

Electric Station Operator
(Class Code 5524)

Task List

Inspection, Meter Reading, and Maintenance

1. Visually inspects equipment in hydroelectric power plants and electrical substations for cleanliness, proper operation, and irregularities in station configurations, or malfunctioning equipment in order to ensure a safe working environment.
2. Reads meters and gauges, in order to monitor operation status of station equipment, and to take appropriate action during routine and emergency situations.
3. Washes high voltage equipment/insulators using high-pressure water hoses as part of a wash crew in order to prevent damage caused by contaminants/sediments.
4. Hand wipes *de-energized* DC/AC equipment/insulators using a damp cloth/towel as part of a cleaning crew in order to prevent damage caused by contaminants/sediments.
5. Hand wipes, cleans, and changes fuses on *energized* high voltage equipment using appropriate safety gear and equipment (e.g., brushes) in order to ensure personal safety and proper equipment operation.
6. Manually replaces burned out indicating switchboard lights in order to keep track of station operating status.
7. Inspects batteries and low voltage DC circuits in electrical stations in order to ensure operational control.
8. Opens or closes switch on low voltage battery charging equipment, and related circuits in power stations to allow routine maintenance.
9. Takes periodic readings of indicating meters, recording meters, and other plant and station meters in order to record data to ensure personnel safety, and proper equipment and station/plant operation.
10. Conducts scheduled or as needed minor maintenance on electric and hydraulic equipment by replenishing oil levels, replenishing equipment lubrication, replacing filters, and removing moisture from air receiver tanks.

11. Performs periodic custodial duties at stations such as sweeping, dusting, and pulling of weeds in order to prevent damage to station equipment and maintain a clean environment.

Switching

12. Formulates switching plans by writing steps in a logical, thorough, and accurate sequence in order to meet switching objectives.
13. Conducts switching procedures in control rooms manually (e.g., pushing buttons, turning knobs), electronically via computer, and in switch yards by turning handles, pushing buttons, rotating cranks, and using a fiberglass or wooden switch pole to reach switch rack overhead and push or pull down/up on switches, in order to safely isolate and restore high voltage equipment/circuits, to provide a safe working environment that allows electrical work to be performed on energized equipment and to restore station to normal configurations once work is complete.
14. Verbally receives and repeats switching orders from load dispatchers and other operators in order to provide continuous/uninterrupted electrical service to customers and to allow for routine maintenance.
15. Observes operators who are performing necessary switching and related operations during routine or emergency situations to ensure accuracy and prevent accidents.
16. Operates circuit breakers, by manually operating control handles in order to provide a safe working environment when electrical work is performed on energized equipment, to restore configurations, and to test electrical systems in order to restore customer load.
17. Tags circuits, switches and valves by hand or by using an insulated tool/pole prior to issuing work authority in compliance with department and OSHA regulations in order to ensure personnel safety.
18. Performs electrical systems tests by closing and/or reenergizing circuits using a remote control as directed by load dispatcher in relayed equipment in order to restore customer load.

Hydroelectric Power

19. Opens and closes valves using valve wrenches, turning handles/wheels and pushing buttons on motorized hydraulic valves in order to control/regulate water flow, and allow work to be done on piping between closed valves.

Paperwork and Documentation

24. Writes associated inspection reports in station logs in order to document station configurations, meter readings, or equipment in need of repair.
25. Checks written station logs of preceding shift in order to keep abreast of current station status, current/ongoing electric station activities, outstanding work authorities, and any abnormal station conditions.
26. Issues work authorities to various work groups in coordination with energy control center via phone to allow work on electric system and local equipment.
27. Manually replaces automated instrument reading chart paper, and records data on a log sheet to document interchange of power between utilities (e.g., other power companies), and to identify operating trends such as water levels, water flow, and voltage levels.
28. Plans and schedules proposed work activities (e.g., equipment maintenance or construction work) to minimize work conflicts and system disruptions.

Vehicle Operation

30. Operates non commercial vehicles (e.g., pick up trucks, and vans) in order to drive to various worksite locations.