

2025 N.D. REC ENGINEERING AND OPERATIONS CONFERENCE & EXHIBITOR SHOWCASE

DEC. 3-5, 2025

THE COOPERATIVE CENTER | NDAREC HEADQUARTERS | 3201 NYGREN DRIVE NW | MANDAN, N.D.

JOIN US AT THE ANNUAL CONFERENCE!

The conference is intended for engineers, line superintendents, operations and construction personnel. Consulting engineers and NDAREC associate members are also invited to attend.

NEW THIS YEAR!

The conference will feature concurrent breakout sessions for engineering and for operations on Thursday, Dec. 4, thanks to feedback from 2024 conference participants.

A roundtable discussion will also be an important part of the conference on Dec. 4.

"WHAT'S NEW, WHAT'S NEXT" SESSION ON DEC. 4 – NDAREC HEADQUARTERS

NDAREC associate members and other vendors will have the opportunity to provide a five-minute update on their products and services, in advance of the Exhibitor Showcase. The Exhibitor Showcase is scheduled for 5-7 p.m. on Dec. 4 at the Baymont Inn & Suites, Mandan. There are limited time slots for this session so registrations will be honored on a first-come, first-served basis for those companies who are registered for the Exhibitor Showcase.

Registration is required for "What's New, What's Next."

EXHIBITOR SHOWCASE AND SOCIAL ON DEC. 4 – BAYMONT INN & SUITES

NDAREC associate members and vendors will join conference attendees from 5 to 7 p.m. on Thursday, Dec. 4, for the Exhibitor Showcase and hosted social. Our thanks to these companies for their generosity in hosting the social.

CONFERENCE AGENDA

Wednesday, Dec. 3 — General sessions

12:30-1 p.m.	Conference Registration
1 p.m.	Opening Announcements
1:15 p.m.	Outage Restoration and Troubleshooting Jason Settle, P.E., Hi-Line Engineering <i>This presentation will focus on effective outage restoration, emphasizing the importance of reliability, which consumers increasingly view as a necessity rather than a convenience. Key topics will include system reliability, coordination of overcurrent devices, common causes of outages and mitigation, lightning protection, restoration procedures, troubleshooting unusual and underground outages, and maintaining power quality.</i>
3 p.m.	Refreshment Break
3:15 p.m.	Importance of Inspections after Major Storm Recovery Jason Settle, P.E., Hi-Line Engineering <i>Jason will highlight the importance of conducting thorough power line inspections</i>

4:45 p.m.

5 p.m.

Thursday, Dec. 4

7:30 a.m.

8 a.m.

9:30 a.m.

following a storm. These inspections are critical to ensure public safety, maintain system reliability, and prevent future outages. Storms often cause hidden damage to infrastructure that can lead to serious hazards or service disruptions months after the event.

Adjournment

Bull N' Beer Welcome Reception

Hot Breakfast Buffet

Mapping & Staking with NISC: Tools, Integrations and Best Practices

Ryan Staggemeier, manager of member value, National Information Solutions Cooperative (NISC)

We'll explore how to maximize the value of NISC's mapping and staking capabilities to streamline field operations, improve data accuracy, and enhance collaboration across departments. Participants will gain insights into the latest mapping and staking tools available within the NISC ecosystem, how they integrate with system integrations, workflows and proven best practices. Whether you're curious about what's new or looking to optimize your current processes, this session will provide an overview of where value can be added.

Work Order Inspections – Breakout Session for Operations

Jason Settle, P.E., Hi-Line Engineering

Work order inspection — whether being done for requirements of Rural Utilities Service, other financing entities or the utility — is vital to ensure new facilities are safe and capable of distributing electricity. This presentation will explore the critical role from an operations perspective of inspections and the importance of clear communication between the operations and engineering departments. It will feature real-world examples of issues discovered during inspections and discuss options available to the construction crews to effectively identify and mitigate these errors to maintain system integrity and safety.

Power Quality Standards – Breakout Session for Engineering

Chris Mullins, president, Power Monitors

This session provides a practical introduction to key IEEE and ANSI power quality (PQ) standards, recommended practices and guides. Attendees will learn how to apply

(continued on next page)

these documents effectively to speed PQ investigations and determine utility or customer attribution to PQ issues. Real-world examples using actual PQ data illustrate how these standards can be leveraged to identify, analyze and resolve power quality issues more efficiently.

10:30 a.m.

Refreshment Break

10:45 a.m.

Work Order Inspections – Breakout Session for Engineering

Jason Settle, P.E., Hi-Line Engineering

Jason will address the critical role from an engineering perspective of why inspections should be done and the importance of clear communication between the engineering and operations departments. It will feature real-world examples of issues discovered during inspections.

10:45 a.m.

Power Quality Field Investigations – Breakout Session for Operations

Chris Mullins, president, Power Monitors

Learn practical techniques for deploying power quality (PQ) monitors as part of an investigation. Attendees will learn proven methods for selecting optimal measurement locations, ensuring proper connections and safety, configuring recorder settings, and verifying data integrity. The session also provides an overview of PQ recorder workflow best practices, including the use of Windows laptops, mobile devices and cloud-based PQ software to streamline setup, data collection and analysis.

11:45 a.m.

An Overview of Modern SCADA Systems

Wesley Mason, electrical engineer, Verendrye Electric Cooperative

Wesley will share his experience and insights on modern SCADA system features, use cases and integrations for rural electric cooperatives.

12:15 p.m.

Group Lunch

1 p.m.

Power Quality Root Causes: Linking Voltage, Current and Location Issues – General Session

Chris Mullins, president, Power Monitors

This joint session for engineers and field technicians explores how the relationship between current and voltage reveals the source and nature of power quality (PQ) issues. Participants will learn how PQ signatures differ upstream and downstream of a disturbance and how to use this knowledge to guide investigations. The session also addresses common PQ problems, essential data and equipment for identifying them, and practical mitigation approaches that connect field observations with engineering analysis.

2:45 p.m.

Refreshment Break

3 p.m.

Great Ideas Happen Here! Roundtable Discussion

Scott Iverson, sr. electrical engineer, Mountrail-Williams Electric Cooperative – facilitator

4 p.m.

This time is reserved for topics that are top of mind for you. Please come prepared to share new ideas, challenges and opportunities for your electric cooperative.

"What's New, What's Next" in Products and Services

Time is reserved for NDAREC associate members and vendors to give 5-minute updates. Companies must be registered for the Exhibitor Showcase to participate in this session.

5 p.m.

Adjournment

5-7 p.m.

Exhibitor Showcase and Social — Baymont Inn & Suites

Conference attendees are invited to join NDAREC associate members and other vendors for this networking event.

Friday, Dec. 5

7:30 a.m.

Hot Breakfast Buffet

8:15 a.m.

Business Meeting of the N.D. Engineering and Operations Association

8:45 a.m.

Above-Ground Mapping Expectations from Aerial Lidar

Miles Strain, aerial services manager, 95West Aerial Mapping, and **Andrew Moody,** Lidar technologist, 95West Aerial Mapping

Miles and Andrew will address proper planning, execution and expectations with above-ground lidar data acquired and classified from manned acquisition platforms. They will also provide an overview of the planning, data calibration, edit tools and delivery formats of lidar data. The overview will include real-life results from fixed-wing aerial lidar and how that data is derived from the raw lidar collection.

9:30 a.m.

Large Load Interconnection Panel Discussion

Greg Owen, manager of engineering services, Capital Electric Cooperative; **Jeremy Syverson,** vice president of transmission, Basin Electric Power Cooperative, and **Will Lovelace,** supervisor of transmission planning, Minnkota Power Cooperative

We've invited three guest panelists to speak to the advantages, disadvantages and challenges of connecting large loads. This will include crypto, data/AI and place-based loads. Each panelist has experience with the process from the first phone call to energizing large loads. This session will include time for Q&A. Please bring your questions!

10:30 a.m.

Refreshment Break

10:45 a.m.

Wildfire Policy Update and Progress

Josh Kramer, executive vice president and general manager, NDAREC

Josh will provide an update on the recent wildfire liability legislation passed in the 2025 North Dakota Legislature and provide a snapshot of discussion occurring on the federal level. He'll also highlight the next

(continued on next page)

steps and ways NDAREC can be helpful as electric cooperatives enhance wildfire mitigation plans.

11:15 a.m.

Fearless

Kat Perkins, singer-songwriter and motivational speaker

Kat shares her experience on reality television, her journey from "then" to "now," and how you can be fearless in striving for success in your professional life. She'll close her presentation with her signature song, "Fearless!"

12:15 p.m.

Conference Evaluations and Adjournment

MEET THE PRESENTERS



Jason Settle is a senior project manager at Hi-Line Engineering, a GDS Associates, Inc. company with more than 30 years of experience in the power engineering industry. He prepares engineering studies, performs distribution line design, and performs work order inspection for cooperatives in multiple states.

Jason is a Hi-Line Engineering training instructor and teaches courses in distribution line design, application and use of the National Electrical Safety Code, Joint Use compliance and requirements, distribution engineering fundamentals, overcurrent protection, transformer sizing and banking, and electric distribution operations.

Prior to joining Hi-Line Engineering, Jason spent 17 years at Pioneer Electric Cooperative as the Vice President of Engineering and Operations for 10 years and as system engineer for seven years.

He earned his Bachelor of Science in Electrical Engineering Technology and Math from Southern Polytechnic State University. He is a Registered Professional Engineer in Alabama, Georgia, Indiana and Virginia.



Ryan Staggemeier is passionate about turning complex data into practical solutions. He has spent the last 10 years working in GIS, staking and enterprise solutions. Today, he serves as Manager of the Member Value department at NISC, where he focuses on connecting data, service and strategy to create meaningful outcomes for members.

Ryan's background is rooted in field operations, spatial data and integrated systems. He began his career in support, quickly discovering a passion for the problem-solving side of GIS. Over the years, he has led projects that streamlined workflows, improved data accuracy, and supported better decision-making across departments.



Chris Mullins is the president at Power Monitors, Inc. in Mt. Crawford, Va. Chris leads a company devoted to leading-edge product development to meet the needs of electric utilities and electricity end-users. He has more than 30 years of experience at Power Monitors, and an extensive background in electric power quality, power line communications and electronic

instrumentation design. His work has resulted in patents in power line communications techniques, power quality instrumentation and energy monitoring.

Chris is an active member of several Institute of Electrical and Electronics Engineers (IEEE) standards groups and has authored more than 70 white papers on many power quality topics. He holds a Bachelor of Science degree in Electrical Engineering from the University of Virginia.



Wesley Mason is a second-generation electric cooperative employee. He grew up in Bemidji, Minn., where his father served 30 years at Beltrami Electric Cooperative.

After graduating from North Dakota State University with his bachelor's degree in electrical engineering, Wesley joined Verendrye Electric Cooperative as a power systems engineer.

He has spent the last decade administering the cooperative's SCADA system and providing engineering services to support the cooperative's business and operational systems.

Wesley and his wife, Katy, became parents in June of this year with the birth of their daughter, Ellie. Wesley is an avid curler in his free time and coaches adaptive curling and runs the nation's only military curling league.



Miles Strain is the aerial services manager of 95West Aerial Mapping, a full-service aerial mapping firm with operations in Grand Forks, Wyoming and Minnesota. A certified photogrammetrist through the American Society for Photogrammetry and Remote Sensing (ASPRS), he also holds a license in photogrammetry in Oregon.

Miles brings more than 40 years of experience in the geospatial industry, working the past 38 years in supervisory and various management levels. He has extensive experience working on projects throughout the United States, including thousands of corridor miles in the utility markets. He's managed numerous projects utilizing various sensor platforms acquired with fixed-wing aircraft, helicopter, mobile mapping units and UAS.



Andrew Moody is an ASPRS certified lidar technologist. With nearly 15 years of experience in the lidar and mapping field, he leads 95West's lidar department. Andrew's project experience is broad, including mapping hundreds of miles of transmission line and pipeline corridors in the upper Midwest.



Greg Owen grew up on a small-grains farm near Valley City, served by Cass County Electric Cooperative.

He earned electrical engineering degrees from North Dakota State University. The first half of his career was at a consulting firm, crawling through substation control buildings from coast to coast.

He then joined Basin Electric Power Cooperative where his responsibilities were focused on instrumentation and controls projects at generation stations. His 17-year career currently includes serving as manager of engineering services at Capital Electric Cooperative, working with a great team to help serve members and improve the distribution system in Burleigh and Sheridan counties.

Greg and his wife have two wonderful daughters and stay busy on their non-profitable hobby farm north of Bismarck.



Jeremy Syverson joined Basin Electric Power Cooperative in 2003 and currently serves as the cooperative's Vice President of Transmission. He holds a bachelor's degree in electrical engineering from North Dakota State University and is a registered Professional Engineer in North Dakota.

Throughout his career at Basin Electric, Jeremy has contributed broadly across the transmission function, including planning, operations, compliance, construction

(continued on next page)

and regulatory policy. He's played a key role in advancing major high-voltage transmission projects across the region.

He is an active participant in regional and national electric industry initiatives, representing Basin Electric and the cooperative sector across organizations including the Southwest Power Pool (SPP), Midcontinent Independent System Operator (MISO), Midwest Reliability Organization (MRO), North American Transmission Forum (NATF), North American Electric Reliability Corporation (NERC), and the Western Electricity Coordinating Council (WECC).



Will Lovelace is currently the supervisor of transmission planning at Minnkota Power Cooperative. His responsibilities include running generation interconnection, transmission service, and large load interconnection processes in addition to more traditional transmission planning. Will graduated from the University of North Dakota

with a Bachelor of Science in Electrical Engineering degree and from the University of Texas with a Master of Science in Engineering degree, where he focused on the impact of increased interconnection of inverter-based resources to grid reliability.



Josh Kramer serves as the Executive Vice President and General Manager of the North Dakota Association of Rural Electric Cooperatives (NDAREC).

A rural farm boy and military veteran, Josh brings a strong sense of duty and service to his leadership role. He is deeply committed to the mission of electric cooperatives and the

strength of the cooperative network. Throughout his career, he has dedicated himself to advancing cooperatives and rural development.

Outside of work, Josh enjoys coaching youth wrestling, camping with his family, and keeping up with his kids' many activities. He and his family make their home in Bismarck.



Kat Perkins appeared on NBC's "The Voice" Season 6, and advanced to the show's finals. Mentored by Adam Levine, Maroon 5 and coach on "The Voice," Kat climbed her way to fourth place! A native of the tiny town of Scranton, N.D., Kat has resided in Minneapolis since 1999. She is a full-time touring musician, songwriter and show creator. Kat founded

The Rising Star Foundation in 2015, fostering financial aid to up-and-coming musicians in need. Music and education are her passion, and she seeks opportunities to combine them whenever possible.

REGISTRATION INFORMATION

Please register for the conference by **Nov. 21**. Online registration is available at <https://www.ndarec.com/ndarec-education-programs>. The training offered via the conference sessions is part of the 2025 NDAREC Menu of Education Programs and is open to other cooperative employees and NDAREC associate members.

REGISTRATION FEE

The registration fee is \$525/person. This covers the cost of course materials, meals and refreshment breaks.

CANCELLATIONS

If you need to cancel your registration, please notify Pamela Clark-Stein at pstein@ndarec.com 14 days in advance of the conference. If notice is provided 14 days or more in advance, there is no cancellation fee. If notice is provided less than 14 days in advance, a cancellation fee of \$70/day will be charged. Please note: Substitutions are permitted at no extra charge if NDAREC is notified of the substitution prior to the conference.

SPECIAL DIETARY NEEDS AND OTHER ACCOMMODATIONS

Please notify Pamela at pstein@ndarec.com of any dietary restrictions such as food allergies, gluten-free options and other special accommodations needed. A minimum of 72 hours' advance notice is requested.

HOTEL ACCOMMODATIONS

For your convenience, a block of sleeping rooms is reserved for Dec. 3 and 4 at the hotels listed below.

Comfort Inn & Suites, 1516 27th St. N, Mandan
To make your room reservation, call 701-204-6712.

For online reservations:

[Rates & Available Rooms - Comfort Inn & Suites Mandan - Bismarck](#)

The block of sleeping rooms is reserved under "REC Engineering Conference." The room rate/night is \$109 and the release date for the reserved block of rooms is Nov. 14.

Days Inn by Wyndham, 2630 Old Red Trail, Mandan
To make your room reservation, call 701-663-8686.

For online reservations:

[Days Inn by Wyndham Mandan Bismarck Area - Mandan, ND Hotels](#)

The reserved room block is under "REC Engineering Conference." The room rate is \$74.99/night and the release date for the reserved room block is Nov. 14.

Planning Committee

Scott Iverson, Mountrail-Williams Electric Cooperative

Tyler Lee, North Central Electric Cooperative

Carson Lovin, Northern Plains Electric Cooperative

Wesley Mason, Verendrye Electric Cooperative

Todd Forster, Widseth

Pamela Clark-Stein, NDAREC

EXHIBITOR SHOWCASE

Dec. 4, 2025

Baymont Inn & Suites | 2611 Old Red Trail | Mandan, N.D

Co-sponsored by:

**The N.D. REC Engineering and Operations Association
and the N.D. Association of Rural Electric Cooperatives (NDAREC)**

NDARECs
North Dakota Association of Rural Electric Cooperatives
Your Touchstone Energy® Cooperative 