Substation Simulator



Simulators | e-Learning | Visualizations

Substation Simulator



Accomplishes the understanding and practice of procedures and policies for lineworkers to be safe and efficient while working in a substation.

Experience Real Life Consequences without Real Life Costs	 Using the training mode in the simulator will help to keep training consistent Simulator allows learners to make mistakes and understand the consequences without causing real injury or harm to the person or the equipment. This translates into "Saving Lives and Saving Equipment"
Practice proficiency with diagnostic theory and achieve improved skill development	 More practice on your specific equipment translates to higher skill levels and improved employee performance Define minimum approach distances within the substation depending on worker qualifications Visually explain OSHA and other regulatory bodies standards and codes
Evaluation capability of users' activities	 Seamless integration with any LMS system (SCORM & AICC Support) Train your substation personnel on your exact competency standards and procedures Certify company substation workers, contractors, and other personnel like tree trimmers to enter and work around a substation

Substation Simulator

GOALS

- Keeps substation personnel current with inspection procedures
- Train and identify safe work procedures in and around a substation
- Recognize the proper care and use of required personal protective equipment
- Learn substation entry, login and dispatch, and exit protocols
- Learn how to use properly use inspection sheets and forms
- Train substation personnel how to setup, inspect, maintain, and replace relays
- Learn how to use SCADA (HMI) system to read if equipment is functioning correctly, acknowledging alarms and how to fix the problem, as well as switching substation yard equipment
- Learn how to calculate power flows in a substation control room
- Learn correct switching procedures for taking equipment out of service and then returning them to normal
- Energized and de-energized work procedures such as minimum approach distances and lockout/tagout requirements
- Learn how to test, maintain, and replace substation equipment
- Train control center operators on correct switching procedures
- Perform switchgear inspection and maintenance
- Learn how to install and maintain substation batteries, battery banks, battery backup systems, and battery chargers
- Perform inspections, testing, and maintenance on breakers, air switches, switch gear assemblies, rectifiers, and transformers



Screen shots





Training mode:

This mode guides a trainee step by step through a procedure in order for them to be taught how to do the procedure correctly and will not allow the trainee to deviate from the set procedure.

Practice mode:

This mode is for the trainee to practice a procedure without any guidance, allows the trainee to deviate from a set path like they would in real life, and the simulator tracks their movements for them to see if they done the procedure. A report comes up to show any errors that they made while doing the procedure like missed steps or doing a step out of order.

Testing mode:

This mode tests the trainee to see if they know how to do a procedure correctly, allows them to deviate from a set path, and the score is written to a learning management system for record keeping.

Evaluation

- Reporting the result to Learning management system (LMS) or a separate standalone database file
- AICC & SCORM supported

