## MMTC LIMITED: MUMBAI

'MMTC HOUSE' at C-22, E-Block, Bandra-Kurla Complex,
MUMBAI 400 051

(A Government of India Enterprise)

## **ADMINISTRATION DIVISION**

Date: 19/04/2016

Tender No. MMTC/MUM/BKC/ELEC MAINT/2016

## TENDER DOCUMENT

For

OPERATION AND MAINTENANCE OF ELECTRICAL INSTALLATIONS AT 'MMTC HOUSE' at C-22, E-Block, Bandra-Kurla Complex,

MUMBAI 400 051

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## **Tender Details**

Date: 19/04/2016

SL. NO.	Particulars	Details	
1	Download of tender	Free of cost and may be downloaded	
	document	from our website mentioned in the	
		Tender Notice w.e.f. 18 <sup>th</sup> April, 2016	
		to 4 <sup>th</sup> May, 2016	
2	Earnest money deposit	Rs.50,000/- (Fifty Thousand only)	
	(EMD)		
4	Due date of tender (two bids)	Upto 1500 Hours on 06/05/2016	
	submission		
5	Technical bid's opening date	1530 Hours on 06/05/2016	
6	Price Bid's opening date	1600 Hours on 06/05/2016	

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#### <u>SECTION – I</u>

#### NOTICE INVITING TENDER (NIT)

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

- 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.
- 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 bidders's satisfactory performance extend the period of contract by another one year.
- 3) Either MMTC or bidders can terminate the contract by giving two month's prior notice without any liability of compensation on account of premature termination.
- 4) Bidders 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.
- 5) The bidders 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.
- 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 erasers or to cancel the whole tender as it may decide. However, the bidders must sign alteration, addition or erasures, if any, in the tender document.
- 7) Tenders must be filled in English only.
- 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.
- 9) The rates quoted by bidders 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 bidders within quoted rates and MMTC will not entertain any claim whatsoever in this regard.
- 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 bidders on actual basis subject to submission of proof of having paid the same to the state Govt.
- 11) Proprietor, partner or an Authorised person holding the power of attorney shall sign the tender.

- 12) Each bidder 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, payable at Mumbai. Tender without EMD will not considered.
- 13) The EMD of the successful bidder shall be treated as security deposit and shall not carry any interest thereon.
- 14) EMD of unsuccessful tender will be refunded within a reasonable time after opening of the tender.
- 15) Bidders must quote rate in the specified column, in the form "Schedule of Quantities" (Section 8) for each item of work.
- 16) The Tender documents duly completed, accompanied with the EMD and addressed to the General Manager, should be dropped in the tender box kept on Ground Floor (Reception) at MMTC Limited, MMTC House, Plot no. C-22, E-Block, Bandra-Kurla Compex, Bandra (E), Mumbai 400051 on or before 06/05/2016 upto 1500 Hrs duly superscribing on the sealed envelope the description of work and bidders.

The Tender submitted by the Bidders shall comprise the following:

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

- a) Each page of the tender document should be signed by the bidders as token of acceptance. If any deviation is proposed by the bidders the same must be clearly indicated and enclosed as deviation list but tenders with significant deviations list and merely enclosing bidder's printed conditions or their own terms and conditions will make the tender liable for rejection.
- b) Copy of the bidders' price schedule with indicating price.
- c) Earnest money deposit as laid down in the instructions to bidders.
- d) Constitution of the tendering firm, i.e. Sole Proprietorship or Partnership and Articles of Association in case of a Public Limited Company.
- e) List of last three years' executed AMC works for Government/private firms along with Xerox copies of work orders / purchase orders.
- f) Statement showing the turnover during the past three years supported by balance sheets or income tax returns duly signed and stamped by their statutory auditors.
- g) Copies of APGST/VAT/W.C.T/Service tax registration certificates and PAN card.

- h) Other State/Central Government agency's registration certificate.
- i) Firm registration certificate (In case of Firm).
- j) Latest profile of the bidder.
- k) List of machinery owned by the bidders which would be used by the successful bidder in connection with the discharge of their AMC.
- I) List of qualified engineers employed by the bidders.
- m) The bidders should have all statutory government licenses i.e. supervisory 11kv and electrical work permit licenses.
- n) MMTC is not responsible for the loss of documents or for the delay in transit.
- o) 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, MMTC LIMITED, MMTC HOUSE, C-22, E-BLOCK, BANDRA-KURLA COMPLEX, BANDRA(E), MUMBAI 400051.

Award of tender shall be valid for a period of 30 days from the date of opening of the tender.

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

GENERAL MANAGER MMTC LTD., MUMBAI.

## **SUBMISSION OF TENDER**

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

Name of work :	Operation and Maintenand C-22, E- Block, Bandra-Kurl	•		ouse,
Sir,				
specifications of v	studied and fully understoo work(s) and having also ins plicate, for the above menti	spected the working		•
I/We enclose De	mand Draft no by me/us towards EMD i	dated n favour of MMTC L	for Rs imited, payable at Mun	drawn on nbai.
	er be accepted, I/we hereby tand that in case of our fail by MMTC.	_		
I/We also underst interest free Secu	tand that in case my/our to rity Deposit.	ender is accepted by	MMTC, my/our EMD	will be treated as
I/we declare that my firm or any of my/our JV Partner/associate firms do not have any business dealings, directly or indirectly, associated with MMTC Limited. 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 award of tender shall be valid for acceptance for a period of 30 days from the date of opening.				
I/we am/are fully	and legally authorized to si	gn this tender docur	ment.	
	y/Authorisation in the nam irms and persons holding po	_	d is enclosed (applicab	le only in case of
		Sign	nature of the Bidders a	nd Rubber stamp
Date :				
Place :				

#### I. **DEFINITION OF TERMS**:

In the tender/contract document as herein defined where the context so admits, the words and expression will have the following meaning:-

- 3.1 '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.
- 3.2 'MMTC HOUSE' means MMTC office building with basement located at C-22, E-Block, Bandra-Kurla complex, Mumbai 400051.
- 3.3 "Building" shall mean "MMTC HOUSE" wherever the context so refers in the tender/contract documents.
- 3.4 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.
- 3.5 Tender shall mean the tender submitted by the Bidders for acceptance by MMTC.
- 3.6 "Bidders" 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.
- 3.7 The "Bidders" 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.
- 3.8 The Official-Incharge means, an official of MMTC or his successor in office, or the person or persons, authorized by MMTC to act on its behalf.
- 3.9 The 'Contract" shall mean the Agreement between MMTC and the Bidder for the execution of the works, in accordance with tender documents along with agreed variations, if any, and acceptance thereof.
- 3.10 "Site" means the "MMTC House" and places on/under, in or through where 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.
- 3.11 "Workmen" shall mean the persons employed/hired/detailed by the Bidders for the purpose of execution of work as per the contractual terms and conditions.

- 3.12 "Contract Documents" means collectively the tender documents, agreed conditions/variations, if any, and such other documents constituting the tender and acceptance thereof.
- 3.13 "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 o Indian Standards (BIS) and or CPWD specifications as applicable.
- 3.14 "Schedule" shall mean schedule of quantities at section-9 of tender/contract document.
- 3.15 'CPWD' shall mean Central Public Works Department, Govt of India and or Maharashtra State Public Works Department as the case may be.
- 3.16 'BIS' shall mean Bureau of Indian Standard (formerly 'ISI') and ISI marking shall mean the quality marking of specified 'BIS' specifications.
- 3.17 'MCGM' shall mean Metropolitan Corporation of Greater Mumbai.
- 3.18 'BSES' shall mean Mumbai Suburban Electric Supply.
- 3.19 'Shift' shall mean shift duty of 8 hours.

#### II. INTERPRETATION OF CONTRACT DOCUMENTS

- 3.20 A word imparting the singular also includes the plural and vice versa where the context requires.
- 3.21 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 bidders 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 manpower employed by the bidder shall be regarded as bidder's employees and MMTC shall not be liable to make any payment to them or any contribution on account of them.
- 4.3 The bidders 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 bidder's workmen.
- 4.5 MMTC shall have the right to adjust unpaid wages by bidders 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 bidder on account of lapses on the part of bidder, from the sum available as security deposit with MMTC and/or from any other payment due to the bidder.
- 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 bidders shall abide by the security requirements of MMTC.
- 4.8 The bidders shall at their own cost and expenses furnish and provide all tools, tool-kits, safety and testing equipments, tackles, and all equipments e.g. chain pully blocks, ladders, ropes, megers, torches, vacuum 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 bidder within quoted rates.
- 4.10 Scope and specifications shall be read in conjunction with the General Conditions of the Contract and any other documents forming part of this Contract, wherever the context so requires.
- 4.11 Except for material specifically mentioned for provision by the bidders, all other material required for repairs/maintenance work shall be issued at site "Free of Cost". In case MMTC is not in a position to issue/arrange the required material fully or partly and directs the bidder in writing to procure the material through his own arrangement, then the bidder shall be reimbursed the cost of material on the basis of supporting vouchers/bills.

- 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 bidder should frequently visit the site and liaison with Official-InCharge to ensure smooth running of services and sort out pending complaints/issue(so, if any).
- 4.14 Bidder's workmen shall report for duty at the site preferably 30 minutes before the start of the shift timings.
- 4.15 If any workmen of the bidder fail to report for duty at the specified time, the bidder shall be informed by MMTC. Bidders 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 bidder.
- 4.16 While on duty, bidder's workmen are required to wear the uniform of colour and style approved by MMTC. The bidders shall provide the uniforms to his workmen at his own cost.
- 4.17 The bidders shall provide all his workmen with identification badges with photographs duly authenticated by MMTC. MMTC on specific request of the bidder shall issue identity card to his workers engaged, after verifying their antecedents with the local police station.
- 4.18 The workmen employed by the bidder shall wear these badges at all times while on duty within company's premises, clearly visible to the MMTC security Guard/Watchman. 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 bidder shall make alternative arrangement.
- 4.19 The bidder 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 Contract which include effective maintenance of essential services, water and electric supply and all the electrical equipments in the building. Maximum care shall be taken to avoid breakdown(s) as far as possible.
- 4.21 The bidder 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 bidders in addition to other records required by statuary rules and regulations:

- Record Book Indicating repairs and overhauling carried out in the substation.
- 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 bidders 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 bidders 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 bidders shall arrange the additional workmen for attending emergency faults at day time or night time including holidays within the quoted rates.
- 4.26 The bidders 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 bidder immediately from his next monthly bills or any other payment due to him.
- 4.27 The bidder 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 bidders shall get the renewal of the contract labour licence from time to time and inform MMTC accordingly.
- 4.28 Bidder shall insure his workmen for the period of their deployment on the work and submit proof of the same to MMTC. The bidders shall be solely responsible for any payments whatsoever to be incurred in this connection. Any accident involving bidder's workmen while on duty or otherwise shall be exclusively at the bidder's risk. MMTC shall be indemnified against claim/compensation on any account.
- 4.28 (a) The bidder shall ensure timely payment of wages to his workers as per the contract Labour (Regulation Abolition) Act 1970.
  - (b) The bidder shall also comply with the provisions of Provident Fund and Family Pension Act, 1952 and submit necessary documents to MMTC.
  - (c) Bidder shall be liable for all claims under the Workmen Compensation Act of 1923 or other such Acts and comply with all the provisions of such Acts.

- (d) If the bidder fails 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 bidder 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 bidder shall indemnify MMTC from all such penalties, claims, compensations and damages etc. on this contract.
- 4.30 The bidder shall also ensure that the contract labour is medically fit and of sound mind and health.
- 4.31 The bidder shall also ensure that the workmen and the supervisors employed by him are not minors.
- 4.32 The bidders should ensure that all installations are in full working conditions and shortfalls, if any, are recorded to avoid future disputes. Similarly bidder shall be responsible to handover all the installations/services in working conditions on expiry of Contract or extended contract period.
- 4.33 The bidders shall not assign the contract or any party thereof or any benefit or interest therein or thereunder to any other person/firm without prior written consent of MMTC.
- 4.34 Water/electricity required for carrying out repairs/maintenance work at site shall be issued free of cost.
- 4.35 All operating keys, winches, tools, chain pully blocks, vacuum cleaner, jhulla, 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 bidder at his cost and bidder's quoted rates shall be deemed to include for all 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, MMTC, shall be final and binding.
- 4.37 The supervisor/electrician/mechanic/operators should be well experienced and should possess valid CPWD Licence for handling the job.
- 4.38 The bidder 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 bidder.
- 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 Official-Incharge, the work/repairs shall be got executed through other agency at the risk and cost of bidder and the expenditure so incurred plus 20% of the same shall be recovered from the bidder's payments/security available. In case of any dispute, the decision of MMTC shall be final and binding on the bidders.

- 4.40 The bidder, if so directed by MMTC, shall immediately dismiss from the works any person employed thereon by him, who may be in the opinion of MMTC is incompetent or of undesirable nature and such persons shall not be employed again at the MMTC site. The bidder shall not question the dismissal of such workmen.
- 4.41 MMTC shall have the right to terminate the contract by giving two month's notice, if the bidder 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 bidder 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. Bidder/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 bidders 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 bidder after a period of 3 months 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 bidder 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 bidders from any liability or obligation under the contract and he shall be responsible for the acts, defaults and neglects of any sub-bidders, his agents, servants or workmen fully as if they were the acts of defaults or neglects of the bidders, his agent/servant or workmen. If the bidders or his sub-bidders 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 bidders 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 bidders (for which the certificate of the Official-Incharge shall be final).
- 4.45 If the bidder or their employees 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 bidder at his own cost and expense. In case of failure to do so, the same shall be recovered from the payments due to the bidder and/or the Security Deposit available with MMTC.
- 4.46 The material/spare parts which bidder shall procure for repair/replacement at works shall be as per the Make already existing or standard make/ISI marked.
- 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 to 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 over-

- ride the provisions of the General Conditions of contract and shall prevail to the extent of such repugnance or variations.
- 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, Regional Office, Mumbai. In the event that no amicable settlement is reached through such conciliations, the dispute shall be referred to the Sole Arbitrator to be nominated by the GM (Incharge) of MMTC, R.O., Mumbai. The Arbitration shall be governed by the Arbitration & Conciliation Act 1996. The venue of Arbitration shall be Mumbai.

#### 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 8 a.m. to 10 p.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:-
- a) 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.
- b) Consumable items such as grease, kerosene oil, mobil oil, wire brushes, nut & bots and washers, PVC insulation tapes, safety gloves and gland-dory etc., to be supplied by the bidders within the quoted rates.
- c) Spare and material except for items specifically mentioned to be provided by the bidders under sub-clause b) above, 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 bidders shall provide experienced workmen holding valid licenses for complete operation and maintenance of water and sump pump sets including pump panel as per requirement.
- 5.4.3 The following works are to be undertaken by the bidder.
- 5.4.4 Checking to be done to notice abnormal operational noise in the running of pump motor set and corrective action to be taken as required.
- 5.4.5 Checking to be done for overheating of pump motor set and corrective action be taken as required.
- 5.4.6 The responsibility for the inspection, maintenance, servicing and requisite inspection of pumps, motors, water level controls etc. shall totally lie with the bidders for ensuring smooth working and serviceability of the pumps, motors and other connected electrical switch boards/cable etc. of the system.
- 5.4.7 All pumps and motors shall be serviced by experienced mechanic/electrician once a month.

- 5.4.8 Any leakage due to pumps or otherwise is to be checked and corrective action should be taken immediately. The bidder 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.
- 5.4.9 Pump and motor shaft and coupling should be periodically checked for alignment and tightness of nuts and bolts.
- 5.4.10 Motor terminal should 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.
- 5.4.11 Bidders shall ensure proper ground earthing of motor and requisite corrective action is to taken.
- 5.4.12 The bidders 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, extra workmen shall be arranged by the bidder within quoted rates.
- 5.4.13 Maintenance of logbooks indicating daily starting/stopping of various pumps, suction and discharge pressures etc., as required.
- 5.4.14 All the monthly maintenance bills are to be submitted to MMTC along with monthly roster, register, log book to MMTC.

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# 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.
- 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.
- 6.3 Operation of D.G. set.
- 6.4 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.
- 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.
- 6.6 Maintenance of electric supply to central air-conditioning plant.
- 6.7 In areas occupied by users other than MMTC, maintenance of distribution switchboard of rising mains is included.
- 6.8 Maintenance of lightning arrestor and aviation light and glow sign board etc.
- 6.9 Preventive maintenance of electrical installations.
- 6.10 Maintenance/repair/replacement of cables/interconnecting cables as required.
- 6.11 Overhauling and periodical maintenance of HT/LT switch gears/panels.
- 6.12 The following items are specifically excluded from the scope of this section.
- a) Addition/new work after award/commencement of maintenance of contract.

- b) 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 that ten tube light fittings in a month.
- c) 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.
- 6.13 The bidders shall provide supervisor, sufficient experienced workmen holding valid license(s) for operation and maintenance under above-said clauses.

#### 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 Bidder shall ensure efficient attending of the emergency situations, 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 Official-Incharge or from occupants/users.
- 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 bidders in case the rates cannot 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 bidders 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 bidder 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 bidder within the quoted rates.
- 6.6 Bidder 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 Bidder shall work out time schedule for carrying out preventive maintenance in consultation with Official-Incharge.
- 6.7.2 The bidder 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 Bidder 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 bidder 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 bidders within quoted rates.
- 6.10.3 The bidder 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 bidders and fuel for operation work will be supplied by MMTC. The bidders 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.

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### 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.

		SHIFTS			
SL.NO	CATEGORY	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 additional staff required for emergency shall be arranged as and when required depending upon the quantum of work/complaints within the quoted rates.

Signature of the bidders/bidders

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 pointsb) Fan and exhaust fan point for similar10 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
 g) Earthing stripes and wires
 h) Lightning conductors
 12 sets.
 Lot
 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.

I) 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.

## (SCHEDULE OF QUANTITIES)

Sl. No.	Description of items	Unit	Period/	Rate	Amount
			Qty	(Rs.)	(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 6.12 – a, b, c) 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 – a, b, c for items excluded from Scope)				

MMTC LIMITED SIGNATURE OF BIDDERS &

**RUBBER STAMP**