

Schedule/Topics of 3 days Training Program for outsourced Technical Skilled workersDay-1**Session-I**

- Address by SE/P&M Concerned
- Introduction & Organizational Structure of PSTCL

Session-II

- Lay out of Sub-station
- Various equipments, switchgear installed i.e. Power Transformers, Circuit Breakers, Isolators, CT's, PT's, CR Panel, Earthing of Sub-station, Bus-Bars, LA's, DC Batteries etc.

Session-III

- Safety aspects in a Sub-station(Safety Manual of PSTCL)

Session-IV

- Operations Aspects in the Working of Sub-station as per P&M manual(Chapter related to operations of Sub-station)
- Issuing of Permits, earthing devices/sticks etc.

Day-2**Session-I & II**

- Maintenance of Sub-station equipment
- To check healthiness of in-service equipment & recording of various operational parameters during shift duty for Transformers.
- Breakers, LA's and Air Compressors etc.
- Recording of Energy data etc.

Session-III

- Operation of Fire-fighting equipment.
- Working of NIFPS System.
- Checking of DC battery to record Gravity and Cell Voltage etc.

Session-IV

- Working of Communications & various uses of Communication channels for data, protection & speech.
- Laying of Communication equipment in a Sub-station Yard & Control Room i.e. Wave Trays, CVT's, Protection Couplers, Carrier Rooms etc.

Day-3**Session-I**

- Introduction to Relays- various types of relays.
- Basic Protection & Testing of Power T/Fs on operation of Buchholz relay, Differential relay, REF relay etc.
- Action to be taken on operation of various relays by operational staff. Periodical testing of Sub-station.
- Importance & healthiness of DC in Protection System.

Session-II

- Interpretation of indicators on relays for eq. distance protection relays, Differential relays, REF relays, backup over current & earth fault relays etc.
- Action required to be taken by operation staff for recording correct indications etc.

Session-III

- Testing of oil, various parameters of oil to check its healthiness as per standards.
- Diagnostic Testing of Power T/Fs, LA's, CT's, CB's and interpretation of Test results.

Session-IV

- Interactive session
- Valedictory address by ASEs.