the installations services in working conditions on expiry of contract or extended contract period.
- 4.33 The contractor shall not assign the contract or any party thereof or any benefit or interest therein or there under without the prior written consent of the MMTC.
- 4.34 Water/electricity required for carrying out repairs/maintenance work and for contractors site office shall be issued free of cost.
- 4.35 All operating keys, winches, tools, chain pully blocks, vacuum cleaner, julla, welding machine, die(s), ladders and all necessary tools required for proper execution of work and for operation and repairs of valves/pumps shall be arranged by the contractor at his cost and contractor's quoted rates shall be deemed to include for this.
- 4.36 The work shall be carried out as per specifications in the tender and in the absence thereof, as per CPWD specifications given in the SSR-1977, as amended upto date & BIS if not in CPWD specifications. In case of any clarification about the specifications to be followed/adopted for a particular item, the decision of GM(A&E) shall be final and binding.

- 4.37 The supervisor/electrician/mechanic/operators shall be well experienced and should be able to handle the job in a very good workmanship manner.
- 4.38 The contractor will adhere to the local laws, acts, regulations laid down by the relevant authorities and MMTC shall be indemnified of any responsibility for non-compliance of the above by contractor.
- 4.39 In case of delay in attending/non-attendance of complaints due to shortage of labour or otherwise within the time specified by the Engineer in-charge, the work/repairs shall be got executed through other agency at the risk and cost of contractor and the expenditure so incurred plus 20% of the same shall be recovered from the contractors payments/security available. In case of any dispute, the decision of MMTC shall be final and binding on the contractor.
- 4.40 The contractor, if so directed by MMTC, shall immediately dismiss from the works any person employed thereon by him, who may in the opinion of MMTC be incompetent or of undesirable nature and such persons shall not be employed again on the works. The contractor shall not question the dismissal of such workmen.
- 4.41 The MMTC shall have the right to terminate the contract by giving one month's notice, if the contractor does not work to the satisfaction of the MMTC or engage inadequate labour force than required, or the terms and conditions of the contract are flouted by the contractor in any manner whatsoever. MMTC is not bound to give reasons for such termination of contract.
- 4.42 Certain other agencies may also be working in the area. Contractor/his workmen shall not create hindrance in any way in the work being executed by such agencies. Further he shall not attempt to delay the repair/maintenance intentionally or on the pretext of other agencies working in the building.
- 4.43 The contractor shall submit the bill pertaining to the repair and maintenance for the work done during the previous calendar month. 5% retention money shall be deducted on monthly bill. The security deposit of Rs.50000/- shall be refunded to the contractor after a period of 3months counted from the expiry/termination of contract. The three month period shall be treated as defect liability period.
- 4.44 Except where otherwise provided in the contract, the contractor shall not sublet whole or any part of the work without the prior written consent of MMTC and such consent if given shall not relieve the contractor from any liability or obligation under the contract and he shall be responsible for the acts, defaults and neglects of any sub-contractor, his agents, servants or workmen fully as if they were the acts of defaults or neglects of the contractor, his agent/servant or workmen. If the contractor or his sub-contractor or their employees shall break, deface or destroy any property belonging to MMTC or others during the execution of the contract, the same shall be made good by the contractor at his own expense and in default thereof, the Engineer in-charge may cause the same to be made good by other agencies and

recover the expense from the contractor (for which the certificate of the Engineer-in charge shall be final).

- 4.45 If the contractor or his sub-contractor or their employees shall break deface or destroy any property belonging to MMTC or others during the execution of the contract the same shall be made good by the contractor at his own expense and in default thereof, the Engineer in-charge may cause the same to be good by other agencies and recover the expenses from the contractor (for which the certificate of the Engineer in charge shall be final).
- 4.46 The material/spare parts which contractor shall procure for repair/replacement at works shall be as per make already existing or standard make/ISI marked and got approved before hand from the Engineer-in charge.
- 4.47 Notwithstanding the sub-division of the document into the separate section every part of each section shall be deemed to be supplementary and complementary of every other part and shall be read with accordingly.
- 4.48 Where any portion of the General conditions of contract is repugnant to or at variance with any provisions of the Scope and specifications, the conditions/provisions of the scope and specifications, the conditions/provisions of the scope & specifications shall be deemed to override the provisions of the General conditions of contract and shall to the extent of such repugnance or variations, prevail.
- 4.49 Any dispute/difference arising from the execution of or in connection with this contract shall be settled through amicable consultation between the parties at the level of GM, RO Mumbai. In the event that no amicable settlement is reached through such consultation , the dispute shall be referred to the Sole Arbitrator to be nominated by the CGM/GM (Incharge) of R.O., Mumbai. The Arbitration shall be governed by the Arbitration & Conciliation Act 1996. The venue of Arbitration shall be Mumbai.

## SECTION – 5

### SCOPE OF WORK AND SPECIFICATIONS FOR WATER AND SUMP PUMP-SETS

- 5.0 SCOPE
- 5.1 Primary function of this section is to ensure efficient service and to carry out requisite repairs/replacement and attending to complaints. The following works are to be undertaken from 8a.m. to 10p.m. on all working days.
  - 5.1.1 Operation and maintenance of water and sump pump – motor sets.
- 5.2 The following items are excluded from the scope of this work:-
  - 5.2.1 Rewinding and major repair e.g. machine work, shaft/impeller replacement etc to pump motor sets. However, labour for replacement of ball/bush bearing, replacement gland-packing and accessories, tightening of belt is included.
- 5.3 Consumable items such as grease, kerosene oil, mobil oil., wire brushes, nut & bolts and washers, PVC insulation tapes, safety gloves and gland-dory etc., to be supplied by the contractor within the quoted rates.
  - 5.3.1 Spare and material except for items specifically mentioned to be provided by the contractor under clause 5.3 shall be provided by MMTC free of cost for replacement/repair of pump motor set and other works as required.
- 5.4.1 **O& M OF WATER SUPPLY & PUMPING SETS**
- 5.4.2 The contractor shall provide experienced workmen holding valid licenses for complete operation and maintenance of water and sump pumps including pump panel as requirement.
  - 5.4.3.1 The following works are to be undertaken by the contractor.
    - 5.4.3.2 Checking to be done to notice abnormal operational noise in the running of pump motor set and corrective action to be taken as required.
    - 5.4.3.3 Checking to be done for overheating of pump motor set and corrective action be taken as required.
    - 5.4.3.4 The responsibility for the inspection, maintenance, servicing and requisite inspection of pumps, motors, water level controls etc. shall totally lie with the contractor for ensuring smooth working and serviceability of the pumps, motors and other connected electrical switch boards/cable etc. of the system.

- 5.4.3.5 All pumps and motors shall be serviced by experienced mechanic/electrician once a month.
- 5.4.3.6 Any leakage due to pumps or otherwise is to be checked and corrective action should be taken immediately. The contractor is required to carry out periodical greasing, replacement of gland required to carry out periodical greasing, replacement of gland packing, inspection and cleaning of pumps, strainers, repair/replacement of non return valves and foot valves within quoted rate.
- 5.4.3.7 Pump and motor shaft and coupling should be periodically checked for alignment and tightness of nuts and bolts.
- 5.4.3.8 Motor terminal shall be checked periodically and corrective action to be taken as required. Dismantling, decoupling and refixing of pump motor set to be done as required within the quoted rates.
- 5.4.3.9 Contractor shall ensure proper ground earthing of motor and requisite corrective action is to taken.
- 5.4.3.10 The contractor should attend to the breakdown of water supply on priority basis. Records of the break down should be maintained by him as directed by MMTC. Efforts should be made on war footing to restore water supply so that regular supply to users is maintained. If need, be the extra workmen shall be arranged by the contractor within quoted rates.
- 5.4.3.11 Maintenance of logbooks indicating daily starting/stopping of various pumps, suction and discharge pressures etc., as required.
- 5.4.3.12 All the monthly maintenance bills are to be submitted to MMTC along with monthly roster, register, log book to MMTC.



## SECTION – 6

### SCOPE OF WORK AND SPECIFICATIONS FOR ELECTRICAL WIRING, ELECTRIC SUB-STATION, HT/LT SWITCH GEARS AND OPERATION OF D.G. SET

- 6.0 SCOPE
- 6.1 The primary function of this section is to ensure efficient service and to carry out all the electrical works, except those specifically excluded under clause 6.2.1 to 6.2.3 including requisite repair/replacement and attending to the complaints. It covers the following works to be carried out round the clock on all days as required.
  - 6.1.1 Operation and Maintenance of sub-station equipment e.g. transformer, HT/LT panels including vacuum circuit breaker, main MV panel, Emergency power panel, emergency lighting panel, capacitor panel and distribution switch boards/gears etc.
  - 6.1.2 Operation of D.G. set.
  - 6.1.3 Maintenance of electric wiring system including rising mains, floor distribution switch boards including maintenance of light/fan/plug points/fittings etc. for Ground floor, first floor, second floor, third floor, fourth floor and common areas like lift lobby, services shafts, terrace, basement, common passage/staircases, AHUs, compound lighting etc.
  - 6.1.4 Repair/maintenance to electric supply to the lifts and electrical fittings provided in the lift car such as tube light, exhaust fan etc., and electric light fitting in the lift shaft.
  - 6.1.5 Maintenance of electric supply to central air-conditioning plant.
  - 6.1.6 In areas occupied by users other than MMTC, maintenance of distribution switchboard of rising mains is included.
  - 6.1.7 Maintenance of lightning arrestor and aviation light and glow sign board etc.
  - 6.1.8 Preventive maintenance of electrical installations.
  - 6.1.9 Maintenance/repair/replacement of cables/interconnecting cables as required.
  - 6.1.10 Overhauling and periodical maintenance of HT/LT switch gears/panels.
- 6.2 The following items are specifically excluded from the scope of this section.
  - 6.2.1 Addition/new work after award/commencement of maintenance of contract.

- 6.2.2 Annual overhauling of transformer/servicing of substation equipments and Half yearly breakdown of substation. Re-wiring of more than ten electric points in a month, complete overhauling/installation of more than ten tube light fittings in a month.
- 6.2.3 Unless specifically included, maintenance of switch board/wiring points/switches/fittings etc., in interior floor area which is to be undertaken by the respective users.
- 6.3. The contractor shall provide supervisor, sufficient experienced workmen holding valid license(s) for operation and maintenance under clause 6.1 to 6.1.10

**6.4 O & M ELECTRIC SUBSTATION, HT/LT PANEL – with yearly test report.**

- 6.4.1 The material and workmanship should generally be undertaken as per relevant CPWD specifications/Bureau of Indian Standard specifications unless specifically overridden by these specifications.
- 6.4.2 Contractor shall ensure efficient attending to of the emergency, routine complaints in utmost quality workmanship commensurate with good engineering practices using quality material of approved make.
  - 6.4.2.1 Emergency complaints like replacements of fuses, short circuits, single phasing, temporary wiring for defective portion etc should be attended to within one hour from the time of receipt of complaints.
  - 6.4.2.2 Routine complaint like replacement of fuses bulbs, tubes, switches, sockets repairing of fans/regulators etc. should be attended immediately from the time of receipt of complaints/instructions from engineer incharge or from occupants/user's.
  - 6.4.2.3 MMTC may at its sole discretion extend the scope of work to additional accommodation / interiors. The rates of items so extended shall be worked out on the basis of existing rates or mutually agreed between MMTC and the contractor in case the rates can not be derived from the existing rates in the tender.
  - 6.4.2.4 Supervisor, electricians and helpers on duty shall be available in the maintenance office during the complete duty time.
- 6.4.3 Generally, following types of works are also required to be undertaken by the contractor within quoted rates:-
  - 6.4.3.1 Detection of faults in all types of wiring such as surface conduit, cables etc. and rectifying them by removing the defects as required.

In concealed circuit system of wiring where conduits are damaged rewiring shall be carried out as directed.

- 6.4.3.2 Removal of defective pedestal/exhaust fans and refixing them after repairs, fixing new exhaust fans.
- 6.4.3.3 Minor repairs to fans, overhauling greasing and oiling as and when required.
- 6.4.3.4 Attending to electrical complaints in any area in the building in case of emergency.
- 6.4.3.5 Testing and periodic checking of all electrical installations and carrying out preventive maintenance as required and as directed by Engineer in-charge.
- 6.4.3.6 Minor modifications to existing installations.
- 6.4.3.7 Maintenance of electric supply to lifts air-conditioning plant, fire alarm system, telephone system etc.
- 6.4.3.8 The comprehensive maintenance of lift is not included in this contract. However, at the time of break down/supply failure of the lift, the contractor shall render all necessary assistance in evacuation of trapped passengers and ensure restoration of supply.
- 6.5 All material required for maintenance work except specified under clause 6.5.1 shall be supplied free of cost by MMTC for repair/replacement.
- 6.5.1 All minor items such as insulation tape, fuse wires of various capacities, interconnecting flexible wires, screws, nut and bolts, fan hooks, tinned brass clips, nails, gasket, rubber bushing washers, grease, kerosene oil, mobil oil, duster, cleaning brush, dhotis, fuses wires, vim, soap etc., to be provided by the contractor within the quoted rates.
- 6.6 Contractor shall be responsible for any loss/damage of materials issued by MMTC to him/his workmen. The cost of the same will be deducted adjusted from the retention amount.
- 6.7 PREVENTIVE MAINTENANCE : The scope of work includes preventive maintenance of electrical installation (LT) installation as per CPWD General Specifications for electrical works part-1 internal (1994) as amended upto date.
- 6.7.1 Contractors shall work out time schedule for carrying out preventive maintenance in consultation with Engineer in-charge.
- 6.7.2 The contractor shall carry out earth test for each and every installation during the first quarter of the contract period and record shall be maintained.
- 6.8 Contractor shall make his own arrangements to remove all dismantled / unusable materials such as bulbs, fuses, tubes, starter, switches, cable cuttings etc derived from routine/preventive maintenance to MMTC store at regular intervals.
- 6.9 The contractor shall abide by and strictly follow all the requirements of safety/security to prevent the accident or damage to the property of MMTC.

**6.10 OPERATION OF DG SET:**

- 6.10.1 Topping up of battery set with distilled water as and when required.
- 6.10.2 Removing the DG set batteries and transporting the same for the repairs/for charging and refixing in position will be undertaken by contractor within quoted rates.
- 6.10.3 The contractor shall carry out daily starting, checking and routine operation of DG set including electrical panel, cooling system, alternators etc.
- 6.10.4 All the spares and materials except specifically provided for provision by contractor and fuel for operation work will be supplied by MMTC. The contractor shall extend all assistance in procurement, transportation/loading and unloading of diesel oil to start DG set within the quoted rates.
- 6.10.5 Inspection, minor adjustment and repairs for maintaining the DG set in efficient running condition as per manufacturers manual recommendations/instructions.

**SECTION – 7**

**ANNEXURE – 1**

We propose to depute/deploy following staff/workmen for executing work specified in the contract as per the terms agreed by us.

SL.NO	CATEGORY	S H I F T S			
		GENERAL	MORNING	EVENING	NIGHT
1	Maintenance Engineer/supervisor				
2	Skilled Electrician/Operator for substation operation				
3	Pump Operators/DG set operator/sub-station				
4	Pump/Generator Mechanic				
5	Helpers				
6	Any other (please specific)				

We also undertake that above is only indicative and any additional staff for emergency shall be arranged as and when required depending upon the quantum of work/complaints within the quoted rates as indicated by Engineer in-charge.

Signature of the tenderer/contractor

With date and seal

## ANNEXURE – 2

### LIST OF MAJOR EQUIPMENTS

I.	D.G. Set	
	(a) 200 KW air-cooled DG set	1 No.
ELECTRICAL		TOTAL QTY. (approx.)
Lift lobby, common passages & compound lighting.		
a)	Light points	300 Nos.
b)	Fan and exhaust fan point for similar	10 Nos
	Area as above	
c)	6 Amps plug points – same as above area	50 Nos.
d)	Distribution Boards having	
	RCCB/EL CB/MCBS (upto floor DB)	24 Nos.
e)	Switch Boards and power panel with SW	
	Fuse units/Instruments/starters/etc.	40 Nos.
f)	Earthing stations	12 sets.
g)	Earthing stripes and wires	Lot
h)	Lightning conductors	5 sets.
i)	Warning Lights	2 Nos.
j)	Public address system	1 set
k)	Various types of light fittings (for area same as	
	Item no.(a)	700 Nos.
l)	Substation Equipment comprising 11 KV	
m)	VCB, 750 KVA transformer, Interconnecting	
	Cables, Bus Ducts etc., LT/HT panels,	
	Engineering Panel, Relay switch gears etc.	1 set.

**SECTION – 8**

**(SCHEDULE OF QUANTITIES)**

Sr.No.	Description of items	Unit	Period/Qty	Rate (Rs.)	Amount (Rs.)
1	Complete ROUND THE CLOCK Operation and Repair/Routine Maintenance of electrical Installations including substation, day to day routine maintenance of 750 KVA dry type transformer HT/LT panels, switch gears, operation of DG set, switch boards/boxes, electrical wiring, etc., as required under the terms of tender/agreement, except items specifically excluded from scope of this item (refer clause 6.2.1 to 6.2.3) and complete operation and maintenance of water supply and sump pump-motor sets etc., as required under terms of tender/agreement. (ref clause 5.2.1 for items excluded from scope)				

MMTC LIMITED

SIGNATURE OF TENDERER &

RUBBER STAMP