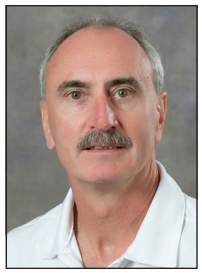
WELCOME!



My name is Ivan Mass, and I am the Building Systems Department Program Director at NDSCS. We are extremely excited about this year's Utility Conference and can't wait to have you join us for this event. We are offering a total of four course tracks this year. 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. But don't worry if you haven't attended before or in a while, simply pick the option that best provides the next level of learning for you!

We hope you learn a lot and enjoy your time at the 2024 Electric Utility Workshop!

Ivan Maas
Chair, Electric Utility Workshop Committee

Information on this year's instructors can be found at NDSCS.edu/UtilityWorkshop

SCHEDULE

TUESDAY, MARCH 5

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

1-5 p.m. Track Sessions

WEDNESDAY, MARCH 6

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 7

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

12 p.m. Lunch

WEDNESDAY, MARCH 6

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.

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36th ANNUAL

2024 NDSCS Electric Utility Hands-On WORKSHOP

MARCH 5-7, 2024

Wahpeton, N.D.

NDSCS.edu/UtilityWorkshop

Did you attend the 2023 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

Transformers with Connections Lab

Using a workbook with a combination of hook-up connections and situations, the participant will be wiring miniature transformers using a variety of wye and delta connections. The transformers will be energized using 240 volt, 3-phase power. The transformer banks can then be tested for proper voltages, rotation and phasing with volt meters and phasing light. 80 percent of the class will be hands on. We will spend time on drawing phasors.

Topics Include:

- Introduction to Transformers
- Wye and Delta Connections
- Phase Development
- Transformer Connections
- Vector Applications
- Voltages
- And more!

Participants will be required to follow your company safety rules when working around secondary voltages. Safety glasses, FR clothing or clothing made from 100% natural fiber "cotton, wool, etc." and class O rubber gloves will be required for this class.

TRACK 2

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.

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
- ProView NXG Interface Software

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

TRACK 3

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

TRACK 4

Power Systems Distribution Communications

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.

Topics Include:

- Basic Circuit Theory including power system faults and relay fundamentals
- Basics of power system distribution communications setup and troubleshooting
- How communications tie into FLISR schemes
- Basics of recloser/feeder protection
- Introduction of advanced metering features

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

REGISTRATION

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

Track Fee $499

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

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

CHECK-IN

Check-in begins Tuesday, March 5 at 11:30 a.m. in the Hektner Student Center/Wildcat Express at NDSCS. After check-in, 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.

REGISTRATION DEADLINE

February 27, 2024

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 27, 2024. 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.

ACCOMMODATIONS

A block of rooms have been reserved until **February 5, 2024** 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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