



14th Annual Minnesota Electric Meter School

Roseville, MN
September 12-14, 2023

Tuesday, September 12

Time	Track 1	Track 2	Track 3
10:00 AM - 12:00 PM	Registration		
12:00 PM - 12:15 PM	Welcome		
12:15 PM - 1:10 PM	Arc Flash and Arc Rated Clothing		
1:10 - 2:00 PM	TBD		
2:00 - 2:15 PM	Break		
2:15 PM - 3:30 PM	TBD		
3:30 PM - 3:35 PM	Transition		
3:35 PM - 4:30 PM	History of Electric Metering (1.1)	Field Testing Customer Installations (2.1)(3.1)	
4:30 PM - 5:00 PM	Vendor Showcase		
5:00 PM - 7:00 PM	Vendor Hospitality Reception / Exhibits		

Wednesday, September 13

Time	Track 1	Track 2	Track 3
7:00 AM - 8:00 AM	Hot Breakfast		
7:30 AM - 8:00 AM	Homework Session by Attendees, Optional		
8:00 AM - 9:00 AM	Meter Electricity Basics (1.2)	Polyphase Metering Review (2.2)	Meter Site Analysis (3.2)
9:00 AM - 9:05 AM	Transition		
9:05 AM - 10:00 AM	Introduction to Single Phase Metering (1.3)	Overview of Electrical Schematics and Drawings (2.3)	CCVTs for Metering and Relaying Applications (3.3)
10:00 AM - 10:15 AM	Break		
10:15 AM - 11:00 AM	Meter Forms, Applications and Math Review (1.4)	Reactive, TOU, and Load Profile Metering (2.4)	Net Metering Applications (3.4)
11:00 AM - 11:05 AM	Transition		
11:05 AM - 12:00 PM	Introduction to Meter Testing (1.5)	Reactive, TOU and Load Profile Metering cont. (2.4)	Vectors, Transformer/Line Losses (3.5) [Jason Christoff - Minnesota Power]
12:00 PM - 1:00 PM	Lunch		
1:00 PM - 2:00 PM	Why we test: Accuracy and Traceability (1.6)	Meter Mis-Applications (2.8)	Power Quality and Metering (3.6)
2:00 PM - 2:05 PM	Transition		
2:05 PM - 3:00 PM	Shop & Field Testing Single Phase Meters (1.7)	Instrument Transformer Theory and Applications (2.6)	Power Quality and Troubleshooting Lab - Hands-on Session (3.7)
3:00 PM - 3:15 PM	Break		
3:15 PM - 5:00 PM	Shop & Field Testing Single Phase Meters - Hands-on Session (1.8)	Applications and Wiring of Instrument Transformers - Hands-on Session (2.7)	Power Quality and Metering Troubleshooting Lab - Hands-on Session cont. (3.8)
5:45 PM - 7:00 PM	Dinner Reception		

Thursday, September 14

Time	Track 1	Track 2	Track 3
7:00 AM - 8:00 AM	Hot Breakfast		
8:00 AM - 9:00 AM	Hot Socket Issues, Site Inspection Basics (1.9)	Distributed Generation Metering (2.5)	Meter Telemetry Configuration and Scaling (3.9)
9:00 AM - 9:05 AM	Transition		
9:05 AM - 10:15 AM	Demand Metering Basics (1.10)	Introduction to Communications (2.9)	Troubleshooting Communications (3.10)
10:15 AM - 10:30 AM	Break		
10:30 -11:15 AM	Metering Utility Rates (1.11)	Introduction to MDMS (2.10)	Energy Calibration, Accuracy, Traceability (3.11)
11:15-11:20 AM	Transition		
11:20 AM - 12:00 PM	Topics in Metering, Q & A		