

ND State Electrical Board
PO Box 7335
Bismarck, ND 58507-7335
(701) 328-9522

Find us at
www.ndseb.com

A Message From the Executive Director:



Hello, everyone!

In recent discussions with contractors around the state, I am hearing that things are starting to pick up in western ND and work remains steady in the east. Our wiring certificate numbers are down from 24,281 filed last year (2015) compared to 14,170 filed in the first 9 months of 2016, but our inspectors remain busy catching up on older inspections and self-wire inspections.

As some of you may know, approximately three Tuesday's per month, we have contractor orientation. This is where a master electrician comes into our office and gets set up to be an electrical contractor. They review the ND Laws, Rules and Wiring Standards and approximately 6 – 9 people each month are entering into electrical contracting.

Exam numbers have been down this past year also. We have the capability of testing 50 individuals at one sitting per month. The past two years we've added an additional testing date for the months of June, July, August and September. This year we've not had to add the extra testing dates.

North Dakota is a member of NERA (National Electrical Reciprocal Alliance) and we hold two meetings every year, one in person and the other by conference call. There are presently 18 State members, including Wisconsin which was voted in as a member at our last meeting in August. These states regulate similar rules for electricians and the group was formed so electricians could move easily from state to state to follow where the work was being done. North Dakota currently has Journeyman license reciprocity with 12 states and Master

license reciprocity with two (2).

We still have a few 2014 NEC soft bound books for sale if you are in need. Call our office to get the reduced price of \$50.00 plus shipping.

We also like to hear from you, so send me questions and I'll do my best to answer them and, as always, we want your comments too. Please keep us informed about your most current address as well as e-mail address.

Don't forget to sign up to attend the ND Chapter IAEI meeting in Mandan, ND October 20 – 21. For more information contact Scott Halle at shalle@nd.gov.

I hope you had a nice summer (a little wet for some) and continue into a great fall!

Be safe out there,
James Schmidt



Ensuring Public Safety Since 1917

Connections

Issue 251
Sept. 2016

Sylliaasen Replaces Scherer on NDSEB

The North Dakota State Electrical Board consists of five members appointed by the governor for a term of five years each. The terms are staggered so that one term expires every June 30th.

On June 30, 2016, Board member Earl Scherer's second term expired. He received a plaque for his 10 years of service and has left the board. (Thank you, Earl, from NDSEB staff!)

Board members are appointed by the Governor and are meant to represent a cross-section of the electrical industry:

- One member of the board is a master electrician who is a contractor;
- One member is a journeyman electrician;
- One member is a consumer member of a rural electric cooperative;
- One member is a person associated with an investor-owned utility; and

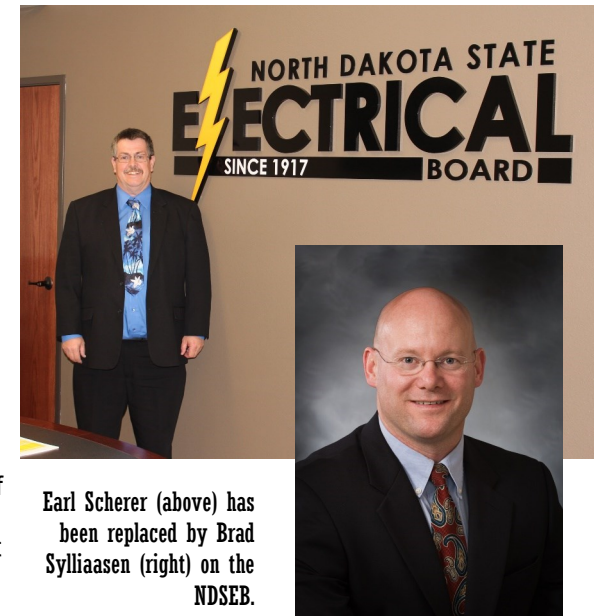
- One member of the board represents the public and is not directly associated with the electrical industry.

Replacing Scherer on the Board representing investor-owned utilities is Brad Sylliaasen. Sylliaasen is the Director of Design and Construction at Xcel Energy and is based out of Fargo, ND. He has worked for Xcel Energy since 1995.

The Board held an Election of Officers at its July 20, 2016 meeting. Officers for the next year are:

- Rod Mayer, President;
- Kyle Miller, Vice President;
- Tom Paulson, Secretary; and
- Brad Sylliaasen, Treasurer.

The day-to-day operations of the board are handled by its Executive Director, district inspectors, and office



Earl Scherer (above) has been replaced by Brad Sylliaasen (right) on the NDSEB.

staff. Recently, several NDSEB employees were recognized for their years of service:

- Scott Halle, Training and Compliance Administrator - 5 years;
- Ashley Windhorst, Administrative Assistant - 10 years; and
- Josh Wilson, District 1 Inspector - 10 years. 🏆

Inside This Issue . . .

- Sylliaasen Replaces Scherer on NDSEB
- A Message from the District Inspectors
- Safety Corner: Proper Lug Selection Important
- News & Notes from NDSEB
- Making a Connection: NDSEB Inspector Zach Paetz
- A Message from the Executive Director

NDSEB Mission Statement:

Ensure safety and protect life, health, and property in the daily use of electricity.

A Message from the District Inspectors

NDSEB recently held its quarterly inspectors' meeting on August 24 - 26 and had some very good discussions on issues they are being encountered out in the field, both good and bad.

Part of the reason for these meetings is not only to discuss code issues we are seeing, but to try and make sure that it does not matter where in North Dakota you as an electrician are working, that we as inspectors look at all electrical installations as close to the same as possible. Like electrical contractors, 10 companies could wire the exact same job, and not many of them would wire it the same. As inspectors, we have 15 different ways to look at things, but in the end, we are trying come up with the same result — a safe and code compliant electrical installation. There may always be a few differences in our approach, but we are trying to maintain a consistency to our inspections.

Highlights from our August meeting:

SERVICES: It seems MOTHER NATURE is feeling the need to flex her muscles this summer, with high winds, hail, tornados, etc. I can only imagine what she has in store for us this coming fall and winter!! With these storms

comes damage to trees, buildings, and electrical services. REMEMBER, when replacing a SERVICE MAST, SERVICE METER, or both, that you must also bring the ELECTRICAL SERVICE up to code. A minimum of a 100 amp panel with twenty FULL SIZED branch circuit spaces / greater than 100 amps but less than 200 amps requires 30 FULL SIZED branch circuit spaces, or a 200 amp panel with 40 FULL SIZED branch circuit spaces must be installed if the existing service does not meet current code requirements as per ND Wiring Standards 24-02-01-08(5).

LATE CERTS: Please remember to get your WIRING CERTIFICATES filed before work begins as per 24-02-01-19 (2)(a). We are starting to do more periodic and rough-in inspections whenever possible, and are finding more and more jobs that are 2 to 3 weeks into the rough-in, and no certificate has been filed. This also pertains to when to close or complete your certificate. The final paperwork shall be submitted within 15 days of completion, use, or occupancy, whichever is foremost. See 24-02-01-19 (2)(b).

REQUIRED CERTIFICATES: There have been several calls to our office recently inquiring about what is

considered MAINTENANCE and when is a WIRING CERTIFICATE required. Please read NDCC 43-09-09 and ND Wiring Standards 24-02-01-02(4) for clarification. Maintenance personnel must be regularly employed by the owner to do any minor repairs to electrical devices.

CORRECTIONS: If you have received a correction report, and you have questions, please call the inspector that wrote the corrections. We, in the office, would love to help, but we were not at the job, and have not seen the violations. Any changes to an inspection report, or any extensions of correction due dates, must come from the inspector involved.

And a little something to make you smile . . . A minister was lying on his death bed in the hospital. He asked if he could please have a lawyer sit on one side of him, and a banker on the other. When the two got there and sat down, they told the minister it was their honor to be asked to do this for him, but why did he ask for a banker and a lawyer? The minister looked up and said "When Jesus died on the cross, he had a sinner on each side of him, I want to go the same way." ☺

- Doug Grinde, Director of Inspections

Safety Corner: Proper Lug Selection Important

Electrical connections are critical parts of any wiring system, and it is important to choose the correct methods and materials to ensure long lasting and safe installations. Lugs are often used as a termination for conductors in equipment and enclosures, so please take time to select the correct product for the application.

One of the first things to verify is to make sure the lug is correct for the conductor material you are terminating: some are only good for copper, some only for aluminum, and some are dual rated for both copper and aluminum.

A common mistake Inspectors see in the field is installing more than one conductor in a lug terminal when that

terminal is not identified for multiple conductors. According to UL's Product Spec., connectors generally accommodate a single conductor under the clamping mechanism unless otherwise identified, such as with the number of conductors located parenthetically in front of the wire size or range. Typically these lugs have a teardrop shaped opening and are marked with a size range for a single conductor and also with a size range for two conductors (often if rated for two they must be the same size conductor).

If you are working with conductors more finely stranded than the typically used Class B, you must use connectors listed for the specific conductor class, as these

smaller strands can easily break in a traditional screw terminal lug.

Torque specifications are another important factor to consider when installing conductors in lugs, most installers over-torque connections, which can increase the resistance of the termination, so follow the manufacturer's instructions in this regard.

These are just a few points to consider when selecting lugs for your next project, but please remember that termination points are a potential failure point, so proper selection and application are essential to a long-lasting code-compliant installation. ☺

News & Notes from NDSEB

• PAST DUE CORRECTION REPORTS

As indicated in previous Newsletters, your cooperation in completing and submitting correction reports issued to you in a timely manner would be greatly appreciated. We have also indicated that pursuant to N.D.C.C. §43-09-15 - Denial, suspension, or revocation of licenses, this could also affect renewal of your license:

5. After due notice, failed or refused to correct, within the specified time, any electrical installation not in compliance with the provisions of this chapter.

Unless the corrections (code violations) are considered an emergency, thirty

(30) days is typically given to correct and submit a correction report. If not received by this Board within the allotted time, a red Past Due Notice is mailed. According to our Laws, Rules & Wiring Standards §24-02-01-19 - Inspection fees.

Corrections. Whenever a correction order is written and corrections are not completed within the allotted time, there shall be an administration charge of fifty dollars, which shall be paid to the board by the master or class B electrician.

Unfortunately, the Board has been assessing this administrative fee to many contractors. We have also

been re-assessing the administrative fee due to non-compliance after the time has expired from the initial assessment. We would like to stress the seriousness of these corrections being completed.

In order to avoid administrative fees being assessed and/or your license being placed on hold from renewal, we would like to reiterate to complete and submit your correction reports on time. If extra time is needed to make the corrections, please communicate with our inspectors to grant that extension "before" it goes past due.

• APPLICATION OF CHECKS/PAYMENT

The North Dakota State Electrical Board has been receiving various checks without any indication of where to apply the payment. We have either been calling or returning the checks in order to resolve appropriate application. In order to avoid your check being returned, please indicate a reference on the check (either on the memo part or check stub). This would help our office process your payment more efficiently.

• WIRING CERTIFICATE AUDIT

The North Dakota State Electrical Board is conducting audits of paper wiring certificates that were requested and issued to contracting Master and Class B electricians. The audit letters for e-Cert contractors were mailed on August 23, 2016 and to other contractors on September 7, 2016. According to our system, the wiring certificates listed on your audit letter have not been used or submitted. Your prompt response would be greatly appreciated.

• EMAIL PROBLEMS

Recently, NDSEB has had issues sending emails. The IT Department tells us it has to do with SPF records (IT language). If you have recently emailed us and have not received a reply, you may want to give us a call in case our email response was unable to reach you! ☺

Making A Connection:

District 11 Inspector Zach Paetz

Originally from Beulah, North Dakota, Zach Paetz has worked for the NDSEB for a little more than four years. He is the District 11 Inspector and handles all commercial, residential, and industrial electrical inspections in Dunn and Stark counties.

Zach and his wife Kayleen have two children - Caleb (9) and Tabitha (4).

What projects are you currently working on? *A new middle school in Dickinson. I recently finished a large gas plant north of Killdeer. I was also a part of the Dakota Prairie Refinery built near Dickinson.*

What is your favorite part of your job? *Code interpretation. This has always interested me and being an inspector allows me to see the process of how codes are developed and the thought that went into each one. I also enjoy the diversity of the work and people in the electrical industry.*

Did you or do you have a mentor or a person that inspired you? *I can't say that there is any specific person*

but I will give credit to all journeyman who took the time to teach me the skills necessary to be in this field. As an inspector I really look up to a former inspector that taught me a lot and helped me to put a lot of things in perspective. He always had a way of putting things so I could wrap my head around a certain code or situation.

What are your hobbies? *Hunt and Fish - although it's hard to find the time.*

What would be your dream vacation? *Fly fishing trip in New Zealand.*

The best thing about North Dakota is . . . ? *There is nothing better than a North Dakota sunrise any time of the year.*

The best movie of all time. ☺

