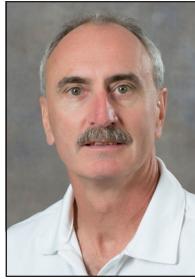


WELCOME!

My name is Ivan Maas, and I am the Building Systems Department Chair at NDSCS. Tom Scherer, who had been the Chair of our Electric Utility Workshop committee for many years, retired last Spring and I stepped into the position.



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We are extremely excited about this year's Utility Conference in March and can't wait to have you join us for this event. We have two new courses that we are offering this year – Distribution Protection and Relaying Basics & Voltage Regulators. Any course this year complements the sessions that were offered last year making the Electric Utility Workshop a progression-based learning opportunity for you and your colleagues annually. Pick the option that best provides the next level of learning for you!

The planning and organization of this workshop is a collaboration of representatives from electric cooperatives, the electric supply industry, NDSCS and NDSU Extension Service. Members of the committee volunteer their time and expertise to plan and organize this event for you. We welcome any suggestions from you for future training topics.

Hope you learn a lot and enjoy your time at the workshop.

Ivan Maas
Chair, Electric Utility Workshop Committee

Information on this year's instructors can be found at [NDSCS.edu/UtilityWorkshop](https://ndscs.edu/UtilityWorkshop)

SCHEDULE

TUESDAY, MARCH 14

11:30 a.m.-1 p.m.
Registration and
Lunch

1-5 p.m.
Track Sessions

WEDNESDAY, MARCH 15

8 a.m.-5 p.m.
Track Sessions

8 a.m.-5 p.m.
Vendor Meet and
Greet

12-1 p.m. Lunch
5 p.m. Banquet

THURSDAY, MARCH 16

8 a.m.-12 p.m.
Track Sessions
12 p.m. Lunch

NDSCS Electric Utility WORKSHOP
North Dakota State College of Science
800 6th Street North, Wahpeton, ND 58076

RETURN SERVICE REQUESTED

35th ANNUAL
2023

NDSCS

Electric Utility

Hands-On WORKSHOP

MARCH 14-16, 2023

Wahpeton, N.D.

[NDSCS.edu/UtilityWorkshop](https://ndscs.edu/UtilityWorkshop)

**Did you attend the
2022 Utility Conference?**

Any Track offering this year would be a great follow-up course to what you learned last year.

NDSCS
DIVISION FOR WORKFORCE AFFAIRS

TRACK 1

Distribution Protection and Relaying Basics

John Aultman, P.E., and Josh LaBlanc, P.E.,
Schweitzer Engineering Laboratories

This course provides an overview of the principles for protecting distribution feeders and buses. Protection and control systems are a critical part of the transmission and distribution systems that feed power to cities and industries.

To enhance user experience in this course, participants should bring a laptop with AcSElator Quickset installed. Link for software installation can be found at NDSCS.edu/UtilityWorkshop.

Topics Include:

- Basic Circuit Theory including power system faults and relay fundamentals
- Recloser control training including distribution feeder protection and troubleshooting topics
- Regulator control training including an overview of regulators, panel settings and troubleshooting regulator control circuits
- Causes of Harmonics using the SynchroWAVE Event to identify harmonics

REGISTRATION

Submit registration and payment information online at NDSCS.edu/UtilityWorkshop

Track Fee \$499

Guest Lunch Meals \$10

Guest Banquet Ticket \$30

A registration confirmation email will be sent upon completed registration. Please keep a copy for your records.

For any registration questions contact Shannon Herman at 701-231-6922 or Shannon.M.Herman@ndscs.edu

SIGN-IN

Registration begins Tuesday, March 14 at 11:30 a.m. in the Hektner Student Center/Wild Grounds Café at NDSCS. After registration, you are invited to lunch in the Hektner Student Center. Your selected class will start at 1 p.m. at the Tech Center or Barnard Hall. Campus maps will be provided when you check-in and signage in the buildings will be in place to guide you.

FEE

Registration includes class tuition, three noon lunches, coffee breaks, sit down banquet and certificate of completion. Lodging accommodations are not included.

TRACK 2

Hands-On Metering: Intermediate to Advanced

Larry Chapman, Chapman Metering

The purpose of this class "to assist field personnel in finding metering errors that are adversely affecting billing accuracy and/or personal safety of the technicians involved in maintaining this equipment." This class has several work stations to test different configurations of meter installations.

Participants are asked to bring hand tools, safety glasses, secondary gloves and an ammeter. These materials are needed for hands on work stations.

Hands On Work Stations:

- Single Phase Metering and 3-phase Metering stations. Participants will properly wire the stations.
- Station trouble shooting. Stations will have errors that need repair and testing.

Topics Include:

- Metering of 3-phase Services using Self-Contained and Transformer Rated Meters
- Proper Selection of Voltage and Current Transformers
- Transformer Burden and Sizing of Metering Conductors
- Single Phase Transformer Rated Meters
- Proper Grounding
- Meter Safety
- AMR Metering-Changes in Metering Practices

DEADLINE March 7, 2023

Pre-registration is required. Class sizes are limited. Registrations will be confirmed by e-mail. The Electric Utility Workshop Committee reserves the right to withdraw any course in which enrollment is not adequate.

REFUND POLICY

A refund, less \$15 processing fee, will be given if we are notified by February 28, 2023. Email a cancellation request to Shannon.M.Herman@ndscs.edu. If you cannot attend, send a co-worker! We are happy to assist you with any questions.

WEDNESDAY, MARCH 15

VENDOR MEET & GREET

Various vendors will be set up Wednesday in the Tech Center. Register for door prizes to be given away at the evening banquet at Prante's.

BANQUET

Don't miss the banquet at Prante's Fine Dining beginning at 5 p.m. Banquet meal will begin at 6 p.m. Drawings for door prizes, must be present to win. Prante's Fine Dining, 1605 11th St. N., Wahpeton.

TRACK 3

Voltage Regulators

John Thierfelder, EATON/Cooper Power Systems

A well-maintained voltage regulator helps ensure more reliable power and increased safety. Proper maintenance also saves time and money by avoiding system downtime and extending equipment life. This course is an overview covering CL-7 control, and voltage regulator basics to improve equipment performance, increase voltage regulator reliability and ensure operator safety.

Training materials and CL-7 voltage regulator controls will be provided for hands-on training.

Topics Include:

- Voltage regulator theory and application
- Control hands-on exercises
- Control panel retrofitting
- Voltage regulator receiving, handling and maintenance
- Tap-changer maintenance and inspection
- CL-7 control settings and features and voltage regulator schematics and troubleshooting
- Safe regulator bypassing and voltage regulator safety topics

ACCOMMODATIONS

A block of rooms have been reserved until **March 1, 2023** at the following hotels. Mention that you are attending the **Electric Utility Hands-On Workshop**. Please do not double book a room at each hotel, they will still charge you for both rooms even if you do not use both.

AmericInn

2029 210 Dr.
Wahpeton, ND 58075
701-642-8365
www.americinn.com

Baymont Inn & Suites

1800 210 Dr.
Wahpeton, ND 58075
701-642-5000
www.baymontinns.com

Other lodging in the Wahpeton and Breckenridge area.

Dakota Magic Casino and Resort

I-29, Exit 1 on the ND / SD border
701-634-3000 • www.dakotamagic.com

Select Inn

831 U.S. Hwy. 75, Breckenridge, MN 56520
218-643-9201 • www.selectinn.com

Travelodge by Wyndham

995 21st Ave. N., Wahpeton, ND 58075
701-484-0378 • www.wyndhamhotels.com

Rodeway Inn

209 13th St. S., Wahpeton, ND 58075
701-642-1115 • www.rodeway.com

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