

Special Conditions

Name of Work: - Providing all inclusive annual service maintenance of H.T. Sub - station at Samras Hostel Building-Bhavnagar, Dist-Bhavnagar

- (1). The contractor has to attend the complaint immediately. In case of failure on part of contractor, the department is at liberty to impose penalty @ Rs.1500/- per day on account of delay in attending the complaint/rectifying the defects and deduct the same either from the bills submitted by the contractor or at its discretion from the Security deposit for any damage caused to department's property by the contractor or for unsatisfactory work.
- (2). The contractor will ensure that all types of safety measures as per norms and advised by Government are taken care of during the performance of electrical work.
- (3). The Contractor shall be responsible for proper maintenance of all Registers, Records and Accounts so far as these relate to the compliance of any statutory provisions/obligations. The contractor shall be responsible for maintaining record pertaining to payment of wages Act and also for depositing the P.F. contributions, if required, with authorities concerned.
- (4). Above maintenance also includes labour required for digging the cable and relaying the same, as such the contractor has to quote the rate accordingly.
- (5). The contractor has to arrange all the testing equipment required, on his own. T&P for daily use will have to be made available with his man.
- (6). Preventive maintenance is to be carried out along with normal maintenance as required even on week recess/holiday and the record of same has to be maintained in a register.
- (7). That the contractor shall comply with the requirement for Electrical Inspector during annual inspection or any visit. However, expenditure if any shall be borne by the Department.
- (8). The contractor's personnel shall take all monsoons and other seasonal precautions, to protect the electrical installation. In case any expense is involved in such precautions, the Department shall be consulted beforehand.
- (9). Contractor shall follow following maintenance schedule but not limited to this and shall prepare Log book for the same

- (10) After Issuance of Work Order contractor will have to remain continuously in contact with Samras Hostel authority and resolve complaint immediately. After written confirmation of Samras Hostel authority regarding satisfactory work on going/completion, procedure regarding R.A./Final Bill will be done.

9.1. HT PANEL / LT panel & LINE:

- 9.1.1. Solid earthing must be done after making the bus bars dead. Only licensed and registered technician/ supervisor should attend to H.T System.
- 9.1.2. General cleaning of the H.T. Circuit Breaker, L.T. switchgears inside and outside once in a month.
- 9.1.3. Checking of Power & auxiliary contacts. Minor fittings to be cleaned with emery cloth once in six months.
- 9.1.4. Greasing/oiling of the moving/sliding mechanism of VCB once in six months.
- 9.1.5. Tightening of termination nuts & bolts once in six months.
- 9.1.6. Checking of closing and tripping mechanism of H.T. Circuit Breaker & testing of relays once in Three months.
- 9.1.7. Measuring insulation resistance of bus-section i.e., phase to phase and phase to earth once in Six months.
- 9.1.8. Checking, cleaning, testing and calibration of relays in H.T. Panel / LT panel for protection once in a Three month.
- 9.1.9. For panel, insulation test for phase to phase and phase to earth with appropriate size megger are to be carried out once in six months and to furnish certificate.
- 9.1.10. To check overheating, crack in bituminous compounding once in a month.
- 9.1.11 Check for working of all indicating lamp & meter and take corrective action as required once in a month.
- 9.1.12 To Measure & Record IR of HT & LT Cable at every Three Month Duration.
- 9.1.13 If Required Rubber matting will have to change by agency without any extra cost.

9.2 TRANSFORMER (1000 KVA-2 No.):

- 9.2.1. Various connections of the transformer e.g., L.T Connections neutral & body earthing is to be checked at least once in three months and if found loose, it is to be tightened.
- 9.2.2. Bushings are to be examined for crack and dirt deposit and are to be cleaned or replaced as required once in a month.

- 9.2.3. Checking of neutral earth and equipment body earth at least once in a Three month.
- 9.2.4. Insulation testing of the following once in a Six Month
- Between L.T and Earth with appropriate size megger
 - Between H.T and Earth with appropriate size megger
 - Between H.T and L.T winding with appropriate size megger
- 9.2.5. To check noise/ humming sound, temperature rise (over heating) and crack in bituminous compound once in a month.
- 9.2.6. General cleaning of transformer to keep it free from dust and soot's once in a month.
- 9.2.7. The Agency is liable to furnish such Testing certificates if required.
- 9.2.8. Checking of oil leakages and attending of same as required once in a month.
- 9.2.9. Monitoring of oil level and corrective action as required once in a month.
- 9.2.10. Check for working of all indicating lamp & meter and take corrective action as required.
- 9.2.11. Check oil and winding temperature gauge for functioning and corrective action as required.
- 9.2.12. Complete routing testing of transformer is to be carried out once in six months as per the instruction given by the engineer in charge.
- 9.2.13. Checking of oil BDV and corrective action as required once in three months.
- 9.2.14. Check & ensure the functioning of Buchholz relay and corrective action as required once in a month.
- 9.2.15. All applicable test of oil is to be carried out and filtering of oil as required once in a year.

9.3. EARTH ELECTRODE AND EARTHING SYSTEM:

- 9.3.1. Megger Test to find out the leakage voltage between the Earth and neutral of the electrical installation (Equipment and neutral separately) to be carried out at least once in a three Months.
- 9.3.2. Further, checking of earth resistance of Earth pits shall also be conducted once in six months.
- 9.3.3. The Agency is liable to furnish Test certificate in this regard.
- 9.3.4. Checking of earth leads to all equipment/panels/DB for its continuity after tightening all connection once in a three Month.

- 9.3.5. In case the earth resistance found higher than prescribed value then it has to be brought to the notice of the Department and take corrective action as required. The Agency is liable to furnish Test certificate in this regard.
- 9.3.6. Checking of earth continuity of all testing machine/equipment, 3 phases, 430V/440V or every section once in six months.
- 9.3.7. The earth pits have to be frequently watered. If the resistance is found to be more than the prescribed value then the contractor should ensure to provide additional salt / charcoal, if required. Contractor shall quote the rates accordingly.
- (20). Minor repairing/maintenance works are included in this work, however for Major work Contractor will inform prior to department as proper maintenance reduces the risk of Major break down. So, contractor shall quote the rates accordingly.
- (21). The contractor should inspect the installation before quoting the rate as the installation shall be handed over on, as is available basis.
- (22). The contractor has to make the installation up to date within the first week of taking over the installation and keep it up to date during the whole of his maintenance period.
- (23). At the end of contract, the contractor will hand over the installation in perfect order and his last payment will be released only after handing over the installation in good condition.
- (25). Acceptance of above special conditions with duly signed by agency shall be submitted along with tender. Failed to do this is liable to rejection of tender.

Signature & Seal of the Contractor/Agency

Deputy Executive Engineer
R & B Electrical Sub Dn
Bhavnagar