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A Message From the Executive Director:



Hello, everyone!

It's been a great summer as we move into a nice fall thus far!

We want to welcome our newest inspector

Kevin Huber who will be taking care of district 8. District 8 is all of Ward County which will include the City of Minot. Last June, Minot turned the electrical inspections back to the NDSEB so check out our latest district map (enclosed and on our website). We now have 14 districts plus Fargo, Bismarck and Grand Forks still have their own electrical inspectors that we work in collaboration with.

Our state office CEU classes for the 22-23 season are going fine, attendance is picking up so if you're interested you can sign up on our website as the classes are filling up fast!

We also started attending high school job fairs and the Market Place for Kids events across the state for this school season. Our NDSEB team is trying to touch the lives of school age kids ranging from 5th, 6th, and some 7th graders to "spark"

some interest in finding replacements for the aging personnel in our trade.

The board is still offering the \$500 per semester scholarships to North Dakota apprentices who are enrolled either in an approved related training program or in an approved ND college degree program. Go to our website to see the full approved list of education providers.

I returned from our National Electrical Reciprocal Alliance (NERA) meeting which was hosted by Texas in Bandera, TX. Of the 17 member states, 10 of us were in attendance. We try to meet annually in the fall of the year, but this is the first time we've met in person in 2 years. This year's discussion ended by assigning member states to contact non-member states that have similar licensing requirements to encourage them to join our group. The main function of NERA is so electricians can move easily between states per reciprocity agreements. We'll keep you posted on how that turns out. Our ND office is and has been the secretary of NERA for the past several years.

With the completion of our latest office remodeling efforts, we are working

towards giving our license examinations in our large conference room at our location vs. at a hotel. More information will be posted on this change as the room continues to get set up to accommodate the testing.

As you may know, we have relaxed HVAC equipment GFCI requirement - article 210.8 (f) in accordance with NPFA TIA 20-19 which can be found on our website. According to the NFPA task group studying this problem, this particular GFCI requirement will be postponed until the 2026 NEC. ND is looking if this was a code correction to install GFCI protection. This will now be waived so get in contact with your local inspectors to remedy this. If you have questions give me a call.

Check out the errata sheet on our website under the Laws Rules tab to see what other changes we've made to the 2020 NEC since our ND Laws Rules and Wiring Standards of ND booklet was printed.

Hope you had a great summer and can get ready for another ND winter!!

I wish you enough,

Hello everyone, the three-year revision cycle of NFPA 70 - the National Electrical Code was just completed. The new 2023 edition NEC is now available for purchase directly from NFPA and should be available soon through other retail outlets. If you would like to check out the new edition, it is available for free viewing at www.nfpa.org - click on Codes & Standards and find NFPA 70. To view the free access version, you will need to set up an account with a username and password. There is no cost for this access, but you may occasionally receive emails from NFPA in the future. You can easily unsubscribe from them if you don't want to get them. With that account set up, you can access any current or past NFPA document such as the National Electrical Code for no cost from any smartphone, tablet, or computer with internet access at any time.

At the time I'm writing this article, we have completed one-half of our NDSEB continuing education classes for this class year, and have eight classes remaining. If you want to attend an NDSEB class this year, I recommend getting signed up soon as there is a limited number of seats at each location, and the last classes of the year always seem to fill up. You can find the registration on our website

under the Continuing Education tab, click on "2022 NDSEB CEU Classes & Registration" and you will find a list of available classes and the registration links to get signed up. Our class this year covers overcurrent protection, wiring methods, and Chapter 5 articles such as healthcare, assembly occupancies, mobile and manufactured homes, and temporary installations. I look forward to seeing many of you at those classes!

There are many other continuing education providers that you can obtain credits from. Just be sure to take a course that has been approved by the NDSEB to ensure that it will be credited toward your North Dakota license renewal requirements. If you are looking for approved providers and courses, there is a spreadsheet on our website listing all approved continuing education courses. For each one, you will find the providers contact information for registration and availability. Many providers will be putting on classes based on the new edition of the NEC in the upcoming months, and I recommend all electricians take an update class to be familiar with the changes to the 2023 edition before they go into effect. One option for this type of class is the North Dakota Chapter IAEI. Their annual meeting is open to everyone and will

be held on February 23 & 24, 2023 at the Baymont by Wyndham in Mandan, ND. The February meeting will consist of 12 hours of continuing education. One of the main topics will be the Analysis of Changes to the 2023 NEC presented by different national speakers who are members of the code making panels and are directly involved in the revision process. Anyone interested in attending this class can reach out to any of our state or city inspectors for more information, or you can email me at shalle@nd.gov.

Thank you and be safe!

Scott Halle

2022 CEU CLASS SCHEDULE

November 2022

November 17: Williston
November 18: Dickinson

December 2022

December 8: Bismarck
December 9: Minot

January 2023

January 5: Fargo
January 6: Grand Forks

- Pre-registration is required to attend a class.
- Register online at www.ndseb.com under the Continuing Education tab and click on "2022 NDSEB CEU Classes and Registration".
- Registration closes approximately one week before each class starts or sooner if the class is full so REGISTER EARLY!

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Career Fairs Spark Interest In Younger Generation

Greetings everyone,

It is that time of year again where the North Dakota State Electrical Board attends numerous Career Fairs. We will be traveling throughout the State promoting the electrical industry. Our goal is to peak interest in young people of the benefits in becoming an electrician and the paths to achieve this. We speak with many high school aged students and have had some great success at this. Many of them have questions on how to become an electrician and what the role of the Electrical Board is, and we are happy to provide these answers. It is amazing how many students we speak with already have a family member in the trade. This was a great program implemented by the Board and we hope it continues well into the future.

In addition to the Career Fairs, the Electrical Board is also a presenter at the Marketplace for Kids. For these events we have several groups of children of all ages in a classroom setting. We then have them build a simple motor circuit or a simple lighting circuit using 9V batteries. Their faces light up just like the light bulbs when they get them working and I am very happy I get to be a part of this. Many children have told us that the class we provide is their favorite one! We are hoping that building these kits may spark some interest in the electrical field later in their life.

Respectfully,

Jon Saylor

Insurance/Inspection Compliance Administrator

News & Notes from NDSEB

APPRENTICE INFORMATION:

Apprentice electrician means a person learning the trade under the personal supervision of a state-licensed electrician.

- Registration is required within 6 months of employment.
- Apprentice registrations expire each year on January 31. Any hours worked while unregistered, will not count towards your Journeyman.
- Any individual over sixteen years of age may work as an apprentice under a licensed master, class B, or power limited electrician, but the master, class B, or power limited electrician may not allow an apprentice to work on any installation without direct constant supervision by a North Dakota licensed electrician working with the apprentice at the worksite.

APPRENTICE EDUCATION:

According to ND Century Code 43-09-11, any person registering as an apprentice electrician **after January 31, 2008** is **required** to have related training consisting of one the following:

- Successfully completed five hundred seventy-six (576) hours of training classes recognized by the board and completed eight thousand (8,000) hours' experience in installing and repairing electrical wiring, apparatus, and equipment; which experience may not be obtained in less than three years.
- Successfully completed at least two years of electrical school approved by the board and completed eight thousand (8,000) hours' experience in installing and repairing electrical wiring, apparatus, and equipment; which experience may not be obtained in less than three years.

Please visit our website, www.ndseb.com, Apprentice Education, for a list of approved apprenticeship related training programs and colleges.

COMING SOON - APPRENTICE REGISTRATION ONLINE RENEWALS:

Your apprentice registration will expire on January 31, 2023 (unless you originally register after November 1, 2022). A postcard reminder will be mailed out to all registered apprentices the first week of December 2022. Renewals must be submitted electronically through the board's website at www.ndseb.com. Remember, apprentices must remain registered for your work experience to count towards a journeyman license.

INTERESTING FACT: FISHY SMELL

If the smell comes and goes, or is stronger in one area than another, it **could signify an overheating electrical component** (circuit breakers, outlets, wiring, etc.).



RICHARD WOLFE RETIRES

District 8 Inspector Richard Wolfe retires after twenty-three (23) years of continued employment at the North Dakota State Electrical Board. Rich started on June 10, 1999 and retired as of June 3, 2022.



We will all miss Rich, but we wish him well with his retirement and keeping up with today's technologies. Enjoy your grandchildren and your next life as a professional golfer.

Best wishes Rich and take care! ☺

A Word from the Director of Inspections

Hello everyone, hope you are all enjoying the beautiful fall weather while you still can before mother nature throws the lovely SNOW our way! We have been inspecting a pretty good number of generators lately so I thought this would be a good time to go through a few things before winter gets here.

When you look at Article 445 in the NEC, it talks about all the general requirements for generator installations. Like all electrical components installed in North Dakota, generators need to be LISTED and have all the markings required. When

you look at 445.18, you need to have disconnecting means AND emergency shutdown, plus any generator over 15KW requires a remote emergency shutdown that needs to be outside of the equipment room or generator enclosure.

There are several codes articles that deal with specific generator installations like 700 for Emergency Systems which you will see mostly for healthcare facilities and places of assembly where it is critical for emergency lighting and branch circuits for equipment to be energized for safety to human life. NEC 700.4 explains the capacity

requirements and NEC 700.5 tells us that all transfer equipment shall be automatic, listed and marked for emergency use. I have seen a few installations where the equipment was not marked properly and having to order a new transfer switch and change it out, usually after hours can turn into a big problem. While automatic transfer switches for legally required systems are required to transfer within 60 seconds, transfer switches for emergency systems are required to transfer in 10 seconds or less. You will find there are a lot of similar codes in NEC 701 for legally required systems, but emergency system installations are stricter and take precedence if both systems are installed at one location.

What we have been inspecting the most for generator installations this year is NEC 702 for optional standby systems. We see these installed for everything from residential houses to farm shops and grain bin sites. There are a lot of similar code articles for these installations like the requirement for signs you find in 700.7 / 701.7 and 702.7. When you are installing an automatic transfer switch on a dwelling, this can be used as your emergency disconnect as required in NEC 230.85 if the switch is listed as suitable for use as service equipment and you can do you bonding and grounding in the switch. Please remember to do a load calculation for all your generator installations which is required in 700.4 / 701.4 and 702.4 – this is one of the corrections we are finding quite often when automatic transfer switches are used and again. This can be a time consuming and costly fix that we do not like to write up and can be avoided with a few calculations.

Like all electrical installations, it is always better to read the article and call your local inspector as soon as the project begins so we can all be on the same page.

Thanks, and have a great FALL SEASON. - Doug Grinde



Making A Connection:

District 14 Inspector Josh Dahl



Originally from Park River, ND, Josh Dahl attended Moorhead State University and received a degree in Electrical Construction from Minnesota State

Community and Technical College in Moorhead. He worked for a few contractors in the Fargo-Moorhead area as well as a contractor in Petersburg before becoming an inspector at NDSEB in November of 2019.

Josh and his wife Susan have four children, aged 11, 9, 8, and 6 who are very active and keep them busy!

What projects are you currently working on? *I have various large commercial jobs that are currently in the process of being built.*

What is your favorite part of your job? *I enjoy the interaction with contractors and people I have worked with or met in the past.*

Do you have a favorite memory or experience while working for the NDSEB? *Any story that Tom brings up from the past is usually memorable (Tom Crawford, District 9 inspector).*

Did you or do you have a mentor or a person that inspired you? *I worked under a few journeymen that were*

great teachers and wanted you to learn. (Thanks, Mike Hanson).

What are your hobbies? *I enjoy whenever I can to sneak outdoors for hunting or fishing. I enjoy helping coach youth football so I guess that would be a hobby since it takes up free time and costs money.*

What would be your dream vacation? *Alaskan hike would be my type of vacation.*

The best thing about North Dakota is . . . ? *Its honey production.*

The best movie of all time is . . . ? *Rudy*

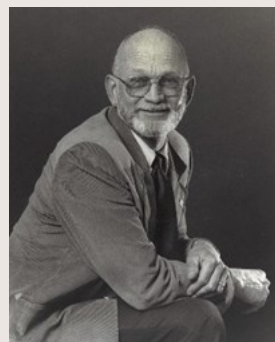
What's your favorite TV show? *Right now it is the Goldbergs because I have two nieces that are on the show this season.*

What do you like on your pizza? *I'm not too picky on what's on my pizza, but I would say ranch usually gets added.*

Anything else you want to share? *To anyone who has read this, thank you, and feel free to get in touch with me or schedule a visit. ☺*



In Memoriam



Richard (Dick) Haman, 87, Minot, ND passed away September 3, 2022. Richard started his career with the ND State Electrical Board as a State Electrical Inspector. In 1984, he became the Director of Inspections. In 1986, he became the Executive Director until his retirement in 1996. We wish to express our deepest sympathy to his wife, Ginger, family and friends.