

# Waukesha Electric Systems UZD™ Training Class

## Proven Maintenance, Calibration and Operation Techniques



Leading electricity providers know it takes more than field technicians and a dispatch center to properly maintain critical power system assets that make up their transmission and distribution systems. To be effective, your team needs to acquire knowledge and product-specific skills to allow them to accurately troubleshoot and repair this equipment.

Recognizing the demand in the electric power industry for a structured program that teaches these critical skills, we developed a comprehensive series of LTC maintenance training courses. One of the models on which we can help is the Waukesha® UZD.

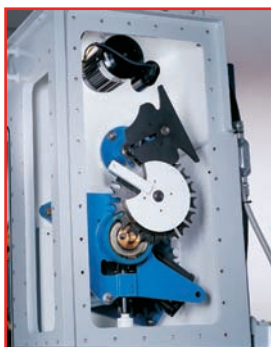


UZD Training Unit and Exploded View of Contacts

### What We Cover

#### THE BASICS

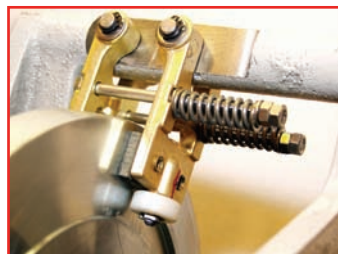
- Theory of Tap Changer Operation
- Identification of Unit
- Timing and Calibration
- Sequence of Operation
- Time Delay Between Operations
- Electrical Connections
- Proper Torque of Connections
- Annual Inspections
- Major Inspections
- Neutral Position and the Need for the Unit to Pass Through Neutral
- Parts identification
- Hands-On Unit Disassembly and Assembly



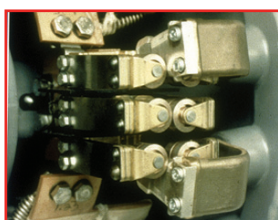
BUE Drive Unit

#### CRITICAL COMPONENTS

- Replacing Fixed Contacts
- Replacing Moving Contacts
- Reversing Switch
  - Operation
  - Purpose
  - Troubleshooting
  - Replacement
  - Upgrades
- Replacing the Transition Resistor
- Spring Drive Mechanism
  - Spring operator crank
  - Geneva wheel gear
  - Fly wheel
  - Reversing selector driving gear
- Oil Filtration System



Close-Up of Nylon Roller



Selector Switch Roller Contacts

### Who Should Attend

Field service technicians, relay technicians, substation technicians and engineers with maintenance and testing responsibilities for utilities can benefit from this class as well as supervisors and others who have responsibility for the testing and maintenance performed by contractors.

### Course Structure

Training courses can be held at one of our training centers, off-site at regional locations across the U.S./Canada or at a customer's site. For customer on-site training, our training team coordinates shipment of required training equipment and conducts courses at the customer's facility, eliminating the need for customer travel. All training models were once fully functioning in the field, totally refurbished for use in these classes.

Each student receives a course manual that is theirs to keep with easy-to-use field reference guides along with many pages of technical resources. Our staff has compiled the information from personal experience as well as from that of utility-recognized experts on specific makes and models. Our qualified instructors teach each course, providing many years of experience to properly train your maintenance team.

To be sure participants maximize their experience and hands-on learning, we limit class sizes to 15 students, whether at your site or at one of our training centers. If you have more than 15 potential students, special pricing can be arranged to accommodate two classes held in the same week on consecutive days.

**Contact Us for Additional Information or to Schedule Your Class:**

**call 800-338-5526**

**visit [www.WaukeshaElectric.com](http://www.WaukeshaElectric.com)**



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