

## **SOP- GENERAL MAINTENANCE**

**Purpose:** This Standard operating procedure (SOP) is developed for maintenance with respect to civil works, Electrical works, Plumbing and Sanitation.

**Scope:** Applicable to the entire campus.

**Responsibility:** Administrative officer (AO)

**Activities:** Receiving the complaints and identification of problem. Attending to the problem using the expertise of skilled workers (available in the institute or hired from outside), Inspection of maintenance works.

### **Details of activities:**

#### ➤ **Civil maintenance**

- Any general maintenance related problem is lodged in the designated register available with AO.
- AO categorizes the received complaint and identifies the problem,
- He carries out the inspection as necessitated.
- He initiates the action by deploying the concerned personal to attend the problem.
- Any material or parts required will be sought for approval of Director.
- If the work involves more financial support, quotations are invited from the vendors and best quote is selected for execution.
- The plumbing and sanitations related problems are en-routed through Maintenance Supervisor.

#### ➤ **Electrical maintenance**

#### **The following activities are involved in the maintenance of Power House.**

- Checking diesel in storage tank daily and top it up, if it is not up to the mark.
- Replenishing stock of diesel at least every 15 hours of run of each generator. To procure the diesel, the following procedure is followed.
- Putting up an office note by faculty-in-charge of power house to the Administrative officer in standard format for approval to purchase diesel and also for transportation.
  - After getting the approval from the Administrative officer, cash must be collected from the Accountant
  - Diesel for approved money is purchased and details are entered in stock register and bills are submitted to the office.
- Checking distilled water level daily and if any shortage is found, it must be refilled. For procuring the distilled water, the above procedure is followed.
- Checking water level in radiator daily and filling it, if it is necessary
- Checking lubricant oil daily
- Cleaning the generators daily with cotton waste
- Verifying daily for due dates of servicing of generators

- Maintaining load balance in three phases of generators
- Registering the number of working hours of each generator and going for maintenance once predetermined time is reached.
- Checking earth resistance and watering the earth pits monthly once
- Checking Radiator fan belt daily

**The following activities are involved in maintenance of transformer.**

- Noting down readings daily from Maximum Demand Indicators and KWH meters verifying whether the power factor is maintained nearer to unity or not.
- Cleaning the substation premises once in a week
- Painting the transformer and other auxiliary equipment once in a year
- Checking earth resistance and watering the earth pits weekly
- Checking H.T fuse daily and if it is found to be blown, the following procedure is followed.
  - Preparing a letter from faculty-in-charge requesting the local Assistant Divisional Engineer to replace the blown fuse with new one.
  - Accompanying and coordinating with the concerned line man while replacing the fuse.
  - Checking whether the fuse is replaced with correct rating.
- Checking B.D.V of transformer oil Yearly once
- Switching-on capacitor bank daily on commencement of institute work.
- Switching-off capacitor bank daily on conclusion of institute work.
- Prohibiting people from entering the Sub – Station.
- Conducting H.T inspection every year after receiving the instruction from concerned A.P. Transco authorities.

**The following activities are involved for general electrical equipment maintenance.**

- After identifying any problem related to electrical equipment, a requisition letter through concerned Head should be sent to the Director. Director will give the instruction to faculty in-charge to take up the work.
- In-charge will instruct concerned Electrician to carry out the work.
- If the work is beyond ability of electrician or if it requires, help from outside experts will be taken
- The electrician after completing the work, will report to the Faculty in-charge

➤ **EPABX Internal Telephone Exchange**

1. Check availability of spares regularly
2. After receiving the complaint from the individuals inform the same to the technician and discuss the problem and its solution.
3. Check the voltage at the telephone instrument end.
4. After that check the voltage at the Junction box and at the system end.
5. Rectify the problem where ever it is identified.
6. If the problem is related to the system, call the service engineer of the system and the supplier and rectify the problem.