

## **Duties of Senior Divisional Electrical Engineer (TRD).**

Sr.DEE/TRD is the officer in immediate charge of the Traction Distribution section in a Division, responsible for all technical and organizational matters connected with the efficient maintenance and operation of the power supply installations, OHE and RC equipment. He should be intimately acquainted with the technical details, performance rating and operating and maintenance problems of the installations under his charge. His chief duties will be as under:-

- a) General planning and supervision to ensure efficient and safe maintenance and operation of the installations under his charge in accordance with prescribed schedules and regulations.
- b) Study of the day-to-day technical and organizational problems of operation and maintenance and initiation of appropriate measures to deal with these Man-powers planning for effective maintenance at minimum cost.
- c) Careful statistical analysis and compilation of details of all defects and failures occurring and initiation of appropriate remedial steps if these are attributable to inadequate or improper operation or maintenance or mismanagement by staff. Where defects are attributable to improper design or manufacture, or where modifications or proposed remedial measures require PCEE's approval, prompt submission of detailed analysis together with recommendations, seeking such approval.
- d) Watch on the progress and completion of all approved modifications as well as the efficacy of such modifications.
- e) Watch on the availability of spare parts and stores required for maintenance and initiation of stores action well in advance for procurement of items involving prolonged delivery and effective follow-up action to ensure timely procurement. Also watch the behavior of equipment to assess their anticipated life and timely programming of replacements.
- f) Overall co-ordination at the divisional level with the operating and other departments to plan power blocks required for maintenance of OHE and careful planning of maintenance work to make the best use of such blocks.
- g) Inspection of his jurisdiction as under-
  1. Detailed visual inspection of the OHE by push trolley, motor trolley or OHE Inspection Car as often as possible.
  2. Detailed inspection of traction sub -stations, switching stations and other power supply and RC installations, in particular protective gear, once in six months.
  3. Frequent surprise checks of maintenance gangs at works including gangs working at night. At least one night inspection and one day inspection will be carried out by him.
  4. General inspection of all subordinate offices under him once a year, including test check of Stores and tools and plant items.
  5. At least one current collection test in a year throughout this jurisdiction on main lines.
- h) Liaison with power supply authorities in regard to important matters that cannot be dealt with at lower levels.
- i) Preparation of plans and estimates for works involving the traction distribution system and scrutiny of plans and estimates for works of other departments affecting the traction distribution system. For minor works such as small changes in the layout of lines in yards or alignments, provision of OHE for one or two additional loops, cross-overs etc. designs will

be worked out at the divisional level in accordance with approved standards and approval of PCEE obtained before the works are executed. Designs for major works will however, be worked out in PCEE's office.

- j) Arrange adequate training of staff under him in the correct methods of maintenance and Operation.
- k) Careful preparation of the budget for traction distribution section and control over expenditure for operation and maintenance. In addition to scrutiny and passing of power supply bills, study of the energy consumption and maximum demand figures and liaison with the operating department and Rolling Stock section to keep expenditure for these under effective control.
- l) Special watch on the adequacy and alertness of the organization for dealing with failures and break-downs, personal supervision of operations in the event of major failures affecting train services or involving outage of essential equipment, so as to effect quick restoration.
- m) Close association with tests and trials in the area under his jurisdiction and submission of prescribed reports.
- n) Ensuring by periodical and surprise inspections that rules and procedures laid down in the General and Subsidiary Rules, Manual of AC Traction, department codes and orders and circulars issued from time to time are being complied with by all staff under him and that they are performing their allotted duties efficiently.

### **Duties of DEE/ADEE TRD (In general)**

DEE/AEE (TRD) is the officer in immediate charge of the maintenance, operation and safety of all power supply installations, overhead equipment (OHE) and RC equipment in his jurisdiction and is answerable to Sr. DEE (TRD) in all matters connected there with.

In addition to assisting Sr. DEE (TRD) in his duties, his chief duties will be as under:-

- i) Efficient and safe upkeep and operation of the installations under his charge in accordance with the prescribed schedules including detailed planning of all maintenance works.
- ii) He should ensure that Traction Power Controller (TPC) takes effective and prompt action to restore services in the event of power supply interruptions or other failures of the distribution system affecting train services.
- iii) Close liaison with power supply authority's to ensure continuity of power supply.
- iv) Careful and prompt investigation of all recurring or major power supply interruptions and equipment failures and initiation of appropriate remedial measures.
- v) Preparation of preliminary plans and estimates called for by Sr. DEE (TRD) for works involving the traction distribution system, and scrutiny as called for by Sr. DEE (TRD) of plans and estimates for works of other departments in the section so far as they affect the system.
- vi) Personal and periodical checking of the break-down organization to ensure that it is in good fettle to deal with all break-downs.
- vii) Prompt implementation of instructions received from time to time including those contained in Inspection Notes of superior officers and keeping record of action taken against each item.

- viii) Careful scrutiny of statistical and other periodical returns before submission to Sr. DEE (TRD) and taking appropriate corrective action.
- ix) Effective co-ordination with officers and staff of other departments in matters that warrant joint action and similar co-ordination with officers of contiguous sections.
- x) Inspection of his jurisdiction as under:-
  - I. Detailed visual; inspection of the OHE in his section from observation dome/roof of OHE inspection car ones in six months. Similarly inspection from cab of locomotives shall also be carried out.
  - II. Detailed inspection of traction sub-station, Switching stations and other power supply installations, in particular, protective gear, once in 3 months.
  - III. Frequent surprise checks of maintenance gangs at work including gangs working at night. The musters for casual staff, if any should be checked and initialed.
  - IV. Random check of the procedure followed for imposition of power blocks to verify that all prescribed safety rules are being rigidly followed.
  - V. Periodic inspection of subordinate officers, including stores, at least once in six months.
  - VI. Current collection test over his entire jurisdiction at least once in six months.