EPIC-3, Project 4
Safety Training Simulators

Module 1: Focused Patrol
Module 2: Equipotential-Zone Work Methods for Underground Distribution

EPIC Symposium
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Safety Training Simulators (Project 4)

1 Objective

Configure existing off-the-shelf software to improve the instructional/training experience for two distinct workgroups:

1. Distribution System Operators in Training (Module 1)
   - Integrate data from various virtual systems to provide one view for operator trainees (SCADA, wireless fault indicators, smart meters, synchrophasors)
2. Journeyman Lineworkers (Module 2)
   - Use augmented/virtual reality to improve the training experience applied to the implementation of equi-potential zones for underground distribution work.

2 Status

- Module 1: Main project activity has concluded, with results favorable to recommend commercialization in the final report.
- Module 2: Main project activity is concluding, with results pointing toward a recommendation for commercialization in the final report.

3 Policy Support and Customer Benefit

Policy Support

- Supports commission policy, holding IOUs to a higher standard for safe operation of their systems
- Supports utility needs to modernize the training experience for improved, more efficient student learning outcomes
- Improve public and employee worker personal safety

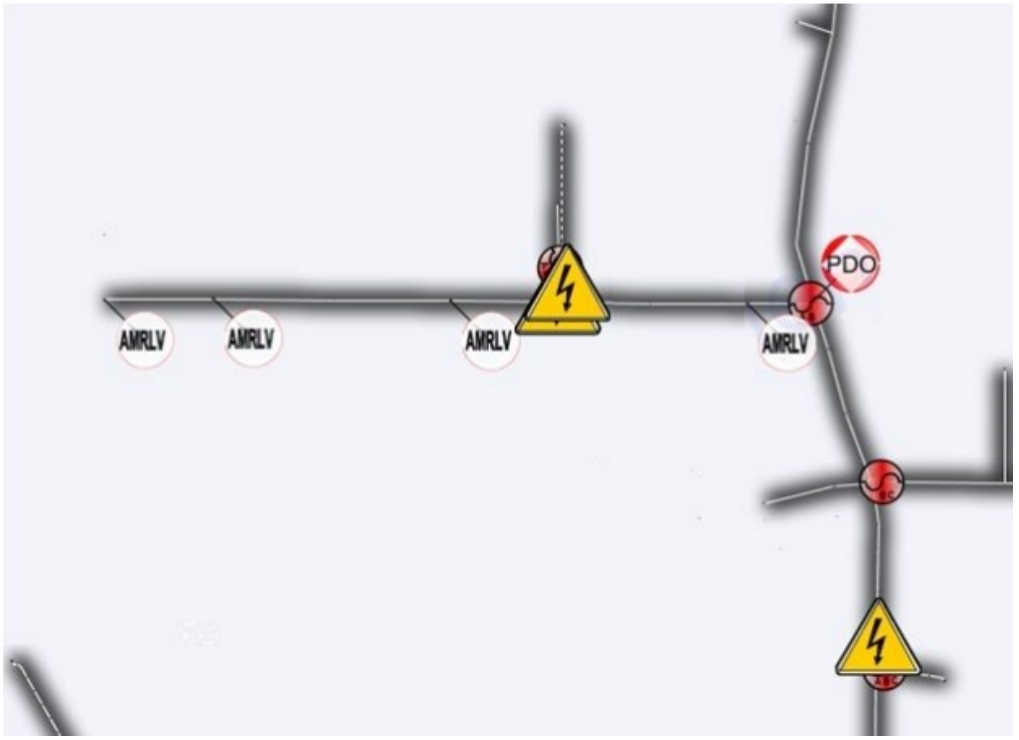
Customer Benefit

- Improved reliability, which improves safety.

Increase Safety	Improve Reliability	Reduce Costs
✓	✓	✓

Example of Training Simulator Display (Module 1)
Fault Location Ambiguities Eliminated

FLA Combined with Wireless Fault Indicators



FLA Combined with AMI Low Voltage Alarms

Example of Training Simulator Screenshot (Module 2)

200 Amp Cable Replacement at Fuse Compartment in Air Switch Cabinet