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
Training, Practice and Testing mode

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