

# Meeting Minutes: Board of Electricity

Date: January 14, 2020  
Time: 9:00 a.m.  
Location: Minnesota Room, Department of Labor and Industry  
443 Lafayette Road North, St. Paul, MN 55155

## **Members Present:**

Alfreda Daniels  
Cole Funseth  
Derrick Givens  
Mike Hanson  
Duane Hendricks – Vice-Chair  
Chad Kurdi  
Peter Lindahl – Secretary  
Daniel Westberg – Chair  
John Williamson  
Weston Wilson

## **Members Absent:**

David Curtis

## **DLI Staff & Visitors:**

Jeff Lebowski (DLI)  
Lyndy Logan (DLI)  
Neil Furman (DLI)  
Dean Hunter (DLI)  
Marty Kumm (DLI)  
Steve Dudley (DLI)  
Todd Green (DLI)  
Adam Hanson (ABC)  
Michelle Dreier (Electrical Assn.)  
Mike Murcek (Electrical Assn.)  
Jerry Daniel (TX Dept of Licensing) – Tele  
Yvonne Feinleib (TX Dept of Licensing) – Tele  
Doug Jennings (TX Dept of Licensing) – Tele  
Gary Krause (State of WI)  
Anthony Tadysak (State of WI)  
Dale Fisch (MNESTA)  
Tim Fischer (Electrician)  
Tony Maghrak (IBEW 6<sup>th</sup> District)  
Jason Carlson (IBEW Local 292)  
Ted Swenson (IBEW Local 292)  
Travis Rust (IBEW Local 292)  
Jeff Heimerl (IBEW Local 292)

## **DLI Staff & Visitors continued:**

Robert Hokstad (IBEW Local 292)  
Nicholas DeMers (IBEW Local 292)  
Andy Snope (IBEW Local 292)  
Aaron Olson (IBEW Local 292)  
Jose Winkels (IBEW Local 292)  
John Winkels (IBEW Local 292)  
Philip Winkels (IBEW Local 292)  
David Frary (IBEW Local 292)  
Rick Coren (IBEW Local 292)  
Jennifer Mudge (IBEW Local 292)  
Brian Cole (IBEW Local 292)  
Jay Nelson (IBEW Local 292)  
Derrick Atkins (IBEW Local 292)  
Myles Lembke (IBEW Local 292)  
Marc Anderson (IBEW Local 292)  
Clyde Fairbanks (IBEW Local 292)  
Steve Russell (IBEW Local 292)  
Eric Shaw (IBEW Local 292)  
Jon Schander (IBEW Local 292)  
Dan Ordahl (IBEW Local 292)  
Mike Wermerskirchen (IBEW Local 292)  
Kenneth Sullivan (IBEW Local 292)  
Alex Peterson (IBEW Local 292)  
Jerry Olson (IBEW Local 292)  
Hu Weiss (IBEW Local 292)  
Gregory Tofe (IBEW Local 292)  
Jonah Hiatal (IBEW Local 292)  
Chris Kohn (IBEW Local 292)  
John Pye Hall (IBEW Local 292)  
Tyler Simmers (IBEW Local 292)  
John Taylor (IBEW Local 292)  
Josh Sideler (IBEW Local 292)  
Tom Tobias (IBEW Local 292)  
Eric Christen (IBEW Local 292)  
Shane Meier (IBEW Local 343)  
Chad Katzung (IBEW Local 343)  
Lane Halley (IBEW Local 110)

**DLI Staff & Visitors continued:**

Jaime McNamara (IBEW Local 110)

Brad Malm (IBEW Local 110)

Kyle Bukovich (IBEW Local 242)

Darik Carlson (IBEW Local 242)

Donald Smith (IBEW Local 242)

Dan Hendrickson (Local IBEW 294)

**1. Call to Order**

The meeting was called to order at 9:10 a.m. by Chair Westberg. Roll call was taken by Secretary Lindahl and a quorum was declared with 10 of 11 voting members present in person.

**2. Approval of Meeting Agenda**

A motion was made by Givens, seconded by Kurdi, to approve the agenda as presented. The vote was unanimous with 10 votes in favor of the motion; the motion carried.

**3. Approval of Previous Meeting Minutes**

A motion was made by Kurdi, seconded by Givens, to approve the Oct. 8, 2019, meeting minutes with a correction to page 4, last paragraph, as shown below (“would” was changed to “may”). The vote was unanimous with 10 votes in favor of the motion; the motion carried.

- “Lebowski said the Board of Electricity makes approval or disapproval of reciprocity agreements and, if approved, the DLI Commissioner **may** enter into an agreement with that state.”

**4. Regular Business**

- a. **Expense Approval** – reviewed and approved the per diem and expenses.
- b. **Enforcement & licensing update** – A handout was provided with the number of electrical enforcement actions/orders.
- c. **Inspections update** – Williamson summarized a press release from Dec. 23, 2019, regarding iMS, the department’s new system that launched with electrical permitting in October. In a recent survey of iMS users, 95% of homeowners and 80% of contractors were satisfied. To date, 95% of all electrical permits are submitted electronically and there have been approximately 23,000 electrical permits issues since October 2019.

**5. Special Business**

- a. **October 8, 2019 Reciprocity vote for Texas and Wisconsin – Motion to Rescind**  
Lindahl stated that during the last Board of Electricity meeting, two states, Texas and Wisconsin, requested consideration to be included as reciprocating states to Minnesota. Clearly from the number of attendees today, it is clear the Board made a mistake. Since the meeting, the Board has received numerous calls and emails against reciprocity with both states. Reciprocating the journey worker license is truly not in Minnesota’s best interests.

**A motion was made by Lindahl, seconded by Daniels, to rescind the previous recommendation made on October 8, 2019 to enter into a reciprocal electrical licensing agreement with the state of Texas. The majority vote ruled with 7 votes in favor, 2 votes against the motion, and one abstention (Williamson); the motion carried to rescind reciprocity with the State of Texas.**

**The following motion was made on October 8, 2019:**

*A motion was made by Kurdi, seconded by Hanson, to enter into a Reciprocal Agreement with Texas. The majority vote ruled with 7 votes in favor, 5 opposed, of the motion; the motion carried.*

Hendricks, as an appointed member of the board, felt it was his obligation to act on the behalf of the best interests and safety of Minnesota. Reciprocity was brought up at the Board meeting in October but wasn't thoroughly reviewed. It is in the best interests of Minnesota to uphold safety. He received numerous letters that were against reciprocity; many people are concerned with reciprocity and reducing Minnesota's standards. He hasn't heard from anyone in Minnesota that wants or needs a reciprocal license with Texas. When comparing Minnesota to Texas, there are currently (and in the past) variances in licensing, codes, training, and continuing education. He asked that members vote to rescind the motion [made on October 8, 2019].

Kurdi asked for reasons why the motion should be rescinded and referred to Steve Dudley's handout from the previous Board meeting (**Attachment A**) that compared Minnesota, Texas and Wisconsin. He believes Minnesota is comparable with multiple other states, including Wisconsin and Texas and doesn't see any issues. He received communication from other members saying that reciprocity would benefit Minnesota workers. He said if there is a training issues, then the Board can request Texas to complete the 16 hours of required continuing education. In the letter Texas sent to the Board (**Attachment B**), it clearly shows Texas is comparable to Minnesota.

Lindahl responded and said he sees this as two pieces – one short term and one long term. The Board could ask Texas to make adjustments; however, as Hendricks stated earlier, that wouldn't mean Texas would keep the changes – Texas could change it 3 months from now and Minnesota wouldn't have any control over this. Long term – it doesn't matter because it is not in the best interest to the state of Minnesota to open the border. The Board is obligated to protect consumers in Minnesota to the highest standards of electrical installation. He said that individuals taking the exam in Texas and Wisconsin can bring in multiple pieces of information. Texas exams are not as easy as Wisconsin's from the standpoint of materials allowed during the exam; however, Texas exam takers can bring in tabbed and highlighted code books and anything else they want. Only 20% pass and this number would be much lower number if those taking the test couldn't bring materials to the exam for reference. When taking an exam in Minnesota, you can only bring a bottle of water and a bag of chips – nothing else – code book, pencils, and calculators are provided. Individuals can only bring their knowledge learned over the years through apprenticeship. As Hendrickson stated, no one from

Minnesota is begging Texas and Wisconsin to reciprocate. Not one person has ever mentioned reciprocity with Texas or Wisconsin to him. Making a decision to vote on reciprocity after only a ten-minute presentation was irresponsible of the Board. Reciprocity should have been tabled to allow the public to comment, which has since happened. Minnesota statutes do not state there must be a reason to rescind a motion. In addition, the DLI Commissioner, even if the Board agreed with reciprocity, is not compelled to sign the agreement.

Hanson said there is a lot of emotion surrounding reciprocity and he focused on facts to address Lindahl's comments. There was a lot of work that went into the decision [to approve reciprocity], not just ten minutes at a Board meeting. The Board charged department staff with determining whether Texas met Minnesota's standards and the response was that Texas did and reciprocity was recommended. It isn't accurate or fair to say that the Board made a decision in ten minutes. Now it has come to light that there may be a different standard when the exam is given. He then asked Texas, what level of information can someone bring to an exam – is a tabbed and highlighted code book and notes allowed? What Texas allows someone to bring to an exam makes a significant difference on whether Minnesota's standard would be met. The entire topic of reciprocity for a journey worker level for Texas and Wisconsin started before Hanson's service on the Board. When the Board met in October, the discussion was that the research had been completed. Is there a shortage of licensed, journey worker electricians in the state of Minnesota and is this why reciprocity would be issued? As a contractor that works across the entire state of Minnesota, Hanson periodically runs into a shortage of licensed electricians, but this has nothing to do with reciprocity, it is a geographical issue. Opening reciprocity to Texas and Wisconsin is not going to address this issue. Hanson doesn't believe reciprocity should have been pursued with any state.

Jerry Daniel, Chief Electrical Inspector, Texas Department of Licensing and Regulation, said the statement that anything is allowed in when taking an exam is not true. Only a current code book is allowed, and it can be highlighted. Electricians should use their code books as a tool and if code books aren't being highlighted in Minnesota then electricians aren't being taught correctly because the code book is a tool. It is not just a book. Those that can navigate the book will be very successful. The book is just the minimum standard and everyone is told they can do better but that they can only hold them to the minimum standard. Calculators, highlighters, and pens cannot be brought to an exam. No handwritten notes are allowed in code books – if found, the exam is over, and the book is confiscated. Texas's exam was developed by TSI subject matter experts – individuals that sit on the exam board are outstanding in the electrical community. Every 3 years through the code cycle there are new applications because they are the best in the industry. As far as the urban legends about their exams and electrician's, all of this is dispelled because it is simply not true. When you view Texas and Minnesota across the Board, the two states are equal – see **Attachment B**. If there were a disaster would the Minnesota Governor be told, sorry, there aren't any reciprocity agreements in place so we can't get workers here. This is one of the good things about reciprocity, in a time of need each state could help the other. The bottom

line, if you want to make electricians jump through hoops if they want to work in Texas, that's fine but he doesn't recommend it. There may be a day when an electrician needs to go to another state just to feed their family. They shouldn't have to repeat the exam process in another state.

Doug Jennings, Assistant General Counsel, Texas Department of Licensing and Regulation, said he agrees with Mr. Daniel's comments. The standards of Minnesota and Texas are virtually equivalent as evidenced by Steve Dudley's comparison (**Attachment A**). Texas has an industry leading examination that is psychometrically tested with the help of TSI experts, on-the-job experience is similar, and both states use the 2017 NEC. Texas will be moving to the 2020 code on September 1, 2020. It is a myth that the standards are not equivalent. From a licensing, examination, and safety standpoint, he believes Minnesota and Texas are on the same page. He also noted that Texas is part of the National Electrical Reciprocity Alliance and have journey worker reciprocity agreements in place with South Dakota and Iowa.

Hendricks thanked Texas for their comments. He understands Texas's interest in reciprocity; however, he hasn't heard any Minnesotans that want to be reciprocal with Texas. In the past, Texas didn't have the same standards as Minnesota and those grandfathered in would be allowed.

Lindahl said the Texas examination webpage says a code book that is tabbed, highlighted and has notes written in the book is allowed. In addition, independent pre-tests are allowed.

Jerry Daniel, Texas, said there can be minor, written notes in pen, not pencil, in a code book. You cannot take anything you want to an exam. It doesn't change the exam if someone knows how to use their code book. Those notes are usually highlighted, put in by that electrician that learned something on the job. He thinks every state has exam prep – this is done in all state. Texas updates their exam twice a year. He said their standards were not less in years prior – their standards have remained the same. They are using the current code. The Inspector's Association helps them educate electricians. If Minnesota wasn't happy with workers coming into Minnesota, then the agreement could be cancelled. Some of those grandfathered are high up because they had a city license. Journey worker electricians eligible for reciprocity with Minnesota would have met Minnesota statutory requirements. He said he was approached by Mr. Sampson (since retired from the department) about reciprocity when he was in Duluth, Minnesota, 3 years ago. Westberg asked if there were any exceptions to the NEC 2017 rule and Daniel replied no, their code is accepted as it is.

Wilson said in July he will have had his Minnesota journey worker license for 30 years. Every person he has worked with has asked why the Board approved reciprocity. He can't believe someone taking an exam can bring in their own code book, filled with any information they want. Everything he has completed in 30 years has been reviewed by a state of Minnesota inspector. There is accountability for everything he has done. The

State of Texas has only two electrical inspectors for the unincorporated areas. The cities have inspectors but there is a lot of Texas that doesn't have a city inspector; therefore, there are a lot of electrician's that don't have their work inspected. How do we know electricians are following the code when their work isn't being inspected? The Board did not ask to be reciprocal of any state to his knowledge. If there is a natural disaster and Minnesota needs to find workers, there would be plenty of time to institute something. He said the Board should vote to rescind the agreement.

Hendricks said there are plenty of licensing requirements that Texas has taken an exception to. In Minnesota, they don't take exceptions – all electrical systems must meet the standard.

Kurdi said safety starts with well-trained, qualified journey worker electricians, working for licensed, bonded, and insured electrical contractors and requiring 8,000 hours of on-the-job training.

Lindahl said there are no ratios in Texas. In Minnesota, we do not restrict anyone from becoming a journey worker – if 8,000 hours can be documented then the Minnesota exam is taken. It is a one-time test. The Board is not trying to prevent anyone from coming to Minnesota to work.

Alfreda Daniels said there wasn't public input when the Board voted on reciprocity at the October meeting and she has since received many emails and letters. The Board should reconsider their decision now that it is evident that Minnesota electricians do not want reciprocity.

Hendricks said there were 295 emails against reciprocity received by the department. Kurdi said he received at least two emails that were for reciprocity with Wisconsin.

Doug Jennings thanked Board members for their consideration.

Williamson said his role at Board meetings is as the Commissioner's Designee and he would be abstaining from any votes for, or against, reciprocity.

**A motion was made by Lindahl, seconded by Daniels, to rescind the previous recommendation made on October 8, 2019, to enter into a reciprocal electrical licensing agreement with the state of Wisconsin. The majority vote ruled with 7 votes in favor, 2 votes against the motion, and one abstention (Williamson); the motion carried to rescind reciprocity with the State of Wisconsin.**

**The following motion was made on October 8, 2019:**

*A motion was made by Kurdi, seconded by Hanson, to approve entering into a Reciprocal Agreement with Wisconsin. The majority vote ruled with 7 votes in favor, 5 opposed, of the motion; the motion carried.*

Hendricks said he has the same concerns with Wisconsin as he does with Texas.

Garry Krause, Bureau Director, Department of Safety and Professional Services, State of Wisconsin, introduced himself and Anthony Tadysak, electrical inspector for the state of Wisconsin. Krause said there is no private sector contractor pushing for reciprocity. There is a move nationally to move to one license nationwide and Wisconsin and Minnesota staff understand that this is to come. Krause then read aloud his talking points and referred to the State of Wisconsin letter written to the Board on December 20, 2019 – **Attachment C**, and referred to Steve Dudley’s comparison chart – **Attachment A**.

Lindahl read Wisconsin’s statute aloud *“a person who initially obtains his or her journeyman electrical license without having successfully passed the journeyman electrician examination and who’s request to renew his or her license is denied because of the failure to fulfill the continuing education requirements of subdivision 1 shall be required to take and pass a journeyman electrician license examination in order to reacquire the journeyman electrical license.”* Lindahl said he has had a fair amount of experience with contracts and this would suggest that someone with a license could only lose it if continuing education requirements weren’t met.

Krause clarified Lindahl’s statement and said none of those are reciprocal, they can’t go to another state. A Wisconsin exam must be passed. The two reciprocal state agencies collaborate and share test scores to ensure exams are passed.

Anthony Tadysak, State of Wisconsin electrical inspector, said that if the 24-hour requirement for continuing education is not met before the defined expiration period (after a license expires), of a 4-year license, the exam must be retaken. There would be no reciprocity agreement – they would no longer be a licensed electrician in the state of Wisconsin.

Lindahl said the claim that Wisconsin has the highest fail rate in the country, and Krause interjected, one of [the highest fail rates], in a state that allows a person to walk in with a bound folder to take an exam – Krause interjected not in Wisconsin, you can take a code book in. Lindahl said you can take anything bound – it says this on Wisconsin’s website. Krause replied that only a code book is allowed – they are the test administrating authority.

Tadysak said he has been an IBEW electrical inspector for the past 16 years with the same curriculum that Minnesota instructors are using – a national book. Exam takers have 2.5 minutes per question, such as calculating a voltage drop; therefore, allowing code books during testing do not lower the integrity of the exam. Several individuals have commented that the Minnesota exam is far easier than Wisconsin’s. The exam could be taken 15 times and the same questions won’t appear twice. Test takers aren’t allowed to have anything written in their code books.

Kurdi thanked Wisconsin for coming and said that although Wisconsin and Minnesota aren't 100% in sync, the two states are similar enough when compared to reciprocity with South and North Dakota and Iowa. Testing in Wisconsin is slightly different, but he doesn't believe their test is "watered down" in any way. Wisconsin electricians are just as qualified as electricians licensed in Minnesota. He believes that reciprocity would allow electricians to work across the border.

Hendricks said that electricians should have the right to work across the border and can currently work unlicensed or they can take the Wisconsin exam. This ensures that credentials are met for that state. He commends Wisconsin for upping their testing standards but believes there could be an issue policing and managing licenses that had lapsed. He believes electricians should take the exam in the state where they want to be licensed.

Hanson said there are already many Minnesota and Wisconsin individuals that have taken their neighboring state's exam. He doesn't think it should be a matter of convenience, it should be the Board's position to look out for the safety of Minnesota residents having electrical work completed. It appears Wisconsin has a high standard, but he might take an issue with someone being able to write calculations in their code book. The formula should be learned if a license is received. He doesn't want to discourage the qualifications of Wisconsin electricians because he employs them, and they are very good electricians. He still questions the need for reciprocity, he doesn't see a shortage of electricians in Minnesota. He works all over the country and when his employees want to work in another state, they either work unlicensed under a ratio or they take that state's exam. This is a decision made by a worker if they want to move around the country. What is the over-riding need for reciprocity?

Krause said reciprocity, as stated in Wisconsin and Minnesota's statutes, is to be pursued and explored – this is Step 1. Step 2 is that federal testing is coming. This is heard constantly at NERA conventions. Reciprocity helps each state's union and non-union workers.

Westberg said that most of the people that contacted him were against reciprocity. One thing that every person, for or against reciprocity, had in common was they felt that if they needed to work in Wisconsin then they could take the exam there.

Wilson said if it is for convenience, so workers don't have to take two different license exams, then why did the Board receive 295 emails against reciprocity. It isn't the case that Wisconsin has more continuing education requirements than Minnesota. Wisconsin has 24 hours over 4 years and Minnesota has 16 hours every two years which is a cumulative total of 32 hours every 4 years. Wisconsin's standards aren't higher than Minnesota as was previously stated. The federal test mentioned by Krause is the first time he's heard this. He isn't going to make any decisions based on the possibility that there might be a federal test when he hadn't heard this until today. If there is truly a

federal test coming, then the Board would review and work with neighboring states to combat it.

Kurdi asked why Minnesota is reciprocating with South and North Dakota and Iowa but not Wisconsin. He doesn't see any safety issues, both states have qualified electricians.

Krause thanked the Board and said that although there were 295 emails, this entailed only name changes and not independent thoughts.

Westberg asked Williamson if he would like to comment and Williamson repeated that he would be abstaining from any votes for or against reciprocity.

The Board took a ten-minute recess.

**b. 2020 NEC Adoption Update**

Lebowski said the rule draft is prepared and ready to be submitted to the Governor's office for review; however, the Board must first discuss costs. There are two elements that are necessary under the Administrative Procedure Act before the Board can adopt the rule and incorporate NEC 2020. First, the Board needs to discuss general costs regarding changes specifically related to GFCI and secondly, the Board must address whether the cost impact will be \$25,000 or more for small businesses or small cities. A small business is defined as 50 full-time employees or less and small cities are those with ten or less. The impact, whether it is there or not, needs to be determined by the Board. This will be placed in a Statement of Need and Reasonableness (SONAR), a legal requirement. The goal is to move as quickly as possible so that a July 1 effective date is met. We are hoping for a cushion between when the code is adopted and when the actual effective date would be. If there is no need for a hearing, then there will be a small cushion for training, although training has already started. The statutes state that there must be a 270-day cushion between when the code is adopted and when it is effective. There are exceptions which were discussed at the last Board meeting.

Lindahl asked if Lebowski recalled what transpired 3 years ago and whether there were any adverse effects. Lebowski said there are things that should be done differently this time – the Board needs to discuss costs. During current rulemaking, the Board reviewed the updated NEC thoroughly and five areas of concern were identified in the SONAR that would increase costs, all related to GFCI, emergency shutoff, and surge protection. A cost savings for agricultural buildings was also identified in the SONAR. The impact on agriculture was not addressed during previous rulemaking.

Williamson said his electrical staff identified five notable changes in the code and surveyed electrical contractors regarding cost impact but only two responded. They also completed their own research. If there were a dwelling unit affected by all five notable changes, then the cost of materials and labor would be approximately \$600 based on a median new home cost of \$417,000. There wasn't a monetary amount in the 2017 SONAR because there were so many pluses and minuses that resulted in a wash. The

department is well apprised of the changes in the 2020 code and some will result in cost reductions. The calculations for the lighting load were completely overhauled and reduces costs. To date, there have been 7,700 public input/comments/revisions in the 2020 code. For the most part costs will wash – some increases and some decreases. Cost impacts on material will be nominal and negligible on labor based on the department’s analysis. There would be no cost impact to small business or small cities. The changes are part of the evolution of the code. Training materials incur a cost every three years but would not come close to \$25,000.

Kurdi said he has taught 16 hours of the new code and said the Board should review the GFCI range.

Williamson said that the emergency service disconnects were scaled back significantly. Dean Hunter said the cost analysis for type 1 costs would be minimal at \$40-\$60. Type 2 is a plug-in device and the cost analysis would also be minimal at \$60-\$70. Lindahl asked what residents would be affected and Kurdi replied that it is only for service entrances, such as for an apartment building.

## **6. Committee Reports**

Construction Codes Advisory Council (CCAC)

Lebowski gave an update and said the reason the CCAC hasn’t met yet because they were waiting for the Federal Department of Energy to issue findings on the Energy Code. This was completed last month so now they are moving forward with the Residential and Commercial Energy Codes. All Building Codes are in place and will be effective the end of March 2020, except for the Elevator Code and the Residential Energy Code. The Residential Energy Code will take longer due to federal requirements and there were issues with the Elevator Code. There will be an informational hearing for public input as to whether the existing Residential Energy Code should be opened for rulemaking and amendments or for adoption. Once the hearing is resolved, there will be a recommendation by the ALJ to the Commissioner. A final determination will then be made whether to open rulemaking.

## **7. Complaints**

No complaints brought forth

## **8. Open Forum**

Nothing

## **9. Board Discussion**

Lindahl said that next time there is something brought to the Board with the same level of magnitude of reciprocity, the Board should table and take time to review.

**10. Announcements**

Next regularly scheduled meetings – 9:00 a.m. Minnesota Room, DLI

a. April 14, 2020

**11. Adjournment**

A motion was made by Lindahl, seconded by Givens, to adjourn the meeting at 11:09 a.m. The vote was unanimous with 10 votes in favor of the motion; the motion carried.

Respectfully Submitted,

*Peter Lindahl*

Peter Lindahl

Secretary

**Electrical License Reciprocity Comparison  
Minnesota/Wisconsin/Texas**

JOURNEYWORKER								
Sort	Subject	Reciprocity Similarities	Minnesota		Wisconsin		Texas	
				Citation		Citation		Citation
1	Statewide licensing	MN Statute 326B.33 Subd. 20	Yes	MN Statute 326B.33	Yes.	WI statute 101.862, with exceptions.	Yes	Texas Occupations Code 51.4041(c) allows reciprocity agreements (subject to approval by the governor)
2	Electrical inspections covered statewide	NERA	Yes. State and municipal	MN Statute 326B.36	Yes. State and municipal.	New one and two family dwellings in SPS 320.10. Farms, public buildings places of employment, etc. in SPS 316.012 and 316.013. Exception for existing industrial and manufacturing facilities in state statute 101.875(2).	Inspections are not mandatory by law, but are required by city and county ordinance.	
3	State administered exam	MN Rule 3800.3520, MN Statute 326B.33 Subd. 20, & NERA	Yes, Minnesota writes and proctors our own exams	MN Rule 3800.3520, MN Statute 326B.33 Subd. 18	Yes. Wisconsin writes and administers its own exams.	SPS 305.09	Yes, Texas creates its own exam, which is administered by a third-party vendor.	Texas Occupations Code 1305.162
4	Number of questions	MN Statute 326B.33 Subd. 20, & NERA		80 Policy		Set by policy and not an Administrative rule.	80	Candidate information bulletin located at <a href="https://urlz.com/UzdVt">https://urlz.com/UzdVt</a>
5	Time allowed	MN Statute 326B.33 Subd. 20, & NERA	5.5 hours	Policy	4 hours	Set by policy and not an Administrative rule.	4 hours	Candidate information bulletin located at <a href="https://urlz.com/UzdVt">https://urlz.com/UzdVt</a>
6	Open book/memory	MN Statute 326B.33 Subd. 20, & NERA	Open book	Policy	Open book	SPS 305.09(4)(b) Set by policy and not an Administrative rule.	Open book	Candidate information bulletin located at <a href="https://urlz.com/UzdVt">https://urlz.com/UzdVt</a>
7	Minimum score	MN Statute 326B.33 Subd. 20, & NERA		70% Policy		70% SPS 305.09(6)(a)	70%	16 Texas Administrative Code 73.21 ("An individual applicant must achieve a passing score on an examination approved by the executive director of the Texas Department of Licensing and Regulation.")
8	Qualifying experience to qualify to examine	MN Statute 326B.33 Subd. 20, & NERA, & MN Rule 3800.3520, NM statute 326B.33 Subd. 2	All hours can be obtained in new installation of light, heat, power in any occupancy type	MN Rule 3800.3520, MN Statute 326B.33	Experience in installing, maintaining, or repairing electrical wiring. Completion of a construction electrician apprenticeship program in installing, repairing, and maintaining electrical wiring	WI statute 101.87(1)	Hours may be gained if under the supervision of a master electrician; must be performing "electrical work" as defined by statute and rule	Texas Occupations Code 1305.002(11); Texas Occupations Code 1305.155(1); 16 Texas Administrative Code 73.10(21)
9	Qualifying experience to qualify to examine (years/hours)	MN Statute 326B.33 Subd. 20, & NERA, & MN Rule 3800.3520, NM statute 326B.33 Subd. 2	8000/4 years OJT	MN Rule 3800.3520, MN Statute 326B.33	8000 hrs. and 4 years OJT or Completion of a construction electrician apprenticeship program in installing, repairing, and maintaining electrical wiring that has a duration of at least 3 years and that is approved by the U.S. department of labor or by the department of workforce development	WI statute 101.87(1)	8,000 hours of on-the-job training under the supervision of a master electrician	Texas Occupations Code 1305.155

**Electrical License Reciprocity Comparison  
Minnesota/Wisconsin/Texas**

JOURNEYWORKER							
Sort	Subject	Reciprocity Similarities	Minnesota	Wisconsin	Texas		
			Citation	Citation			Citation
10	Hours granted for the successful completion of a 2 year technical college electrical course	MN Statute 326B.33 Subd. 20, & NERA, & MN Rule 3800.3520, MN statute 326B.33 Subd. 2	2000 MN Rule 3800.3520, MN Statute 326B.33	2000 WI statute 101.87(2m)	n/a		n/a
11	Out of state experience accepted	MN Statute 326B.33 Subd. 20, & NERA, & MN Rule 3800.3520	Yes, as long as it is comparable to experience gained in Minnesota MN Rule 3800.3520	Yes. WI statute 101.87(1)	Yes, as long as it is comparable to experience gained in Texas		Texas Occupations Code 1305.164; Texas Occupations Code 51.4041(b)
12	Minimum education requirements to qualify to examine	MN Statute 326B.33 Subd. 20, & NERA, & MN Rule 3800.3520	2 hours CE per year for Minnesota registered unlicensed electricians. No apprenticeship education required. No education requirements for individuals who gained experience in other states MN Rule 3800.3520, MN Statute 326B.33	None.	No education or apprenticeship is required to take the examination; however, electrical apprentices are required to take 12 hours per year of CE.		16 Texas Administrative Code 73.25
13	Military experience accepted	MN Rule 3800.3520	Yes. Must provide DD214 and MOS must be for electrical MN Rule 3800.3520	Yes, if the experience is in installing, maintaining, or repairing electrical wiring. WI statute 101.87(1)	Yes. Must provide DD214 and MOS must be for electrical work.		Texas Occupations Code 1305.1645
14	Duration of journeyworker license	Policy	2 years Policy	4 years SPS 305.06	1 year		16 Texas Administrative Code 73.22
15	Continuing education content required to renew journeyworker license	MN Rule 3800.3602	12 hours code 4 hours statute, rules, technical MN Rule 3800.3602	Content not specified, but has to relate to the skills and knowledge of the license category. Classes must be state approved. SPS 305.08(1)(a) and (d)	12 hours annually - 4 hours NEC, 4 hours statute and rules, and 4 hours safety (NFPA 70E)		16 Texas Administrative Code 73.25
16	Continuing education hours required to renew journeyworker license	MN Rule 3800.3602	16 hours prior to renewal - 2 year cycle MN Rule 3800.3602	24 hours. Classes must be state approved. SPS 305.44(6)(b) and 305.08(1)(a)	12 hours annually - 4 hours NEC, 4 hours statute and rules, and 4 hours safety (NFPA 70E)		16 Texas Administrative Code 73.25
17	NERA Member		Yes	Yes	Yes		
18	Reciprocal States		Alaska, Arkansas, Colorado, Iowa, Montana, Nebraska, North Dakota, South Dakota, Wyoming	New Hampshire, Iowa	Alaska (pending), Arkansas, Idaho, Iowa (pending) Louisiana (master only), Montana, Nebraska, New Mexico, North Carolina, Oklahoma (pending), South Dakota, Wyoming		
19	Code Cycle	MN Rule 1315.0200	2017 MN Rule 1315.0200	1 and 2 family dwellings are on 2011 until January 1, 2020 when they go to 2017. Everything else is on 2017			2017 Texas Occupations Code 1305.101; 16 Texas Administrative Code 73.100

JOURNEYWORKER						
Sort	Subject	Reciprocity Similarities	Minnesota		Texas	
				Citation		Citation
1	Statewide licensing	MN Statute 326B.33 Subd. 20	Yes	MN Statute 326B.33	Yes	Texas Occupations Code 51.4041(c) allows reciprocity agreements (subject to approval by the governor)
2	Electrical inspections covered statewide	NERA	Yes. State and municipal	MN Statute 326B.36	Inspections are not mandatory by law, but are required by city and county ordinance.	
3	State administered exam	MN Rule 3800.3520, MN Statute 326B.33 Subd. 20, & NERA	Yes, Minnesota writes and proctors our own exams	MN Rule 3800.3520, MN Statute 326B.33 Subd. 18	Yes, Texas creates its own exam, which is administered by a third-party vendor.	Texas Occupations Code 1305.162
4	Number of questions	MN Statute 326B.33 Subd. 20, & NERA	80	Policy	80	Candidate information bulletin located at <a href="https://urlzs.com/UzdVt">https://urlzs.com/UzdVt</a>
5	Time allowed	MN Statute 326B.33 Subd. 20, & NERA	5.5 hours	Policy	4 hours	Candidate information bulletin located at <a href="https://urlzs.com/UzdVt">https://urlzs.com/UzdVt</a>
6	Open book/memory	MN Statute 326B.33 Subd. 20, & NERA	Open book	Policy	Open book	Candidate information bulletin located at <a href="https://urlzs.com/UzdVt">https://urlzs.com/UzdVt</a>
7	Minimum score	MN Statute 326B.33 Subd. 20, & NERA	70%	Policy	70%	16 Texas Administrative Code 73.21 ("An individual applicant must achieve a passing score on an examination approved by the executive director of the Texas Department of Licensing and Regulation.")
8	Qualifying experience to qualify to examine	MN Statute 326B.33 Subd. 20, & NERA, & MN Rule 3800.3520, MN statute 326B.33 Subd. 2	All hours can be obtained in new installation of light, heat, power in any occupancy type	MN Rule 3800.3520, MN Statute 326B.33	Hours may be gained if under the supervision of a master electrician; must be performing "electrical work" as defined by statute and rule	Texas Occupations Code 1305.002(11); Texas Occupations Code 1305.155(1); 16 Texas Administrative Code 73.10(21)
9	Qualifying experience to qualify to examine (years/hours)	MN Statute 326B.33 Subd. 20, & NERA, & MN Rule 3800.3520, MN statute 326B.33 Subd. 2	8000/4 years OJT	MN Rule 3800.3520, MN Statute 326B.33	8,000 hours of on-the-job training under the supervision of a master electrician	Texas Occupations Code 1305.155
10	Hours granted for the successful completion of a 2 year technical college electrical course	MN Statute 326B.33 Subd. 20, & NERA, & MN Rule 3800.3520, MN statute 326B.33 Subd. 2	2000	MN Rule 3800.3520, MN Statute 326B.33	n/a	n/a
11	Out of state experience accepted	MN Statute 326B.33 Subd. 20, & NERA, & MN Rule 3800.3520	Yes, as long as it is comparable to experience gained in Minnesota	MN Rule 3800.3520	Yes, as long as it is comparable to experience gained in Texas	Texas Occupations Code 1305.164; Texas Occupations Code 51.4041(b)

JOURNEYWORKER						
Sort	Subject	Reciprocity Similarities	Minnesota		Texas	
				Citation		Citation
12	Minimum education requirements to qualify to examine	MN Statute 326B.33 Subd. 20, & NERA, & MN Rule 3800.3520	2 hours CE per year for Minnesota registered unlicensed electricians. No apprenticeship education required. No education requirements for individuals who gained experience in other states	MN Rule 3800.3520, MN Statute 326B.33	No education or apprenticeship is required to take the examination; however, electrical apprentices are required to take 12 hours per year of CE.	16 Texas Administrative Code 73.25
13	Military experience accepted	MN Rule 3800.3520	Yes. Must provide DD214 and MOS must be for electrical	MN Rule 3800.3520	Yes. Must provide DD214 and MOS must be for electrical work.	Texas Occupations Code 1305.1645
14	Duration of journeyworker license	Policy	2 years	Policy	1 year	16 Texas Administrative Code 73.22
15	Continuing education content required to renew journeyworker license	MN Rule 3800.3602	12 hours code 4 hours statute, rules, technical	MN Rule 3800.3602	12 hours annually - 4 hours NEC, 4 hours statute and rules, and 4 hours safety (NFPA 70E)	16 Texas Administrative Code 73.25
16	Continuing education hours required to renew journeyworker license	MN Rule 3800.3602	16 hours prior to renewal - 2 year cycle	MN Rule 3800.3602	12 hours annually - 4 hours NEC, 4 hours statute and rules, and 4 hours safety (NFPA 70E)	16 Texas Administrative Code 73.25
17	NERA Member		Yes		Yes	
18	Reciprocal States		Alaska, Arkansas, Colorado, Iowa, Montana, Nebraska, North Dakota, South Dakota, Wyoming		Alaska, Arkansas, Idaho, Iowa, Louisiana (master only), Montana, Nebraska, New Mexico, North Carolina, Oklahoma, South Dakota, Wyoming	
19	Code Cycle	MN Rule 1315.0200	2017	MN Rule 1315.0200	2017	Texas Occupations Code 1305.101; 16 Texas Administrative Code 73.100
<b>Submitted by Doug Jennings, Assistant General Counsel, Texas Department of Licensing and Regulation</b>						



# TEXAS DEPARTMENT OF LICENSING & REGULATION

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[www.tdlr.texas.gov](http://www.tdlr.texas.gov)

January 7, 2020

Dan Westberg  
 Chair, Minnesota Board of Electricity  
 c/o Minnesota Department of Labor & Industry  
 443 Lafayette Road North  
 St Paul, MN 55155-4344

Re: Electrical Licensing Reciprocity with Minnesota

Dear Mr. Westberg:

Thank you for your notice of the Board's upcoming vote to rescind approval of a potential reciprocal journeyman/journeyworker electrician licensing agreement with Texas. I appreciate the Board's consideration of this important matter, and urge the members not to rescind approval of the agreement. A reciprocal agreement will help remove unnecessary barriers to licensure for skilled and experienced tradespeople in both states.

Just as Minnesota does, Texas requires that electrical work performed within the state is performed safely, and only by licensed persons under the supervision of experienced electricians. Apprentices performing non-exempt electrical work are required to be licensed, and must be provided on-site supervision by a licensed master electrician, journeyman electrician, or residential wireman. Electrical work in Texas is currently subject to the 2017 National Electrical Code (NEC), and the 2020 NEC will become the statewide code on September 1 of this year.

The standards for licensure in Minnesota and Texas are similar, ensuring that in the event a reciprocity agreement is approved, only highly qualified electricians will be eligible under the agreement. In order to become licensed as a journeyman electrician in Texas, a person must accrue 8,000 hours of on-the-job experience under the supervision of a master electrician. This is identical to Minnesota's requirement for journeyworker electricians. The attached spreadsheet, prepared by staff of both states, shows the other many ways in which our states' licensing requirements align.

I will add that both of our states are active in the National Electrical Reciprocal Alliance (NERA). Texas has journeyman electrician reciprocity agreements in place with several NERA members, including Montana, Nebraska, South Dakota, and most recently, Alaska and Iowa. I applaud NERA's efforts to create consistency in licensing requirements across the member states while maintaining high standards for licensure.

A reciprocal licensing agreement between our states would be mutually beneficial, helping tradespeople and local economies alike. I appreciate your time, and respectfully request approval of a potential agreement.

Sincerely,

A handwritten signature in blue ink that reads "Brian Francis".

Brian Francis  
 Executive Director  
 Texas Department of Licensing and Regulation

- Wisconsin is rapidly advancing to have some of the most stringent electrical licensing and work requirements in the nation.
- Both Minnesota and Wisconsin are active members of the National Electrical Reciprocal Alliance (NERA).
- Minnesota and Wisconsin staff have worked cooperatively together on this project. They analyzed and determined the two states' electrical licensing requirements align well.
- We are only discussing reciprocity with Electrical Journey Worker licensing, not master electrician or contractor licensing.
- I would like to clarify that only licensed electricians who have passed a state license exam can gain reciprocity. There is no grandfathering of licenses.
- A recent analysis reflects Wisconsin has 646 Minnesota residents licensed as Wisconsin Journeyman Electricians, and Minnesota has 469 Wisconsin residents licensed as Minnesota Class A Journeyworker Electricians.
- Both states have comprehensive statewide electrical licensing, permitting, and inspection, in both the residential and commercial setting.
- Like Minnesota, Wisconsin accomplishes electrical inspection through state employee inspectors, delegated municipality or delegated county authority, and contracted agent inspection.
- To take a Wisconsin Electrical Journeyman exam, one must demonstrate 8000 hours of work experience and four years on the job training, or the completion of a construction electrician apprenticeship.
- Both Minnesota and Wisconsin have open book tests. Minnesota has 80 test questions and allows 5.5 hours to complete. Wisconsin has 100 test questions and allows four hours to complete. In effect, Wisconsin's exam has more test questions and allows less time to complete. Both tests are conducted under secure monitored conditions. Wisconsin's exam has been professionally reviewed for reliability and validity.
- Wisconsin's exam uses up to date compliant test questions based solely on the 2017 National Electrical Code.
- The Wisconsin exam is rigorous. When viewing all test takers, there is an approximate pass rate of 25%.
- Wisconsin requires all Electrical Journeymen to take a Minimum of 24 hours of state approved classes in order to renew their license. Wisconsin's classes are required to be in a related skill and knowledge area. Minnesota requires 16 hours of renewal classes, with a minimum of 12 hours being code related and up to four hours being non-code related.
- Wisconsin ensures electrical workers must have direct supervision. A person enrolled as a registered electrician shall perform electrical wiring activities under the direct supervision of a person who holds a license either as a licensed master electrician or a licensed journeyman electrician or holds a registration as a master electrician.
- A person who is enrolled as a registered electrician may perform electrical wiring activities under the direct supervision of a person who holds a license as a licensed residential master electrician, or licensed residential journeyman electrician, provided the wiring is associated with dwellings, dwelling units, detached accessory buildings, and structures serving the dwellings or the dwelling units, such as garages, carports, gazebos, and swimming pools.
- A person who is enrolled as a registered electrician may perform electrical wiring activities under the direct supervision of a person who holds a license as a licensed industrial journeyman electrician provided the wiring is within the facilities or properties of the business establishment where the industrial journeyman electrician is employed.

Appreciatively,

**Garry Krause, Ed.D., MBA**  
Bureau Director  
Division of Industry Services  
Bureau of Technical Services  
4822 Madison Yards Way  
Madison, Wisconsin 53705

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**Tony Evers, Governor**  
**Dawn B. Crim, Secretary**

December 20, 2019

Minnesota Board of Electricity  
 c/o Minnesota Department of Labor & Industry  
 443 Lafayette Road North  
 St Paul, MN 55155-4344

Re: Electrical Licensing Reciprocity with Minnesota

Dear Board Members:

I am pleased that on October 8, 2019, you voted to approve entering into an Electrical Journeyman/Journeyworker License reciprocity agreement with the State of Wisconsin. Wisconsin and Minnesota have a long history of collaboration to the benefit of the residents of our states. With last year's election of Governor Tony Evers, we are recommitted to working collaboratively with our sister states.

Wisconsin currently has 646 Minnesota residents licensed as Wisconsin Journeymen Electricians and 439 Minnesota residents licensed as Wisconsin Master Electricians.

Minnesota currently has 469 Wisconsin residents licensed as Minnesota Class A Journeyworker Electricians, and 248 Wisconsin residents licensed as Minnesota Class A Master Electricians. With our shared borders, there are many opportunities for contractors, electricians, and residents to work in their neighboring community just across the border. Bordering communities and craftworkers appreciate this important proactive initiative.

Both states are progressively active in the **National Electrical Reciprocal Alliance (NERA)**. Minnesota and Wisconsin department staff have worked cooperatively together to analyze, compare, and determine that the two states electrical requirements align well. It is through their expert analysis and recommendations that we clearly see the two state's electrical licensing requirement statutes align.

Both Minnesota and Wisconsin have comprehensive statewide electrical licensing, permitting, and commercial/residential inspection. Wisconsin, like Minnesota, accomplishes inspection with state employee inspection, delegated municipality authority inspection, and contracted agent inspection.

To take the Wisconsin Electrical Journeyman exam, one must demonstrate 8,000 hours of work experience and four (4) years on the job training, or the completion of a construction electrician apprenticeship that has a duration of at least three (3) years and is approved by the US Department of Labor or the Department of Workforce Development.

Both Minnesota and Wisconsin have open book tests. Minnesota has 80 test questions and allows 5.5 hours to complete the test. Wisconsin has 100 questions and allows four (4) hours to complete the test. Wisconsin's exam has more test questions and less test taker time to complete the exam than Minnesota. Both tests are conducted under secure monitored conditions. Wisconsin's electrical exams have been professionally reviewed for reliability and validity. Wisconsin's exams use up to date compliant questions based solely on the 2017 National Electrical Code. The Wisconsin Journeyman electrical exam has rigor and there is an approximate pass rate of 25% when viewing all Journeyman test-takers.

Minnesota Board of Electricity  
Minnesota Department of Labor & Industry  
December 20, 2019  
Page 2

Wisconsin believes in public safety and a trained and educated workforce. The state requires all its Electrical Journeymen to take a minimum of 24 hours of state approved classes in order to renew their license. The licensing renewal classes are required to be in related skill and knowledge areas.

Wisconsin ensures that electrical workers have direct supervision through SPS 305.40(4)(d) and 305.40(5). State language provides that a person who is enrolled as a registered electrician shall perform electrical wiring activities under the direct supervision of a person who holds a license either as a licensed master electrician or a licensed journeyman electrician or holds a registration as a registered master electrician.

A person who is enrolled as a registered electrician may perform electrical wiring activities under the direct supervision of a person who holds a license as a licensed residential master electrician or licensed residential journeyman electrician provided the wiring is associated with dwellings, dwelling units and detached accessory buildings and structures serving the dwellings or the dwelling units, such as garages, carports, gazebos, and swimming pools.

A person who is enrolled as a registered electrician may perform electrical wiring activities under the direct supervision of a person who holds a license as a licensed industrial journeyman electrician provided the wiring is within the facilities or properties of the business establishment where the industrial journeyman electrician is employed.

At any time, for any electrical wiring project, the total number of registered beginning electricians at an installation site may not exceed twice the total number of licensed or registered master electricians and journeyman electricians at the installation site plus two.

Wisconsin believes in providing safety to residents. Minnesota and Wisconsin share a lengthy border with many close-proximity communities. It is advantageous to the residents, the contractors, and the craft workers to allow licensure reciprocity. This proactive opportunity removes the requirements for licensed individuals to have to study for two separate exams and attend separate license renewal classes. It also makes it possible for both states' residents to reach a contractor nearby them to do their needed work.

We share your commitment to the proactive protection of the public and the betterment of the lives of our citizens. A reciprocity agreement between our two states only enhances this commitment. If approved by your board, a reciprocity agreement will foster greater collaboration between our states as we work to grow an educated, safety conscience and licensed workforce.

Sincerely,



Dawn B. Crim  
Secretary-designee