

**ELECTRIC STATION OPERATOR (5224)  
TASK LIST 2019**

**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 and to document and report equipment status or irregularities.
2. Reads meters, gauges, and computer displays, 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 mitigate contamination caused by contaminants/sediments.
5. Hand wipes, cleans, and changes fuses on energized high voltage equipment using appropriate safety gear, methods, and equipment, such as 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 switches on low voltage battery charging equipment, and related circuits in power stations in order to perform 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, electronically via computer, and in switch yards by turning handles, pushing buttons, rotating cranks, and using a fiberglass or insulated 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 normally 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. Coordinates with field crews to reissue work authorities, to discuss scope of job, and identify work place hazards in order to safely perform work and facilitate routine or emergency work.
16. Observes operators who are performing necessary switching and related operations during routine or emergency situations to ensure accuracy and prevent accidents.
17. Operates circuit breakers by manually operating control handles in order to provide a safe working environment when electrical work is performed on normally energized equipment, to restore configurations, and to test electrical systems in order to restore customer load.
18. Applies accident prevention tags to 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.
19. Performs electrical systems tests by closing and/or reenergizing circuits using a remote control as directed by load dispatcher on relayed equipment in order to restore customer load.

## **Hydroelectric Power**

20. 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**

21. Writes associated inspection reports in station logs in order to document station configurations, meter readings, or equipment in need of repair.
22. 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.
23. Issues work authorities to various work groups in coordination with the energy control center via phone to allow work on power system and/or local equipment.
24. 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.
25. Plans and schedules proposed work activities, such as equipment maintenance or construction work, to minimize work conflicts and system disruptions.