



Watt-Hour Metering Workshop

March 18-21, 2019

Northeast Wisconsin Technical College
Green Bay

This workshop offers not only an educational experience but also practical, hands-on training to aid your learning. The three-day workshop (and the half-day pre-workshop session) is a “must-attend” for meter technicians, who will learn new technologies, approved work practices, verifying and identifying metering inaccuracies, review choosing and applying the correct metering equipment along with networking opportunities. The Monday pre-workshop session covers basic metering for those who may be new to metering or would like a refresher on the basics. There will be many opportunities for hands-on practical training and member-to-member networking and an opportunity to visit with vendors offering metering equipment.

Who should attend:

Electric meter technicians, superintendents, utility directors, linemen, foremen, meter engineers and electricians

Register online at meuw.org

Deadline: March 8

\$495 for MEUW members

Fee includes the three-day workshop (Tuesday through Thursday), including breakfast and lunch each day

Pre-Workshop Session (Monday afternoon):

\$75 extra fee



Workshop presenters and facilitators

Roger Aho, who is well-known in the industry and has years of experience as a meter technician. Roger started working for Wisconsin Public Service in 1971 as a gas street man in Stevens Point and became a meter reader in 1975. Now retired, Roger continues to share his knowledge through MEUW seminars.

Randy Larson, a former utility lineworker and longtime apprenticeship lineworker instructor for Chippewa Valley Technical College, who now works for MEUW as Electric Utility Safety and Training Coordinator, providing on-the-job training for municipal electric utility employees.

Christine Smith, senior revenue protection investigator for We Energies, a position she has held for 20 years. Prior to her work with We Energies, Christine was a City of Madison police officer.

Training Location:

Northeast Wisconsin Technical College (NWTC)
2740 W. Mason St. | Green Bay, Wis.

A room block has been reserved for the workshop at the **Radisson Hotel & Conference Center**. To reserve a room with the special rate of \$95/single (\$105/double), call **(920) 494-7300** and reference MEUW; please confirm your room no later than March 8.

PRE-WORKSHOP SESSION

Monday, March 18 – 12:30 – 3:30 p.m.

Basic Metering: Calculations (vectors, timing the meter, register ratios), current transformers, potential transformers, service configurations (meter forms), safety (inspection and testing of meter sockets)



WATT-HOUR METERING WORKSHOP

Registration and continental breakfast at 8:00 a.m.

WORKSHOP DAY 1

Tuesday, March 19 – 8:00 a.m. – 4:00 p.m.

- Matching Meters/Meter Forms, Vectors and CT Sizing
- Meter Socket Basics: Terminals, wiring, heating, wiring prep and connectors
- Reactive Metering and Billing Accuracy: Burden testing, ratio testing, checking your billing system
- High Bill and Joint Metering Investigations: Tips from the Field

One municipal utility will share processes to investigate customer complaints of high bills or joint metering; discussion will include tools and equipment, regulatory requirements, customer communication and some typical and non-typical findings from the field

Attendees should bring the following materials to the workshop:

- Laptop with meter program
- Your utility's metering wiring diagrams
- One pre-wired meter socket
- Hand tools, work gloves and safety glasses
- Arc-rated clothing, hard hat, Class 0 rubber gloves



WORKSHOP DAY 2

Wednesday, March 20 – 8:00 a.m. – 4:00 p.m.

Continental breakfast beginning at 7:00 a.m.

- Meter Settings: Workmanship, standardization, who selects equipment, best wiring practices, prewired meter sockets
- Meter Software: Programming, saving and exporting data

• Hands-on Labs:

- Wiring meter installations: quality workmanship and best practices
- Troubleshooting, Verification, Vectors, KYZ, Bird Dog Testing

Labs will feature products from these vendors

- Bill Amelse, Primus Marketing
- Mark Honeywell, Elster
- Ken Grant, Aclara – GE
- Alan Riebe, Border States – Itron
- Jim Murray, Irby – Landis & Gyr
- Robert Meyer, Sensus – Elster & ABB

WORKSHOP DAY 3

Thursday, March 21 – 8:00 a.m. – 12:00 p.m.

Continental breakfast beginning at 7:00 a.m.

- Meter to Cash: Best Practices to reduce billing errors – requirements of Public Service Commission (PSC) 113
- Common billing errors occurring in the hand-off of information from the metering department to the billing department
- Metering records, tariff application, multipliers, and misreads
- Updates on PSC metering rules
- Energy theft
- Open discussion of participant topics

Workshop presented by

MEUW

Questions?

Call MEUW at (608) 837-2263