

**Our Ref: TI/G-50:3**

**Date: 5 Dec 2006**

**Subject: Annual Contract for Maintenance and Operation of the following:**

- a) HT/LT substation, 180 & 160 kVA Diesel Gensets, Water lifting Pump sets and LT panels along with various types of electrical fittings**
- b) Fire Fighting System**

**Dear Sir(s),**

1. Sealed item rate tender of two bid system for the above subject works is invited from eligible contractors by National Institute of Training for Standardization (NITS), A 20-21, Institutional Area, Sector 62, NOIDA up to 1600h on or before 28 Dec 2006. The tender document-two bid system- is to be submitted in two separate envelopes each sealed and clearly identified as to envelope number and contents as indicated below and addressed to “Section Officer (Administration)” with address as above. Both the envelopes shall be contained in a large envelope super scribed **Tender Document for Annual Contract for Annual Contract for Maintenance and Operational of the following:**
  - a) HT/LT substation, 180 & 160 kVA Diesel Gensets, Water lifting Pump sets and LT panels along with various types of electrical fittings**
  - b) Fire Fighting System (including routine re-charging of Fire Extinguishers**
2. The Technical Bid shall be opened on the next day at 1500hrs. The representatives of the contractors may be present at the time of opening of the tender, if interested. The time and date of opening of the Price Bid will be intimated later to all the contractors qualifying in the Technical Bid.
3. Any particulars of information regarding the proposed work can be obtained from the Section Officer (Admn) of NITS on any working day during office hours.
4. The tender document can also be either downloaded from our website < [www.bis.org.in](http://www.bis.org.in) >

Section Officer (Administration)

**TENDER DOCUMENT  
FOR  
ANNUAL CONTRACT FOR MAINTENANCE AND OPERATION OF THE  
FOLLOWING**

- a) HT/LT substation, 180 & 160 kVA Diesel Gensets Water lifting Pump sets and LT panels along with various types of electrical fittings**
- b) Fire Fighting System**

**Installed at National Institute Of Training For Standardization, A 20-21 Institutional Area, Sector 62, NOIDA(UP)-201 307**

**Tender Due Date : 28 Dec 2006 (up to 1600 hrs)**

**Technical Bid Opening Date : 29 Dec 2006 – 1500 hrs**

This tender document contains the following chapter:

- 1. Chapter -1 Instructions of bidders
- 2. Chapter -2 Conditions of contract
- 3. Chapter- 3 Schedule of requirements
- 4. Chapter -4 Specification and allied technical details
- 5. Chapter -5 Price schedule (to be utilized by the bidders for quoting their prices)

Tender Document issued to \_\_\_\_\_

Signature of the Issuing Authority

## **CHAPTER- 1: Instruction to Bidders**

1. Technical Bid of Tender Document: Each page shall be duly signed by the tenderer as a token of their acceptance of the Technical and Contractual details, including tender form duly filled in, complete details and description, including all data to be supplied by the tenderer as specified in the information and instructions to the tenderers. The Envelope No. 1 shall also contain Earnest Money Deposit in the form of crossed Demand Draft of Rs. 10 000.00 in favour of Bureau of Indian Standards, payable at New Delhi/Noida and forwarding letter of the contractor. The forwarding letter of the contractor should contain the following annexure in support of their eligibility:

Annexure 1 – Documents indicating a set up of the organization, partnership, proprietorship, Private Ltd., Public Ltd. etc.

Annexure 2 – Valid enlistment with CPWD/MES/Railways/Public Sector Undertakings, other Govt. Bodies.

Annexure 3 – Details of works of similar nature carried out in Central or State Govt. Bodies/Departments, Public Sector Undertakings, MES, Railways in the last 7 years ending on 31 March 2006, with value of the work undertaken.

Annexure 4 – Details of tools, tackles, plant, machinery and technical personnel available with the organization.

Annexure 5 – Copy of valid ITCC certificate.

Annexure 6– Copy of Registration with Works Contract Cell of Sales Tax Department, Noida/ NCT of Delhi

Annexure 7 – Proof of financial turnover achieved along with copy of balance sheet of previous three financial years ending 31 March 2005.

Annexure 8 – List of on-going works with their financial value.

Annexure 9 – List of arbitration cases (if any)

Annexure 10- Valid Electrical License

Annexure 11-Certificate of training/experience in fire fighting systems from recognized Institute.

2. Relevant information/certificates called for should be annexed to the tender. Non-receipt of any information or certificates with the tender may entail rejection of the tender.
3. Certificates should clearly indicate the scope and nature of work undertaken and the value of various components of work as executed, in order to confirm conformity to the defined similar works. The certificate should be attested by the issuing authority with stamp.
4. Similar works means works related to the Maintenance and Operation of:
  - a) **HT/LT substation, 180 & 160 kVA Diesel Gensets , Water lifting Pump sets and LT panels along with various types of electrical fittings**
  - b) **Fire Fighting System**
5. The intending tenderers are advised to visit the site of work so as to be familiarized with site conditions before quoting the rates and may obtain any information about the subject work from the Section Officer (Admn) of NITS, Noida on any working day during office hours.
6. Sealed tender should be sent and delivered in person and tenders sent by registered post will not be accepted.
7. The tender shall be accompanied by an Earnest Money Deposit of Rs.10, 000.00 in the form of crossed Demand Draft drawn in favour of “Bureau of Indian Standards” payable at New Delhi / Noida from any Nationalized Bank. Cheques will not be accepted.
8. The tender should remain valid for an acceptance period of 90 days from the date of opening of the tender.
9. Canvassing in any form will entail disqualification.
10. Rates quoted by the tenderer shall be firm and inclusive of all levies, excise duty and sales tax, any other tax etc. No. escalation in price would be permitted on any ground.

11. Price bids of tenderers who do not fulfill the above requirements shall not be opened. Required documents should be submitted strictly as prescribed. Original documents may be required for verification of the above claims at the time of opening of the technical bids.
12. General Terms and Conditions of the Contract to be fulfilled by the eligible contractor are enclosed.
13. List of Equipments installed at the premises of NITS is enclosed for filling the tender by the tenderer (see Chapter-3).
14. Scope of Work and Maintenance Schedule of the Work to be done at NITS is enclosed (see Chapter-3).
15. Format of the letter to be submitted along with the tender by the tenderer is enclosed.
16. The firm without having previous experience of HT, LT, DG set, AMP Panel and fire fighting systems etc. will not be considered.
17. This envelope shall be super scribed "Envelope No. 1 – Technical Bid for Annual Contract for Maintenance and operation"

## **CHAPTER -2: General conditions of Contract**

1. Tenderer will have to return all the documents issued to them while submitting their tender duly stamped and signed as per General Terms and Conditions enclosed.
2. The Earnest Money deposited by the successful tenderer shall be retained and it will be adjusted against the performance security deposit. Performance security deposit shall be 10% of the annual payment and shall have to be deposited immediately after award of work by the successful bidder.
3. No interest shall be paid on performance security or earnest money.
4. NITS reserve the right thereto without assigning any reason:
  - a) Accept or reject any or all tenders in whole or in part;
  - b) Increase or decrease the quantities of any item of the work and the successful tenderer shall perform the same at the rates quoted.
5. Time period of contract will be for two years from the date of award of work contract.
6. TDS and any other taxes as applicable from time to time shall be recovered by NITS from the bills submitted by the contractor. Any change in the rate of TDS shall be to the contractor's account.
7. If the services rendered by the contractors or performance of the persons deputed by the contractor is not found to be satisfactory by NITS, the NITS reserves the right to terminate the contract by giving 15 days notice without assigning any reason.
8. Successful bidder will be required to submit the Letter of Acceptance within a period of 15 days of receipt by him of notification of award of work. The Letter of Acceptance will be deemed as binding Contract between Contractor and NITS in respect of all terms and conditions contains in this tender document.
9. The contractor shall be responsible for any loss/damage to the materials by his staff deployed for duty.

10. The contractor shall abide by the regulations/requirements meant for security dept and strictly follow the rules. NITS security staff will have the right to check, search or interrogate any contractor's material while entering/leaving the NITS premises for purpose of security.
11. If the contractor fails to maintain required number of qualified manpower, the contractor shall be liable to pay penalty at double the notified rates in force for the category of personnel concerned.
12. The contractor shall make all payment including PF, ESI etc. due to the staff deputed at NITS directly and it will be his sole responsibility to observe the statutory rules in this regard. The placement of any staff at NITS shall not amount to supply of Contract Labourers.
13. The contractor shall depute adequate staff to ensure round the clock on all days for preventive and break down maintenance services but not less than follows:
  - i) Electrical System
    - a. Electricians One in each shift of 8 hours
    - b. Helpers One in general shift of 8 hours
  - ii) Fire Fighting System
    - a. Supervisor One in general shift of 8 hours
    - b. Semi-skilled staff with the knowledge in fire fighting systems One in each shift of 8 hours
14. The contractor shall submit the bill every month.
15. The contractor shall be wholly responsible for theft, burglary, fire or any other mischief done by their staff.
16. NITS reserve the right to verify the bonafides of the contractor's staff deputed at NITS and would be justified in asking for their replacement for bonafides reasons. The decision of the NITS in this regard will be final.
17. Any claim arising on account of damage, compensation or expenses payable in consequences of any accident or injury sustained by any workman of contractor or any other person, whether in the employment of the contractor or not; while in or upon the said works or site of the same, the NITS shall not be bound to entertain any claim or such claim brought under the Workman's Compensation Act.

18. Contractor will be responsible for coordinating with any agency for the work and for keeping the system running uninterruptedly.
19. The contractor will ensure that at no time there is any violation of infringement of any rules and regulations of the bye laws under Indian Electricity Act and or under the UPPCL Rules for Electrical System as well as Fire Fighting System.
20. The entire system including substation, DG set, pump sets and pump room incorporating fire fighting pumps etc. shall be kept clean and in perfect running condition/order at all times (during day and night). All the electrical regulations as per Indian Electricity Rules, Rules and Regulations for Fire Fighting System laid down by the State Govt./Noida Authority shall be followed.
21. Miscellaneous:
  - a. The staff to be provided by the contractor shall be disciplined, polite and courteous.
  - b. They will not misbehave with any of NITS staff members and will not enter into any unlawful activities in the premises.
22. Contractor should coordinate with UPPCL officials in case of supply voltage being low or any other problem faced by the NITS, i.e. power failure, meter reading etc.
23. Routine refilling of fire extinguishers of CO<sub>2</sub> and re-charging of other fire extinguisher on due dates shall be the responsibility of the Contractor on due dates.
24. Cost of refilling/re-charging of fire extinguishers of used for actual operation shall however be paid to the contractor.
25. The contractor shall submit weekly maintenance report and will bring to the notice of the NITS officials any matter which needs their attention as and when necessary.
26. Any repair or replacement necessitated due to accidental damage on account of natural calamity or due to any other causes beyond control in any such eventuality the contractor



shall submit the details of repair/replacement that may be necessary for maintaining satisfactory services along with estimated expenditure towards the same.

27. The contractor will be required to make safety tests recommended or directed by the Statutory Authorities at his own expenses.
28. The contractor shall not assume possession or control of any electrical installation/equipment or its components/parts and the NITS continues to be its exclusive owner thereof.
29. The full particulars of the personnel to be deputed by the contractor including their names and addresses shall be furnished to the NITS before they are actually deputed.
30. The local representative of the contractor shall be the in-charge of the deployed personnel and shall be responsible for the efficient rendering of the services under contract.
31. The local representative of the contractor will visit daily and a visit would also be made weekly by the contractor's head office field staff. During the weekly visit, contractor's representative will also see the officer dealing with services under the contract for mutual feedback regarding the work performed by his personnel and removal of deficiencies, if any, observed in the working.
32. The contractor shall undertake to ensure that any replacement of the deputed personnel, as required by the NITS for any reason specified or otherwise, shall be effected promptly by the contractor without any additional cost to the NITS. If the contractor wishes to replace any of the personnel, the same shall be done with prior concurrence of the NITS at his own cost.
33. In case of any loss that might be caused to the NITS due to lapse on the part of the deployed personnel in discharging their responsibilities will be borne by the contractor and in this connection, the NITS shall have the right to recover the amount of such loss besides imposition of penalty. In case of frequent lapses on the part of the deployed personnel by the contractor, the NITS shall be within its right to terminate the contract forthwith or take any other action without assigning any reason whatsoever.

34. In the event of deputed personnel being on leave/absent, the contractor shall ensure suitable alternative arrangements to make up for such absence.
35. Taxes as applicable shall be deducted from his bill as per rules.
36. The tools, tackles provided by NITS, if any shall be maintained in working condition all the time and shall be returned to NITS after the contract is terminated/over.
37. Responsibilities of the NITS
  - a) NITS shall agree to provide space/room for their staff and for keeping the required tools and tackles.
  - b) Allow admittance to contractor's authorized maintenance staff and technical personnel.
38. The court at Noida alone shall have jurisdiction in any matter arising out of relating to or touching this agreement.

### **CHAPTER -3: Schedule of Requirements**

1. The contractor is required to make arrangement to provide each Technician with the tools and tackles (insulation tapes, screw drivers, pliers, test lamp with holder etc.), uniforms and shoes, petty consumables like cloths for cleaning, to carry out the subject work. All consumables like transformer oil, materials required for servicing of 180 & 160 kVA Diesel Gensets, pump sets, Transformers, ACB's, OCB's changeovers etc. shall be supplied/provided by the NITS.
2. The contractor shall make arrangements to carry the materials required or provided by NITS for repair and maintenance purposes.
3. The contractor shall keep the following minimum testing equipment in the room provided to them at site:
  - a. 1000 Volts tester One
  - b. Multimeter (D.C.) One
  - c. Tong Tester One
  - d. Earth Meggar One
  - e. The necessary requisite equipment for checking of fire control panel
4. In addition to the above, if required, the contractor should organize at their cost all other testing equipment/tools etc. like HV Tester, Meggar, Secondary test set etc. wherever it is required for the work.
5. Qualification and experience of various categories of staff deputed by contractor shall be as follows:
  - a. Electrician (skilled): Having certificate in Electrician/Wireman trade issued by ITI/Local authorities/Govt. of India and minimum 3 years experience in this field and in operation of DG set.
  - b. Helpers (semiskilled): Minimum 3 years experience in this field.
  - c. Supervisor for fire fighting systems having requisite qualifications, experience certificate (min. 3 years) indicating satisfactory execution of the by him. Additionally, he/she shall also have the knowledge and experience in electrical systems as above.
  - d. Supporting staff for the supervisor for fire fighting systems should be semi-skilled and have knowledge/certificate of 3 years experience in this line.
6. The contractor shall maintain log book, log sheet, record of temperature of oil of transformer, electric load etc. Log book for running of DG set shall also be maintained by the contractor.

## **LIST OF EQUIPMENT FOR OPERATION/MAINTENANCE**

### **A. Electrical System**

1. HT/LT substation (11 kV/415 V, 400 kVA) including 3 HT Panel – i) Incoming from Metering, ii) Outgoing transformer, iii) Battery Charger, and iv) Generator Panel, Emergency Panel, LT Panel, Capacitor Panel
2. 180 & 160 kVA Diesel Gensets coupled with Greaves make Engine and Kirloskar & Jyoti Ltd. Alternator
3. 6 numbers of water lifting pump sets (2 Pump sets and one submersible for supply of water to office building as well as hostel building, 3 Pump sets of which one is Diesel Operator for fire fighting)
4. 2 LT Panels receiving supply from two transformers near HT/LT substations.
5. 3 Pump sets of the Fountain opposite to office building entrance.
6. LT Panels in the office building.

### **B. Fire Fighting System**

- i. 28 Fire Hydrant Points with Hose reels and requisite number of hose pipes
- ii. 44 Fire Extinguishers of DCP type
- iii. 27 Fire Extinguishers of CO<sub>2</sub> type
- iv. 5 Fire Extinguishers of Water type
- v. Fire Fighting Pumps (one main electrically operated 30 HP, one Jockey Pump 3 HP and one Diesel Pump)
- v. Fire Control Panel and Battery system
- vi. Safety Tanks of 5000 ltr capacity, Diesel Tank of 100 ltr. Capacity and 8 number of Buckets filled with sand

## **SCOPE OF WORK**

**A. Providing trained and experienced Supervisors for Electrical as well as Fire Fighting Systems, Electrician and Attendants/Helpers for the following services:**

**B. Operation and Maintenance of Electrical System**

1. Maintenance and operation of HT/LT substation (11 kV/415 V, 400 kVA) including 3 HT Panel – i) Incoming from Metering, ii) Outgoing transformer, iii) Battery Charger
2. Routine maintenance of 180 & 160 kVA Diesel Gensets coupled with Greaves make Engine and Kirloskar & Jyoti Ltd. Alternator and operation of the same as and when required.
3. Operation and routine maintenance of 6 numbers of water lifting pump sets (2 Pump sets and one submersible for supply of water to office building as well as hostel building, 3 Pump sets of which one is Diesel Operator for fire fighting)
4. Operation and maintenance of 2 LT Panels receiving supply from two transformers near HT/LT substations.
5. Operation and maintenance of 3 Pump sets of the Fountain opposite to office building entrance.
6. Maintenance of LT Panels as well as distribution boards in substation, pump room, hostel building, staff quarter and main office building.

**C. Operation and Maintenance of Fire Fighting System**

1. Maintaining continuously in ready to use condition and operation (when required) of 28 Fire Hydrant Points with Hose reels and requisite number of hose pipes
2. Maintenance and re-charging (on expire of charge) of:  
44 Fire Extinguishers of DCP type  
27 Fire Extinguishers of CO<sub>2</sub> type  
5 Fire Extinguishers of Water type
3. Fire Fighting Pumps (one main electrically operated 30 HP, one Jockey Pump 3 HP and one Diesel Pump)
4. Fire Control Panel and Battery system
5. Safety Tanks of 5000 ltr capacity, Diesel Tank of 100 ltr. Capacity and 8 number of Buckets filled with sand

## **CHAPTER:-4: Maintenance of Schedule**

### **A. Electrical System**

1. HT switch gears (OCB) and LT switch gears – To be maintained and operated in accordance with IS 10116 and regulations/guidelines given in the relevant statutory rules.
2. Transformers (11 kV/415 V/400 kVA) – To be maintained and operated in accordance with IS 10028 and regulations/guidelines given in the relevant statutory rules.
3. 180 and 160 kVA Diesel Gensets – Routine operation and maintenance as given in the manufacturer's guidelines with necessary operation as and when required (excluding servicing performed by authorized service agent of OEM).
4. WATER LIFTING PUMPSETS
  - a. Routine Maintenance of 3 Pump sets of the Fountain opposite to office building entrance.- such as cleaning, replacement of gland, oiling/greasing and minor adjustments of the components/parts in order to keep them in good working conditions,
  - b. Operation of the above pumps as and when required/scheduled by NITS at any time during day or/and night.
5. Maintenance of LT Panels as well as distribution boards in substation, pump room, hostel building, staff quarter and main office building.

### **B. Fire Fighting System**

1. Running of Pump for 10 minutes weekly
2. Automatic start of jockey pump and main pump at preset pressure
3. Greasing of pump bearings, checking of glands and non-return valve.
4. Maintenance of Diesel engine and its batteries
5. Checking of all fire extinguishers provided at various locations for their serviceability and re-charging on expiry/leakage.
6. Checking of hose reels and hose pipes, underground water tank.
7. Functional check in every quarter of the entire fire fighting system.
8. Overhauling and cleaning of fire control panels.

## **CHAPTER:-5**

### **NATIONAL INSTITUTE OF TRAINING FOR STANDARDIZATION NOIDA**

#### **ENVELOPE 2: PRICE BID**

**Name of the work : Maintenance and Operation of a) HT/LT substation, 180 & 160 kVA Diesel Gensets , Water lifting Pump sets and LT panels along with various types of electrical fittings b) Fire Fighting System installed at NITS, A 20-21, Institutional Area, Sector 62, Noida for two years**

#### **CONTENTS**

1. Envelope No. 2 shall contain only Price Bid of Tender Document, that is, the copy of schedule of work and prices duly filled in and signed by the tenderer. No commercial or technical condition or qualification of any sort shall be indicated by the tenderer in this envelope, otherwise the tender shall be summarily rejected. This envelope shall be super scribed “**Envelope 2 – Price Bid for Annual Contract for Maintenance and operation of the following:**
  - a) **HT/LT substation, 180 & 160 kVA Diesel Gensets Water lifting Pump sets and LT panels along with various types of electrical fittings**
  - b) **Fire Fighting System**
2. The rates quoted shall be firm throughout the period of contract.
3. Schedule of Work and Price to be filled by the tenderer is enclosed.

## **SCHEDULE OF WORK AND PRICE**

**(To be enclosed with price bid in a separate cover marked “Envelope 2”)**

**Name of the work : Maintenance and Operation of a) HT/LT substation, 180 & 160 kVA Diesel Gensets , Water lifting Pump sets and LT panels along with various types of electrical fittings b) Fire Fighting System installed at NITS, A 20-21, Institutional Area, Sector 62, Noida for One Year**

<b>Sl. No.</b>	<b>Description</b>	<b>Rate/Month</b>	<b>Total annual amount</b>
1.	Maintenance and operation of HT/LT substation (11 kV/415 V, 400 kVA) including 3 HT Panel – i) Incoming from Metering, ii) Outgoing transformer, iii) Battery Charger.		
2.	Routine maintenance of 180 & 160 kVA Diesel Gensets coupled with Greaves make Engine and Kirloskar & Jyoti Ltd. Alternator and operation of the same as and when required.		
3.	Operation and routine maintenance of 6 numbers of water lifting pump sets (2 Pump sets and one submersible for supply of water to office building as well as hostel building, 3 Pump sets of which one is Diesel Operator for fire fighting)		
4.	Operation and maintenance of 2 LT Panels receiving supply from two transformers near HT/LT substations.		
5.	Operation and maintenance of 3 Pump sets of the Fountain opposite to office building entrance.		
6.	Maintenance of LT Panels as well as distribution boards in substation, pump room, hostel building, staff quarter and main office building.		



Sl. No.	Description	Rate/Month	Total annual amount
7.	28 Fire Hydrant Points with Hose reels and requisite number of hose pipes.		
8.	44 Fire Extinguishers of DCP type		
9.	27 Fire Extinguishers of CO <sub>2</sub> type		
10.	5 Fire Extinguishers of Water type		
11.	Fire Fighting Pumps (one main electrically operated 30 HP, one Jockey Pump 3 HP and one Diesel Pump).		
12.	Fire Control Panel and Battery system.		
13.	Safety Tanks of 5000 ltr capacity, Diesel Tank of 100 ltr. Capacity and 8 number of Buckets filled with sand.		
14.	Taxes		
15.	<b>Total (including taxes)</b>		

**NOTE:**

1. Evaluation of lowest bidder shall be based on total annual cost for all items combined taking into account existing requirements.
2. Individual item cost shall be reckoned for any increase in work item during the period of contract.
3. No escalation shall be permitted during the period of contract except for increase/addition of statutory taxes, if any.

**TENDER TO BE SUBMITTED ON OR BEFORE 1600 h ON 28 Dec 2006**

Section Officer (Administration)  
National Institute of Training for Standardization  
Bureau of Indian Standards  
A-20-21, Institutional Area  
Sector – 62  
Noida 201 301

Dear Sir,

Having examined the form of contract, nature, quantum of work relating to the above mentioned work and having visited and examined the site of the proposed work and have acquired the requisite information relating thereto as affecting the tender invited by you on behalf of the National Institute of Training for Standardization, I/We, the undersigned hereby offer for providing qualified Technicians and Attendants to undertake the operation and maintenance services strictly in accordance with the contract documents .

I/We undertake to provide qualified Technician and Attendants for services as desired on the annual basis. We also agree to submit the bill on monthly basis and accept the payment accordingly.

I/We further agree to the retention of earnest money which would be adjusted against the security deposit and to all statutory deductions in force.

Yours faithfully,

Name of the Partner of the Firm

Or

Name of person having Power of Attorney to sign the Contract.

(Copy of the power of Attorney to be submitted  
which will be compared with the original in case  
the Tender is awarded)

along with seal of the firm.