

# Meeting Minutes: Board of Electricity

Date: October 8, 2019  
Time: 9:00 a.m.  
Location: Minnesota Room, Department of Labor and Industry  
443 Lafayette Road North, St. Paul, MN 55155

## Members Present:

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

## Members Absent:

None

## 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)  
Gary Thaden (NECA)  
Ray Zeran (IBEW Local 132)  
Michelle Dreier (Electrical Assn.)  
Jerry Daniel (TX Dept of Licensing) – Tele  
Yvonne Feinleib (TX Dept of Licensing) – Tele  
Derrick Atkins (Mpls JATC)  
Craig Mulder (State of WI)  
Gary Krause (State of WI)  
Greg Mueller (State of WI)

### 1. **Call to Order**

The meeting was called to order at 9:01 a.m. by Chair Westberg. Roll call was taken by Secretary Hendricks and a quorum was declared with 12 of 12 voting members present in person.

### 2. **Approval of Meeting Agenda**

A motion was made by Kurdi, seconded by Hanson, to approve the agenda as presented. The vote was unanimous with 12 votes in favor of the motion; the motion carried.

### 3. **Approval of Previous Meeting Minutes**

A motion was made by Hendricks, seconded by Curtis, to approve the July 9, 2019, meeting minutes as presented. The vote was unanimous with 12 votes in favor of the motion; the motion carried.

### 4. **Regular Business**

- a. **Expense Approval** – reviewed and approved the per diem and expenses.
- b. **Enforcement & licensing update** – A handout was provided to members with the number of electrical enforcement actions/orders.

c. **Inspections update**

Williamson demonstrated the department's new web-based permitting software, iMS, that replaced eTrakit on Oct. 7, 2019, for obtaining electrical permits.

5. **Special Business**

a. **Reciprocity**

Dudley referred to the Electrical License Reciprocity Comparison Chart for Minnesota, Wisconsin, and Texas – **see Attachment A.**

**TEXAS:**

Jerry Daniel, Texas Department of Licensing and Regulation, addressed the Board via teleconference. Daniel said Texas is part of the NERA group and believes a reciprocity agreement with Minnesota would help all electricians. Three years ago, when in Duluth for the NERA meeting, he spoke with several representatives that wanted a reciprocity agreement [between MN and TX] and therefore they've asked for this.

Lindahl asked Daniel how many electricians there are in Texas and Daniel said approximately 150,000 licensed electricians, and must all have, at a minimum, an apprentice license. Hendricks asked how long licensing for apprentices and journey workers have been in place and Daniel said this was passed in 2003 with an effective date of September 1, 2004. Hendricks asked if there were any licensing requirements in place prior to 2004 and Daniel said not state-wide, but at least 80-90% of the state were governed by municipality licenses. Hendricks asked if those doing electrical work prior to 2004 became licensed by the state and Daniel said yes, those with a municipal electrical license received a state license of equal value; however, reciprocity they are seeking with Minnesota would not include these individuals, only individuals that pass the State of Texas's examination. Lindahl asked if Texas municipalities had different licensing exams prior to 2004 and Daniel said yes; however, municipality exams required 8,000 hours to become a journey worker plus a passing exam score. Lindahl asked if each municipality had their own exam and Daniel said yes, but that now all state requirements must be met. Daniel explained that those with municipality licenses prior to 2004 were grandfathered in and did not have to take the state's exam. He further explained that these individuals would not be included in a reciprocity agreement [with Minnesota]. Lindahl asked how these individuals would be differentiated from those that passed Texas's exam and Daniel said their system separates those who took the exam and those grandfathered in. Texas would collaborate with NERA to approve reciprocity for only those individuals that meet state requirements to perform electrical work in Minnesota who would be able to perform electrical work through a reciprocity agreement. Lindahl asked if those that passed Texas's exam would receive reciprocity to perform electrical work in Minnesota automatically and Daniel said no, only if the 8,000-hour requirement of on the job training were completed and the state's exam had a passing score – those grandfathered in would not be eligible. Kurdi asked which version of the NEC has been adopted by Texas and Daniel replied 2017 and Texas will be adopting the 2020 NEC in 2020. Lindahl asked if Texas inspectors are exclusively electrical inspectors or if other types of inspections are performed and Daniel said

absolutely, they are for the state of Texas; however, some municipalities have combination inspectors. Novotny asked Daniel how many inspectors the state of Texas has, and Daniel said currently they have two – they mainly handle unincorporated areas. Inspections in cities are handled by municipal inspectors. Larger cities such as Houston (37 inspectors), Austin (21 inspectors), San Antonio, and Dallas (30 inspectors), employ inspectors that were previously licensed electricians. Hendricks asked Daniel if Texas has measured the success of the pass rates of their exams (since 2004) and if work/inspections [performed] met NEC criteria. Daniel said he wasn't sure what Hendricks was asking but said that yes, [all inspections] meet NEC criteria. Texas developed and write their own exams that are a product of Texas. PSI ensures exams are psychometrically sound, dependable in a court of law, and are the property of Texas. Current exams are written on the NEC and will be updated to NEC 2020. Daniel said the journey worker pass/fail rate is approximately 40%. There is a lot of work in Texas. He is not concerned that there will be a lot of individuals from Texas working in Minnesota – Texas has a lot of work with a 21% shortage and he believes that both states could benefit from a reciprocity agreement.

Lebowski asked Chair Westberg if the Board wanted to make a motion on reciprocity with Texas now or wait and do both Texas and Wisconsin at one time. Westberg and other members agreed to make a one motion that would include both states.

#### **WISCONSIN:**

Garry Krause, Bureau Director, Department of Safety and Professional Services, State of Wisconsin, addressed the Board. Krause said he was formerly licensed as an electrical journey worker in Minnesota; therefore, he is very familiar with Minnesota's electrical licensing requirements. Krause introduced Greg Mueller, one of the state's inspectors. Krause said Wisconsin has been working through several legislative activities, such as, mandatory statewide commercial inspection effective on 1/1/2020. The state already requires mandatory residential inspection. There are approximately 6,000 licensed journey workers and 6,000 master electricians licensed in Wisconsin. Most individuals fail the journey worker exam the first time it is taken. There is a general, overall pass rate of 25-30%. Wisconsin is currently using the 2017 code, and for one- and two-family dwellings they use the 2011; however, effective 1/1/2020 they will be using the 2017. Licensed electrical inspectors must take an exam to receive their credentials. They are currently processing 200 municipalities for approval (must pass the state's new ordinance). There are two parts municipalities must pass – must adopt the state's ordinance (a copy was provided in its entirety to the BOE) and they must submit their credentialled licensed individuals. Therefore, the state knows exactly who the municipality inspectors are and only credentialled individuals are approved. They have a full-time staff member committed to the integrity of this process. There is a shortage around the country of workers and contractors, as you are all aware, as this was discussed at the last NERA meeting. Krause was formerly a dean of a technical college and was also an apprenticeship coordinator for both segments – the ABC and the IBEW. There is a long border of communities where people are going back and forth with contractors and there is a need for staffing across the country. Recently Wisconsin

workers went to Nebraska and this created a lot of turmoil for companies when workers must be re-licensed in every state. Wisconsin is a bordering state [to Minnesota], laws are very similar, almost identical, as shown by the comparison chart (Attachment A). He emphasized how important this opportunity would be for employers and employees. This would be a great opportunity and believes that with the adoption of Wisconsin's new laws that Wisconsin and Minnesota are almost identical. Their system is designed to address most of the questions asked earlier by the Board – they are on the same page [as Minnesota] and this would be good for both states.

Wilson asked how many journey workers were licensed in Wisconsin and Kraus said approximately 6,000, all have taken the examination. No journey workers have been grandfathered in. Wilson asked who would be grandfathered in and Kraus said only those that hold a Registered Master Electrician license (must have been born before January 1, 1956 and have at least 15 years of experience). All licensed journey workers have passed the state's examination.

Lindahl asked if journeyworker electricians licensed in the 1980's would have been required to take the state's exam and Mueller said that the state began administering examinations in 1986. Mueller further explain that individuals licensed prior to 1986 had to take the state's test in order to receive a journey worker license. Prior to this, from 1986 to 2014, there was an optional exam, but it was administered by the state. Some municipalities had their own licensing but none of these were grandfathered. There was no grandfathering of any type of license. Krause said their exam questions are created in-house by content experts, next the exam goes to credentialing. All individuals, when in the same room, receive a different test that is randomly generated from a pool of questions. His staff doesn't have access to the questions. They are kept in a locked storage system. There is great integrity in their testing process. Exam questions can't be accessed, they are auto-generated and auto-coded.

Lindahl asked if the test administered in 1986 is the same test used to today or was it changed. Mueller doesn't know how many questions, or time allotted, was included in the test in 1986; however, the exam is updated every time the NEC code cycles are updated. At least since the mid 1990's the number of questions and time allotted have been the same with only updates to a new code. Lindahl said the critical point is allowing someone to get a license as a formality to cover the status of licensed or not licensed. Krause said they haven't made the test easier, there is a high failure rate. No exam can leave the room and there are numerous complaints that their exam is too hard. Hendricks said there is a 2017 test,

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.

**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.**

**A motion was made by Lindahl, seconded by Wilson, to deny entering into a Reciprocal Agreement with Wisconsin. The vote was 7 to deny, 5 to accept the motion; the motion was denied and did not carry.**

**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.**

**b. NEC Adoption**

The Rules Subcommittee provided the full Board with their NEC Adoption report and recommended that the Board adopt the 2020 NEC as-is without Minnesota specific amendments. Lindahl said he is for accepting the 2020 NEC code as is. Williamson said the Board needs a motion.

**A motion was made by Givens, seconded by Novotny, to accept the NEC Committee's recommendation to go forward without amendments. The vote was unanimous with 12 votes in favor of the motion; the motion carried.**

**A motion was made by Williamson, seconded by Givens, to authorize and direct the Board Chair to pursue adoption of the 2020 NEC without Minnesota amendments, including the publication of the Board's Dual Notice of Intent to Adopt Rules in the *State Register*, providing Additional Notice to those who have registered their names with the Board for that purpose, acting as the Board's representative at any possible Hearing on the rules, signing any required filings or final Order for Adoption of the rules, and doing anything else in the rulemaking process necessary to ensure the successful adoption of the 2020 NEC in the State of Minnesota. The vote was unanimous with 12 votes in favor of the motion; the motion carried.**

**A motion was made by Williamson, seconded by Givens, to establish an effective date of July 1, 2020, because the Board finds that an earlier effective date than that provided for in Minn. Stat. 326B.13, subd. 8, is necessary to protect the public's health and safety after considering among other things, training time needed for enforcement and compliance with the new Code, the need for uniformity with past practice and among the several states participating in reciprocity, and general business continuity. The vote was unanimous with 12 votes in favor of the motion; the motion carried.**

**6. Committee Reports**

Construction Codes Advisory Council (CCAC) – met on July 18, 2019. The next meeting will be at 9:30 a.m. on Oct. 21, 2019.

Kurdi asked if it included the Building Code and Lebowski said yes, approximately 12 chapters that are considered the State Building Code. Williamson chapter 1513 is the Electrical Code and is part of the Building Code, it doesn't stand alone.

**7. Complaints**

No complaints brought forth

**8. Open Forum**

Nothing

**9. Board Discussion**

Westberg thanked the NEC Committee for their work.

Dudley summarized the NERA meeting he attended on August 13, 2019, in Utah – see **Attachment B.**

**10. Announcements**

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

a. January 14, 2020

**11. Adjournment**

A motion was made by Givens, seconded by Daniels, to adjourn the meeting at 10:15 a.m. The vote was unanimous with 12 votes in favor of the motion; the motion carried.

Respectfully Submitted,

*Peter Lindahl*

Peter Lindahl  
Secretary

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

**Attachment A**

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**

**Attachment A**

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	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.	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

# NERA 2019 Midvale Utah

(National Electrical Reciprocal Alliance)

Meeting was called to order on August 13, 2019 at 8:00 am. There were representatives from 16 of the 18 NERA states present. Representatives from North Dakota and New Mexico were not present. James Schmidt of North Dakota had a conflict in his schedule and was unable to attend but sent an update on his state that I have added in this report. Kelly Hunt is no longer the representative for New Mexico, and they have not replaced him yet. NERA is going to reach out to New Mexico. Brad Stevens was the chair.

There were three new NERA representatives this year:

- James McClain – Colorado
- Garry Krause – Wisconsin
- Jane Allred - Wyoming

Tim McClintock (NFPA) presented on the 2020 changes to the NEC

- New articles
- Space about electrical equipment
- GFCI expansion
- Load calculations
- Six disconnect rule
- Emergency disconnect requirements for one- and two-family dwellings
- Surge protection

Round table discussions on:

How to standardize CE requirements:

- One CE provider for all NERA states
  - This would be met with opposition from all the independent providers
- If a state is willing to accept a reciprocal license, why can't we accept reciprocal CE credits?
  - The differences in the states statutes and rules regarding what qualify' s for CE credit prevents this

How can NERA help states reciprocate licenses in emergency situations?

- Prompt response sent to Nebraska
- Arkansas has issued temp license
- Iowa has issued temp apprentice license

Apprenticeship training courses

- Most states require 576 hours of education to qualify to examine
- Many states follow the federal department of labor (DOL) requirements

Professional proctors for exams and a standard NERA journeyman/journeyworker exam

- PSI, Prove, ICC
  - Prove will allow the state they are proctoring for to own the exams

# NERA 2019 Midvale Utah

(National Electrical Reciprocal Alliance)

- NERA exam bank of questions
  - Average pass rate – 42% to 48%
  - This would allow for states to proctor their own exams, or utilize other proctors
  - Who will own the questions?
  - Who will oversee creating of the bank?
    - All NERA states to submit questions
  - What will be in the bank of questions?
    - Code and theory
      - Statute's, Rule's, and amendments would be up to each state to add them to their exam
- Bylaws
  - Who is allowed to be a voting member of NERA?
    - A letter from the state must be sent to the secretary stating who the voting member is
    - Alternate is by proxy
  - Joe (Oklahoma) proposed to change the NERA chair from a one-year term to a two-year term to make sure the hosting state is no longer the chair due to the extra work load of both hosting and being the chair. This passed.
- Seven NERA states conduct background checks prior to issuing a license. They will not issue a license to anyone with a felony

## Alaska

- 2,087 licenses issued
- 682 trainees
- New reciprocal agreement with Iowa, and working on becoming reciprocal with Texas
- Number of issued licenses has declined
- Work is slowing
- No major changes, but licensing is being scrutinized by legislation.

## Arkansas

- Solar is strong
- Solar is exempt on farms
- No major changes
- All licenses were evaluated by legislation with no changes. There is a sunset clause of three years at which time all licenses will be re-evaluated. There were no changes to licensing because they are a member of NERA and already have reciprocity
- 4000 hours experience on large commercial and industrial projects in order to qualify to examine

## Colorado

- 8758 Journeyworker

# NERA 2019 Midvale Utah

(National Electrical Reciprocal Alliance)

- 5000 master
- 886 Residential
- 12000 Helpers
- 3896 Contractors
- Solar licensing requirements:
  - Must be NABCEP certified for the DC side
  - Licensed electrical contractor required for the AC side

## Idaho

- New Governor asked for each agency to provide information to prove why they are needed
- All proposed rule changes did not pass. Working under pending emergency rules
- Rule making process according to the Governor is for every new rule added, they must remove two rules.
- New provisional Journeyworker license. They will issue a provisional license to anyone who is licensed as a journeyworker in any other state. This license is good for one year.
- Removed the education requirement in order to qualify to examine
  - 8000 hours with 576 education hours to qualify
  - 16000 hours without education
  - 24 hours of CE required if not in an apprenticeship program with 576 hours of education
- Ratio can be adjusted according to the amount of education of the apprentice
- Looking at creating all new exams due to the high number of contested questions
- Looking at reciprocity with all state licenses, without a reciprocal agreement

## Iowa

- Things have been quiet
- Will issue a license to individuals with felonies that did not harm others
- Preapproval by the Board is required to be allowed to start a DOL apprentice program
- Looking at raising the ratio for licensed to unlicensed individuals

## Maine

- No education required for a helper. Background checks required
- A helper can stay a helper for as long as they wish
- 576 hours of education and 8000 hours of experience (in any category) required to qualify to examine
- Correspondence courses are allowed
- 15 hours of CE required prior to renewal
- Language change in their statute states: comparable experience or training that is acceptable to the Board. This will allow individuals to qualify to examine easier.
- Looking at adjusting solar fees
- Looking into licensing changes for the racking on large scale solar

# NERA 2019 Midvale Utah

(National Electrical Reciprocal Alliance)

- Trying to become reciprocal with more states
- Legislation pushing for less regulation

## Montana

- Adoption of language change for reciprocity from “may reciprocate” to “shall reciprocate with states that are substantially equivalent”
  - Legislation looked closely at licensing, and since Montana was a member of NERA, they only changed the wording from may to shall.
- Five organizations over the past few years
- Jason reached out to Washington state in order to attempt to have them join NERA. Washington has not responded.
- Failed exam
  - First time they can reapply
  - Second time they must wait six months
  - Third time they must go back for more education

## Oklahoma

- 1-3 ratio was implemented
- New statute states, an electrical contractors license can be issued if the individual has taken an equivalent exam whether they are reciprocal with that state or not.
- 16000 registered and licensed individuals
- 4000 hours experience on large commercial and industrial projects in order to qualify to examine

## Nebraska

- Legislation is looking into reciprocity with every state
- Legislation is attempting to reduce licensing by removing background checks
- The restricted journeyworker license, anyone with a state journeyworker license will qualify to examine. The restricted license is nonreciprocal
- Irrigation license may be re-instated
- No license required for agricultural work

## New Hampshire

- 63% of all licensee's are over 50 years old, 1/3 of them are over 60
- 1800 apprentices
- License is not required for technology circuits or systems
- 1-year credit allowed for an approved high school program. This 1 year is towards the required education component
- NERA membership has helped to keep legislation from forcing more reciprocity
- The NEC cannot be adopted until it has been in publication for at least two years

# NERA 2019 Midvale Utah

(National Electrical Reciprocal Alliance)

- If an apprentice fails the exam ten times, they are required to repeat the course

## North Dakota

- Was not in attendance but sent an update.
- Creates and proctors their own exams
- Looking for a program to replace LXR
- Added power limited technicians license
- Tentative 2020 NEC adoption-April 1, 2020

## South Dakota

- Introduced listing and labeling requirements for industrial machinery. They used Minnesota Rule 3801.3620 as a guide
- Legislation has expanded their Board to oversee licensing
- No big changes

## Texas

- Petition to remove the 2000 hour per year cap but will keep the 4-year requirement for experience hours to qualify to examine. If someone submits over 2500 hours in one year will trigger an investigation
- Over 5000 have taken the journeyworkers exam last year
- 18%-20% pass rate for the master
- An individual can re-examine until they pass
- Working with Arizona to help implement state licensing in Arizona
- Background checks required
- Fines for unlicensed electrical work can be as high as \$5000 per day

## Utah

- Follow the NEC for commercial work, and the IRC for residential
- 1-3 ratio on residential. 1-1 ratio on commercial and industrial, but may change to 1-2.
- 2000 hour cap per year is under scrutiny
- 10% of all licenses per year must be reviewed
- Eliminating the categories from experience hours required
- Practical, hands on is required on the exam

## Wisconsin

- January 2020, mandatory commercial inspections increase
- Looking for more inspectors
- Municipalities must adopt statutes in their entirety
- No Board
- Many new solar sites

# NERA 2019 Midvale Utah

(National Electrical Reciprocal Alliance)

- Implementing more training
- Use eSLA to track licensing
- Looking at a possible license fee reduction
- Discussion on adopting the 2020 NEC. Looking into rapid adoption
- Working to reciprocate with Minnesota and Texas

## Wyoming

- Licensing and permitting is all electronic
- Plan review required for solar and wind
- 8 state inspectors
- Permits are required for electrical work, but only random inspections are required
- Work has increased by 5% and is projected to increase to 12%