

# McCall Electrical Hearing

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Transcript Prepared By:



**T R A N S C R I P T I O N**  
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1 Wing: Okay, we'll go ahead and get going here. We've got a  
2 couple new faces. Some of you haven't been here --  
3 been to one of these before, and I see a couple of you  
4 have. So, my name is Warren Wing. I'm with the  
5 Division of Occupational and Professional Licenses,  
6 formerly known as Division of Building Safety. And  
7 we're out here to talk about ZBR, zero based  
8 regulation, and kind of what that is and what it does.  
9 And I'll kind of give you a -- just a little short  
10 spiel. Come on in. You know, just a little short  
11 spiel on it. There is about 70 administrative rule  
12 chapters within DOPL, Division of Occupational and  
13 Professional Licenses. It covers everything from  
14 electricians, plumbers, HVAC, all the way to  
15 cosmetologists, engineers, and surveyors. And we are  
16 -- every agency is under government mandate to do  
17 what's called zero based regulations. And so, what  
18 happens is from here on out until it changes, every  
19 five years, we've got to actually repeal all of our  
20 rules to where we don't have any rules anymore. And  
21 then, we've got to look at them, and we've got to  
22 evaluated them, and analyze, and do a thorough review  
23 to see if that rule can be improved, okay? And as we  
24 do that, they want us to critically reevaluate each --  
25 the necessity of the rule, right? Why is that rule

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even there? And look at that rule, determine if there is a necessity for it, determine if that rule is actually doing what that rule is put in place for. We want to look at it -- we have to look at it from a basis of is this rule protecting a certain part of the industry's model or is it allowing for what's called -- you know, for innovation and permissionless innovation? You know, is this rule creating a situation where people have to come to the government and ask them permission to innovate and create different models? Those are all the things we have to weigh as we do this. Part of it is to simplify the rules, streamline the rules, and reduce the burden of the rules themselves. And what we're doing is we're out here talking to you to see if you have ideas on how to do this and get your feedback about how it impacts you, how it impacts your safety, how it impacts your industry your company, and if it impacts safety in general, and if there's a way to actually create these rules, rewrite these rules, to ensure that installations are still safe, installations are still gonna meet code, but they're gonna be as least intrusive on the industry as we possibly can. So, that's kind of what ZBR is about. And that's what we're out here doing. There's a couple items that



1 have come up in each meeting that I'll throw out there  
2 and we'll talk about those for a little bit and get  
3 your input on that. And since it's a small group, if  
4 there's anything else that you guys want to talk about  
5 during this meeting of the next hour and a half, feel  
6 free to bring it up. You know, this is your time to  
7 kind of let us know your concerns, where you're at,  
8 and your ideas about zero based regulations and how it  
9 works. We are recording this with this neat little  
10 microphone guy I've been hauling around with me all  
11 over the state. We are recording this. And we're  
12 gonna have it transcribed, and it's gonna be on our  
13 webpage, so that everybody has access to it. So, I  
14 know it's a small setting; it's kind of intimate and  
15 everything, but we're still gonna need you to come up  
16 here and if you have something to say, come up here to  
17 the podium and say it so that we can get it recorded,  
18 and get you on record, and as we compile all this  
19 information, we're gonna be look at the transcripts.  
20 We're looking at emails that are coming in. We're  
21 looking at phone calls that are coming in,  
22 conversations people are having with us offline. You  
23 get a lot -- it's interesting, you get a lot of  
24 conversations offline after the meetings that people  
25 won't say during the meetings. And those people are



1 being asked to send us an email, you know, with your  
2 comments on it, so that we can get that stuff  
3 compiled. All that's gonna be -- all that  
4 information, everything you guys are telling us,  
5 everything you send us, is gonna be compiled, so that  
6 we can make a determination in order to meet the goals  
7 of DOPL, and the goals of the governor, and the goals  
8 of the executive branch in general. So, with that, I  
9 think the first one we'll start off with that's been  
10 coming up quite often is the master electrician  
11 requirement. Okay? Currently, there is contractors  
12 right now who were grandfathered in -- we all like to  
13 use that term, grandfathered in, who are journeyman  
14 electricians, to become a facility account, to make  
15 electrical installations, and the facilities can make  
16 electrical installations exactly the same way a  
17 contractor can. The law only requires a journeyman  
18 electrician to be the supervisor or the signatory for  
19 the facility account. When a -- when the relationship  
20 between a contractor and a master, a signing master  
21 electrician changes, right now the rule says that they  
22 have to notify the division within 10 days, and then  
23 they get 90 days to maintain that company. So, for  
24 that 90 day period, that three month period, they're  
25 also working supervised, making installations under a

1 journeyman electrician. So, the question that comes  
2 up, is there a necessity, a need, to have a journeyman  
3 -- or master electrician? Why does a person need to  
4 wait four years, and then pass a test in order to be  
5 that signatory? Why can't a person just become a  
6 journeyman electrician, get four years of experience,  
7 and be the signatory? Is a test actually doing that  
8 much for us. And with that, I'll just kind of leave  
9 it open for you guys to come up and give us your input  
10 on that. Don't rush the podium.

11 Wearin: Lonnie Wearin (ph) for the record. So, Lonnie Wearin.  
12 I'm a licensed journeyman in the state of Idaho. I  
13 currently work at Quality Electric. I'm also an  
14 instructor at the Southwestern Idaho Electrical JATC.  
15 I've also been in the trade for 30 years. As I see  
16 it, there's not a lacking in contractors in the state  
17 of Idaho. So, keeping the current state of masters  
18 licensing is a good thing. I don't see that it needs  
19 to be changed at this time.

20 Wing: No, that's great, Lonnie. That's great.

21 Wearin: Okay. I didn't know if it's question/answer or --

22 Wing: No, if you're willing to take a question, if somebody  
23 has a question, they're welcome to ask or anybody else  
24 is welcome to ask. But that's kind of what we're  
25 looking for. Would anyone else like to address this?

1 Oh, it's a race.

2 Male: Race? Oh, if he wants to go, he can go.

3 Brown: I did this speech in Meridian, but I'll do it up here.  
4 Tom Brown, B&B Electric. I've been an electrician 49  
5 years. I've been a contractor 38 years. I am  
6 grandfathered in. I was one that sat on the Board  
7 when they brought in the master, and I was the one  
8 vote out of seven that was an aye. I didn't agree  
9 with it. I think it's just adding more government.  
10 If you're a journeyman, the test ought to reflect upon  
11 it that you can take the test. Do layouts. Do  
12 design. I don't see where a masters should be any  
13 different than a journeyman. I think it's just one  
14 more step that we don't need, and we don't need the  
15 government saying, hey, you shouldn't be a contractor  
16 if you can't be a master. The test for a journeyman  
17 ought to be the same as for a master, and you ought to  
18 be able to do it. I know there's a lot of guys who  
19 disagree with it, but I think it's a fallacy that it  
20 makes for better contractors. I have two sons that  
21 have worked for me for 25 years. They are not  
22 masters. They got their own contractor license when  
23 the masters came up, 'cause they didn't see where they  
24 needed to be a master to do it. They do design. They  
25 do layouts. They do calculations. Right now, when I

1 quit or retire, if they want to take over B&B Electric  
2 instead of their company, they've got to become a  
3 master. Why? There isn't anything changed. It's all  
4 the same. It's just one more step we have to do. You  
5 have one man that wants to be a contractor and just do  
6 service work. He has to hire somebody else if he  
7 isn't a master. So, that man now has to employ  
8 somebody to run his shop. And then, you have shops  
9 that have 300 hundred people, and they have one  
10 master. So, you're gonna tell me that master is  
11 watching all 300 of those people? It's out of  
12 (inaudible - 00:09:24). There's nothing -- there's no  
13 rhyme or reason to having the master. I can't see any  
14 need for it.

15 Wing: Tom, you said you were on the Board. Can you tell us  
16 what problem the Board was trying to solve or what  
17 problem --

18 Brown: There wasn't a problem. Some journeyman came to us  
19 and said they wanted to make a special journeyman that  
20 sat above everybody else a little bit more. It was a  
21 status thing. And the Board looked at it and said,  
22 "Okay, but what good is it? Are they gonna want to do  
23 it just so they can say they're a master?" Well, then  
24 the suggestion came up, "Let's make it a contractor.  
25 You have to be a master to be a contractor." And I



1           said, "That's wrong. We're creating something to fix  
2 something and there's no problem. There's no problem  
3 with what you have right now." So, why did we create  
4 the master? Just why? I never could understand.  
5 They couldn't give it to me. My complaint is I'm not  
6 gonna take this test, so if you want to go ahead and  
7 pass this, we'll probably have a lawsuit. And they  
8 said, "What if we grandfathered?" And I said, "Well,  
9 there's a lot of contractors that want to be  
10 grandfathered, and that'll appease some of them, but  
11 eventually this is gonna come down the road and bite  
12 you." And I think it's already bit a couple of them  
13 with legislators that have lost their license and now  
14 they have to be a master. Now, when you start staring  
15 up the legislature, you've got problems. I sat on the  
16 Board for 12 years, 10 years, and I was chairman for 8  
17 years, and there's a lot you don't see happens with  
18 that Board. I attended every meeting I could find,  
19 like these meetings. I wanted to know what was going  
20 on, and part of that was to see was there anybody else  
21 having a problem with a masters. And I've had guys  
22 coming to me and said I don't want to take the test.  
23 And I said, "You don't have a choice right now. I'm  
24 sorry."

25 Wing: All right. Thank you.

1 Brown: Anybody else?

2 Male: Are you willing to take questions, Tom?

3 Brown: Huh?

4 Male: Are you willing to take questions?

5 Brown: Sure.

6 Male: So, your efforts in being involved with development of  
7 the rule, and as they evaluate for the values of these  
8 rules?

9 Wing: Can we get you to come up here and ask the question,  
10 so we can (inaudible - 00:11:34).

11 Male: Yeah, sure. So, how long ago was that participation?  
12 Like when did this become a role?

13 Brown: I've been off the Board 10 years, and I think I was in  
14 the second year. I wasn't chairman of the board at  
15 that time, so I'm gonna guess it's been 20 years we've  
16 had the master's license now.

17 Male: I believe it was 2008.

18 Male: 2008.

19 Male: So, 13?

20 Brown: 13, yeah.

21 Male: That was my question was to get --

22 Brown: I'd have to research it. I think it's further back  
23 than that, but.

24 Male: Okay.

25 Wing: All right. Thank you, Tom.

1 Brown: Anybody else?

2 Wing: Appreciate it. Would anybody else like to address  
3 this?

4 Larson: Yeah, I would. Hi, my name is John Larson. I am  
5 actually new to the electrical industry. I have a  
6 professional background where I have a history of  
7 success and progression in my career. And I made the  
8 leap to become an electrician. I guess four years ago  
9 is when I started the process. I'm now a third year  
10 apprentice. So, I'm the apprentice, so I'm the  
11 apprentice-saurus-rex, as I'm a little older. And the  
12 reason I did it is because the barriers to entry into  
13 the trade. As I kind of evaluated -- when you talk  
14 about evaluating rules when presented the ZBR, I  
15 thought it sounded really well the way it was  
16 presented to say, oh, it makes sense that they're  
17 doing this. The necessity of rules was the term that  
18 you used. And I think that's cool. Or I think that's  
19 a good word and it's a good mindset to have, because  
20 sometimes we have things that are obsolete. However,  
21 another way to look at it is to say the value of the  
22 rules. Has some thought and deliberation been put  
23 into creating what we have sometimes before we can  
24 critique it. And I think critique is important, but  
25 we also have to critique from the mindset of why is

1 this important, why is it valuable? Why did we have  
2 it in the first place? Because often, beyond the  
3 immediacy of how it impacts us negatively, sometimes  
4 there's an overarching value as it applies to  
5 everybody. Specific to the topic that we're on right  
6 now and I'm assuming we're gonna go to other topics,  
7 about the masters, I guess my endorsement or support  
8 of the masters program is something I aspired to do  
9 and know that I have to work toward is that I believe  
10 that you have to truly look at qualitative experiences  
11 versus chronological experience. As an apprentice  
12 with some professional reference, I work with lots of  
13 journeymen. I can assure you I've worked with good  
14 journeyman and bad journeyman whether they've been 20  
15 years or 5 years. There's a difference between the  
16 two. And so, to say they're all qualified to masters  
17 I think would be foolish, because there's competency  
18 levels between the two and how they conduct themselves  
19 as a professional and how they can execute their job.  
20 And so, to have a masters, I think that you have to  
21 have a way to have it measurable, the competencies  
22 need to be measurable so you can have a  
23 differentiation between someone who just has put in  
24 the time -- who has done their 40, or 60, whatever it  
25 is versus someone who has put some passion and thought



1 to it and has done some professional development and  
2 has really learned their trade, and is truly an asset  
3 and value to the industry as a whole when it comes to  
4 life safety issues and people safe, those things are  
5 important, because there's nothing worse than a bad  
6 installation. I worked with an electrician once who,  
7 at the time -- and I won't name, but he was adamant  
8 that he had 78,000 hours of experience. Same  
9 electrician went ahead and hooked up a bunch of low  
10 voltage lights, a whole room full, to high voltage.  
11 Of course, they all popped, and it created a safety  
12 issue for everybody. The point being is if he had  
13 worked with that individual, it was clear that his  
14 78,000 hours certainly weren't on competency with  
15 other electricians I've worked with who might only  
16 have 20,000 hours, that it truly matters how you carry  
17 yourself as a professional and what you bring to the  
18 table. Chronological time is not enough.

19 Male: So, can I ask you a question?

20 Larson: Sure.

21 Male: Between the two, the 20,000 and the 78,000, in your  
22 opinion, what was the difference -- what set the  
23 20,000 hours apart from the 78,000?

24 Larson: Oh, that's a great question. I think it's much like  
25 any profession, or sport, or anything you do, it comes

1 down to attitude and effort. It's the way you show up  
2 in the morning and what's your mindset going forward  
3 in terms of your commitment to yourself, commitment to  
4 your craft, and how do you carry yourself.

5 Male: So, it wasn't a license issue or --

6 Larson: I don't think it was a license issue, but to say that  
7 they're both now gonna have the same license in their  
8 pocket, I think has become somewhat of an issue to say  
9 that they were comparable or the same. They're not.  
10 You have one electrician who has been -- who has  
11 worked with like 65 different contractors over the  
12 course -- if you do that math, that puts him at just  
13 under six months average per contractor, because he  
14 can only hold a job long enough to -- before they can  
15 kind of figure out, like, oh, this guy is not up to  
16 speed versus someone else who is very competent and  
17 qualified. And I think, Tom, it's great that you work  
18 -- you must work around a lot of good electricians if  
19 that's the paradigm you see it by. I've been  
20 fortunate to see kind of all of it. I've seen very  
21 good ones, and I've seen poor ones. And there should  
22 be something to differentiate them.

23 Male: Can I ask you another question?

24 Larson: Sure.

25 Male: So, do you think the requirement to take the master

1 exam is gonna solve the problem with the attitude and  
2 the effort?

3 Larson: No, but in order -- you have to have something --  
4 there has to be a measurable in there. So, I can't  
5 even speak to the intelligence of the exam or whether  
6 the exam tests the right things. I don't know that.  
7 I have a few friends who just recently passed it, and  
8 they talked about the difficulty of it, but more or  
9 less it was an extension of the -- there was a few  
10 more calculation based than was already on the  
11 journeyman exam. It's a very comparable exam  
12 currently. So, it does make sure that you have  
13 journeyman that have to at least hit their books again  
14 and they've got to retool certain competency levels  
15 that they were measured on the first time when they  
16 got their journeyman, but my understanding is the test  
17 itself is not much different other than you have more  
18 calculations. But I can't speak to the test. I've  
19 never seen it.

20 Wing: Appreciate your comments. Appreciate that. Thank  
21 you.

22 Larson: You betcha.

23 Wing: Would anybody else like to address this one?

24 Wagner: Hi, I'm Richard Wagner. I've worked 20 years in the  
25 electrical industry. You speak about the measurable

1 difference between a masters and a journeyman license.  
2 So, I personally know two or three people who are book  
3 smart and test crazy. They can go in there, and they  
4 can take a test and knock it out and not have any  
5 problem, but they can't make up a simple three-way  
6 switch. So, how are you differentiating versus, you  
7 know, experience or knowledge with a test? If a guy  
8 is book smart, he's book smart, and he can do it, and  
9 he can test. But if he can't make a simple three-way  
10 switch, how have you differentiated the two? That's  
11 kind of really all I had to say.

12 Wing: Well, that's a good question, and I'd kind of like to  
13 turn that back around on you.

14 Wagner: Sure.

15 Wing: So, how do we do that? How does a licensing agency be  
16 able to qualify, not quantify, not hours, but qualify  
17 whether or not that person who is being licensed is  
18 going to meet the requirements of the contractors that  
19 (inaudible - 00:19:58)?

20 Wagner: That's a very good question. And how do you quantify  
21 that? I have no idea. I think if a person can go out  
22 and get their masters does not necessarily mean he's  
23 gonna end up being a good contractor. And I think  
24 through time, that will avail itself and that person  
25 will most probably either work for somebody else or no



1 longer have a business. That's the only way I can  
2 figure that's going to find that person that not only  
3 is potentially book smart, but also capable of doing  
4 the job that he was set to do. I mean, if you took  
5 the masters away and a journeyman with four years of  
6 experience comes in, is he gonna survive? Is he gonna  
7 kill somebody, etc.? So, you've really got no true  
8 way of going in and taking a test and go through the  
9 codebook and say here is this answer, here is this  
10 answer, but then when you get out in the field, he's  
11 got the code book and he knows it, but he can't apply  
12 it. I don't know how to measure it.

13 Wing: I appreciate your thoughts on that.

14 Sims: I can speak on that actually. I'm Asa Sims. I also  
15 work for Trisdale (inaudible - 00:21:36), and I'm  
16 local 291. As far as the masters test goes, I agree  
17 exactly what you're saying. You might have guys who  
18 are book smart and can pass a test whiz free and no  
19 problem and then you've got guys who have no common  
20 sense and can't apply what they've learned or wrote in  
21 the test. So, what I would imply to that, instead of  
22 just doing a written test, there should also be a  
23 mechanical test. Take somebody into like a lab, have  
24 them make up a switch, or make up a panel, or  
25 different stuff, you know, not just sit there, write

1 down answers, and test.

2 Wing: We've heard that come up a few times, and we've also  
3 heard people say that -- well, you know, people can  
4 learn how to pass a test like that too, you know, but  
5 -- sorry. Basically, someone can also be taught or  
6 trained how to pass a hands-on test. I know -- was it  
7 you guys --

8 Male: I was gonna say, as a plumber, the outside looking in,  
9 we have a practical, but it's a joke.

10 Wing: So, my question would be, is there like a  
11 nonregulatory means that someone could verify the  
12 skills or the qualifications, the actual quantifiable,  
13 measurable, aptitude individuals that they're hiring?

14 Sims: As far as that one, no, I couldn't tell you there. I  
15 would just say, if anything, make taking the master's  
16 test a two part test, a written part and then there's  
17 also applying that in a lab or in an actual working  
18 scenario --

19 Wing: Okay.

20 Sims: -- I guess is the only thing I was implying. As far  
21 as what you're talking about, no, I have no idea.

22 Wing: Okay. I appreciate your comments. Anybody else want  
23 to take a swing at the masters? No? Okay. Yeah --  
24 oh, one more? Go ahead.

25 Cornwell: Yeah, I'm Wes Cornwell. I run my business under

1 Wesley Cornwell Construction. I was in construction  
2 my whole life. Had neck issues 20 years ago, and  
3 decided to go to the electrical, which I had a lot of  
4 experience back in the 70s. As soon as I had passed  
5 my journeyman test is the year they changed it where  
6 you had to wait four years, go get the -- pass your  
7 master test. It was right at '08 when the big  
8 downturn was in the economy. I was told, when I went  
9 down to see about it, 'cause used to you had to wait  
10 two years after -- past your journeyman, and then you  
11 could go take your contractor's license and become a  
12 contractor, which was a good deal. You know, you  
13 didn't go directly into competition with your  
14 journeyman that -- contractor that you had worked for.  
15 Okay, that was a good deal. So, I was -- then when  
16 that happened and I was doing it with my real uncle  
17 who had been in it his whole life, and he was at the  
18 end of his career, and -- so, at that time, I was  
19 totally stymied. I couldn't go do nothing, because no  
20 contractor needed -- they didn't even need a  
21 journeyman. All they wanted was some journeyman -- or  
22 some apprentice that they could run around and dig  
23 holes, and pull wire, and dig holes, and nail boxes.  
24 And to reference your question, I feel that is the  
25 journeyman's fault. If a guy gets up to where he can

1 -- you're not even -- you don't need to even take the  
2 master test unless you want to be an electrical  
3 contractor. A lot of electricians don't want to be a  
4 contractor. They like wiring and that's what they  
5 want to do. And I totally understand that. I've had  
6 some on my crew. I've had a guy run through -- I  
7 couldn't get him through the -- past the journeyman  
8 test 'til about three or four times until finally I  
9 just took him and stayed on him to pass the test. It  
10 has really nothing to do with wiring three-way  
11 switches. I mean, your first year or two they teach  
12 you that in the books, and then if the journeyman  
13 isn't teaching an apprentice how to wire these, that's  
14 their fault. I was told when I went to do this that  
15 they were -- their answer was -- you were on the Board  
16 then, the answer to me was oh, we're gonna raise the  
17 bar. The guy behind the desk, he told me -- I still  
18 remember him; he's a great big guy that had classes  
19 that -- he did classes, and I was told it was time to  
20 raise the bar. Now, I've seen a lot of these  
21 journeyman electricians and I totally agree, the bar  
22 needed to be raised. I've seen them do all kinds of  
23 stuff. So, I don't know if it impedes anybody. I  
24 don't think it impedes -- I think it's a good thing,  
25 taking the master test. I mean, I passed it by

1 studying, studying, studying, studying, and that's how  
2 I passed it. I'm not a real book smart person. I  
3 can't just go up and look at a book and read and tell  
4 -- I mean, I read every passage in that codebook and  
5 every time I did it, I learned something else. The  
6 master test was a lot harder than the journeyman.  
7 There were 16 to 20 hard calculation questions on  
8 there, and when I got done in four hours with it, I  
9 go, man, I don't think I passed this thing, 'cause I  
10 had about 20 of them. So, I forgot about the rule.  
11 They say don't go change your answers. Well, I sat  
12 there for the next hour, I went back over, and I  
13 changed a lot of answers. And somehow I passed it by  
14 three points. But it was hard. But I was proud of  
15 it, and I went right down in a week and go my  
16 contractor's license and went to work. And I found  
17 out that I am learning -- I have a lot to learn to be  
18 a contactor, 'cause to apply all the things in the  
19 code -- that's what these tests are about, code. It's  
20 not about -- there's not one question on the master  
21 about wiring a three-way switch. Now, I have one  
22 young man that wants to become an electrical  
23 contractor and I'm working my butt of to try to get  
24 him through it. I'm teaching him how to wire these.  
25 I'm teaching him the different ways to do it. I'm

1           trying to teach him all the parts in ground, the  
2           difference between equipment ground and grounding  
3           electroconductor, when to apply the different rules  
4           and that's where all the hard questions come in. And  
5           I'm telling you, my old journeyman, he didn't teach me  
6           that stuff. And after he passed away and I wasn't  
7           done, I went onto another guy, and he didn't teach me  
8           that stuff. I found out -- he had been electrical --  
9           he had been an electrical contractor. He had been in  
10          the Union. He couldn't even do voltage drop  
11          calculations. He thought it was great when he got on  
12          the line, and he could -- there was something on there  
13          that you can do a voltage drop calculations. I mean,  
14          how hard is that? I mean, it takes one minute. But  
15          these are the things that they're not learning unless  
16          their journeyman is teaching these apprentices. So --  
17          and I'm not just saying it, because I had to do it,  
18          but I don't want to see them simplify it too much to  
19          become an electrical contractor, because there's a  
20          big difference in being an electrical contractor --  
21          and there is a good journeyman electrician that wants  
22          to work that way -- and there's a lot of them that's  
23          what they want to do. They don't want to get out  
24          here, pull permits, make sure everything is done  
25          right, and get the inspections passed, go -- I mean,

1           there's a lot to it. And as I understand it, there  
2           was a big problem in the staff of Idaho, talking to my  
3           inspector, Kevin Hubble, a lot that back -- and I've  
4           been to your meetings, Warren, and you talked about  
5           the people over in eastern Idaho where a master calls  
6           you from Northern Idaho regarding a job that just  
7           flunked an inspection in eastern Idaho four hours ago  
8           or something. We know that it's not getting done  
9           right. And I don't agree to that. I mean, I work my  
10          ass of to do mine, and I only handle what I can  
11          handle. And so, I don't believe in this circumventing  
12          everything to make it easier for everybody to go be a  
13          contractor that isn't a good contractor.

14 Wing:     I appreciate your comments. So, you think -- the  
15           example you used about the master in northern Idaho,  
16           do you think a master license is solving the  
17           unidentified problem -- or, you know, what is the  
18           problem that we're solving with the master's if that  
19           type of stuff is going on?

20 Cornwell: Well, you guys are the ones that said you needed to  
21           raise the bar. I didn't know the bar was too low at  
22           the time, but I do see -- I don't know, you guys  
23           decided. Should an electrical contractor know how to  
24           do a voltage drop calculation? I have known them that  
25           don't, don't have a clue where to start. I know a

1 lot of journeyman electricians that don't want to be a  
2 contractor. They don't necessarily care that they  
3 don't know how to do a voltage drop calculation,  
4 'cause they have somebody else to do it. They want to  
5 do the wiring. So, I can't answer your question  
6 exactly. That was your guy's rule. Or that was your  
7 explanation. That was the guy behind the counter down  
8 in Meridian when I went don't there, because I was  
9 really disgusted with having to sit now for four years  
10 and do nothing. But that was the answer I got from  
11 him. Apparently, you guys knew that the bar was too  
12 low. I don't know. Or you just -- or wanted to keep  
13 the competition down for the contractors that -- I  
14 don't know. That was the answer I was given.

15 Wing: Okay. Well, I appreciate it. And that's what we're  
16 trying to identify out here, you know, what problems  
17 need solving.

18 Cornwell: And like I did say, all that studying, I'm telling  
19 you, I found out when I got -- 'cause by then, I had  
20 to go be my own contractor. I was still building.  
21 And I was doing both everything at the same time.  
22 Because there were two -- I'm from Cascade, there were  
23 two electrical contractors there. It wasn't the  
24 easiest thing to break into. And I found there was a  
25 lot more to it then I dreamed. And I don't know if



1 the master helped. It helped in a lot of the  
2 calculations, I do know that, but is it totally  
3 necessary, I don't know. You guys will have to decide  
4 that.

5 Wing: Appreciate that.

6 Cornwell: But I don't think it hurts. I think anybody that  
7 wants to be an electrical contractor is probably --  
8 like the gentleman there on the left back there said,  
9 that -- I took real pride in it, passing it, and I  
10 think if you want to be an electrical contractor,  
11 you're probably willing to go through and do it.

12 Wing: Okay. Well, thank you for your comments. We really  
13 appreciate it. Anyone else? Like I said, this is an  
14 open forum. You're welcome to come up and talk about,  
15 you know, anything you want to. But I'll throw  
16 another one out there that's been coming up quiet a  
17 bit is the idea of exempting certain types of  
18 installations. We had somebody mention specifically -  
19 - and I think it was the post Falls meetings about  
20 getting rid of -- or just exempting floor heat, so  
21 that tile installs can do floor heat. And the other  
22 one that's been coming up a lot lately has been the  
23 idea of a handyman, letting handyman change  
24 receptacles, and change lights, and install ceiling  
25 fans. So, that's been coming up quiet a bit and we've

1 heard both sides of the arguments on that one also.  
2 So, we want to get your guy's, you know, input and  
3 your feedback on that one too while we're up here, and  
4 anything else. I mean, we can go ahead and just --  
5 like I said, anything else on your mind, let's hear  
6 it. It's a small venue. You guys have plenty of time  
7 to talk and let us know. No one wants to address the  
8 handyman or exemption for tile floor heating?

9 Male: I will. Tile floor heat. I see a lot of them do it.  
10 I know Kevin, the inspector, he's totally against it.  
11 I'm totally against it. They want us to come in and  
12 supply the branch circuit, you know, hook up the  
13 thermostat and all that, which I think has to be done.  
14 That's what an electrician does. I mean, they're not  
15 supposed to do that unless you're an electrician.  
16 It's in a bathroom. Installing a cable, I know it's a  
17 big pain in the butt to cross everybody over and a lot  
18 of those guys, they -- I'm sure those tile guys have  
19 installed more of them than I have. But they're not  
20 an electrician, and it's electrical. He's running  
21 through the floor in the bathroom. So, I've got no  
22 problem saying no, don't -- no exemption. Now  
23 handyman exemption, no. I've gone in and worked for  
24 tons of customers, remodeling -- this happens all the  
25 time with these -- what I see, these emergency

1 restoration companies that go in and get -- you know,  
2 the house freezes up and the water is all turned off,  
3 so they'll go get a bid from an electrician, or an  
4 estimate, or their computer configure out the  
5 electrical portion. So, then they go in and have your  
6 guys take out receptacles, do all this, do it wrong.  
7 People's refrigerator then trips off. I go in and  
8 look -- I'll come back, and I'll look. They're not  
9 grounded properly. They have -- once they take it  
10 apart, they have no clue what they're doing to put it  
11 back together. It doesn't get put back together  
12 right. I've never seen one that I would have not  
13 chewed my apprentice's ass for doing. so, I'm no on  
14 the handman too.

15 Wing: Okay. Appreciate your comments.

16 Male: Oh, the specialty licenses where -- like well, guys,  
17 don't they have -- don't they take a year class? I  
18 know you guys have changed it around. I don't know  
19 what the rules are anymore. But -- oh, the heat guys,  
20 no, never let them do any electrical. Never. I don't  
21 care if he's the heat guy or not. But I just did a  
22 job this last year. They had a heat guy come up to do  
23 -- put a heat system in business down in Cascade. And  
24 he comes up there and he gives the guy a good bid. I  
25 liked the young kid. I liked him. But he tells the

1 owner that the electrical should cost \$700. Okay, and  
2 so we've got to take from the service inside out and  
3 around the building, hook it up outside to the unit,  
4 then he's putting all this equipment up in the attic,  
5 got to go up in there. Okay, \$3000 later, you know,  
6 the thing is wired in properly, you know, with -- so,  
7 I think if they go through the course, what they used  
8 to have to do, one or two year course, and pass a test  
9 for their application, I'm totally fine with that. I  
10 don't think Kevin is. Kevin, he wants us to do it  
11 all. There's some of the stuff I see after -- with  
12 the proper training that I don't have any problem with  
13 if they pass a test that says they can do what you,  
14 the regulatory board, set up. But just to have any  
15 and all of them, no. They don't know what to do.  
16 They don't know where they have to have a receptacle  
17 for the equipment. You have to have a light up here  
18 in the attic. If you have equipment in there, you  
19 know, none of that stuff gets done, you guys. The  
20 cable -- the heat guys run -- leave the cables laying  
21 on the ground underneath the buildings. I mean, I  
22 find this in all of them, everyone of them. Splices  
23 put together in the cables with wire nuts not in a  
24 junction box.

25 Wing: Can I ask you a quick question?

1 Male: Yeah.

2 Wing: So, he would be supportive of a handyman or a tile  
3 limited license that -- with the same qualifications  
4 as the rest of our limited license when they've got to  
5 show two years' experience and pass a test?

6 Male: Maybe on the tile guy. I don't know about the  
7 handyman guy, 'cause they can get into too many  
8 different situations --

9 Wing: Okay.

10 Male: -- right here without thinking it out for a while.  
11 That's how I solve the problems. I think it out. But  
12 the tile guy, maybe, being as that's the only thing  
13 he's gonna do is put those cables in underneath that  
14 tile, leave the squawk box on, so that we know that  
15 everything is done right. But then, not any farther  
16 than that, and not putting in the thermostat, none of  
17 that, but that would be -- but the handyman guy,  
18 there's just too many things. The next thing, you'll  
19 have them in panels. You'll have them screwing up the  
20 -- everything. I say no on that.

21 Wing: Okay. Well, I appreciate your comments. That's what  
22 we need to hear. Anybody else? It's open forum too,  
23 so. No? All right, I --

24 Larson: Yeah, I'll go one more time. John Larson again.  
25 Appreciate your feedback and the dual participation,

1 so I don't feel like I've -- and I'll be quick on this  
2 one. I think it's imperative that we focus on the  
3 preservation of the integrity of our industry through  
4 -- and except that regulation is part of that, so it  
5 creates a barrier to entry, so that you don't dilute  
6 the profession to the point that it doesn't exist.  
7 And I know there's a line in there somewhere that has  
8 to be drawn. When unions first come out in 1881, when  
9 the miners and the knights of the unions were involved  
10 with the mines, it was to the point where you couldn't  
11 change a lightbulb without an electrician. Like none  
12 of the other trades could ever change a lightbulb.  
13 And so, at some point, I think we've come to the point  
14 where we're like anyone can probably change a light  
15 bulb. But now you get into -- with the specialization  
16 of the way electronics are components of work, we're  
17 really getting to a dangerous area where we open up  
18 and start defining people's installers, because how  
19 far do you take that before you've completely deluded  
20 the trade. It's all together just 'cause a lot of  
21 what we do is installation, and the installation part  
22 is the easy what we do. That problem is when  
23 something doesn't go the way it is or when you have to  
24 factor in voltage drop, or, you know, how long are the  
25 wires gonna be that you're using to get to your source



1 as it creates resistance? There is a technical  
2 component to us that gets overlooked and trivialized  
3 when we just make everything about installers. And  
4 so, I think as you guys continue to weigh this out,  
5 as the state, and evaluate rules, that you keep that  
6 in mind, that the preservation of the industry itself  
7 is by maintaining a professional standard, and that if  
8 we start chipping away at that, what do we have?  
9 Should we just have a bunch of installers that creates  
10 life safety issues for people ultimately, and you  
11 start dealing with loss of life and property? So, I  
12 think we go the opposite route where we've gone. We  
13 don't see too many fires these days. You know, when I  
14 was a kid growing up in the 70s, it seemed like every  
15 weekend there was a major fire somewhere. You know,  
16 these houses and buildings had been built at the turn  
17 of the century started to become obsolete with their  
18 electrical systems. For the most part now, you don't  
19 see a lot of fires. And a lot of that is because the  
20 standard is where it's at, that a lot of time and  
21 effort has been put from many agencies, you know,  
22 state and federal to make it so that installations are  
23 done safely, and people and property are safe as a  
24 result of it. And I think it's important that we  
25 don't go the opposite way with that.

1 Wing: Well, you know, I appreciate that. I appreciate, you  
2 know, your desire to maintain that trade. On the  
3 other side of that, I had a guy yesterday -- and I  
4 wrote it down here, and I can't remember exactly how  
5 he said it, but you know one of the things that we're  
6 tasked with looking at and that we want to look at is,  
7 you know, not creating a situation where the rules,  
8 the statutes, are keeping somebody from being able to  
9 intubate, right? I think -- I had -- I wish I could  
10 remember exactly what was said. He said, you know,  
11 nowadays with the generation -- and I don't want to  
12 get into a generation fight, I'm just telling you what  
13 the guy told me. He said -- he goes, "I need a  
14 conveyor belt model for a conveyer belt generation," I  
15 think is the way he put it to me after the class,  
16 right? And he said the same thing, you can totally  
17 respect of the idea of this well-rounded journeyman  
18 electrician -- I mean, we all know there is certain  
19 part of the industry that that's -- they create  
20 incredible journeyman electricians. But on the other  
21 side of that, you have guys who are literally coming  
22 to me and saying, we don't need that level of person,  
23 we need that conveyor belt person. We need to be able  
24 to have that model where we can go in and teach a guy  
25 in an hour how to install a receptable and say now go



1 do a thousand of those throughout this apartment  
2 complex or whatever. So, there's that balancing in  
3 there that we've got to look at. You know, so how do  
4 we approach that balance of now being able to, you  
5 know -- as we go through these rules and statutes,  
6 not putting barriers on innovation, also the people  
7 who have a different model than that model.

8 Larson: And I don't know if what you described would be  
9 innovation, if that was the example. What I heard  
10 there is that someone wants to make more money by  
11 creating more efficiency specific to a task. And I  
12 think that's okay, and that kind of innovation is left  
13 for the business owners or the contractors. That's  
14 here they separate themselves from other contractors.  
15 But at the end of the day, the regularly side should  
16 be focused on the safety of the industry itself and  
17 the preservation of property and life. And so, I  
18 think it's a dangerous game to cater to that, because  
19 that's where the skill for contractor will manage the  
20 productivity of his guys and keeping them acute in  
21 their skills and specific to their tasks, but also  
22 developing them, like as he talked earlier about  
23 developing someone who wants to become ultimately the  
24 master electrician. There has to be that commitment.  
25 If we get too cookie cutter and too conveyor belt, we

1           lose that value and we undermine the professionalism  
2           and ultimately it would desensitize talent from coming  
3           into this trade.

4 Wing:       Okay. Now, appreciate that. Any other comments?

5 Male:       I think we deal with a lot of this stuff you're  
6           talking about all the time in equipment we get. Say  
7           heaters -- I'll use just one quick instance. I  
8           install a lot of these heaters, 10 Kw heaters like in  
9           stores in the back units and stuff like that. So, I  
10          was down in Cascade, and we were installing one. And  
11          we get it, and, you know, they're 10Kw heaters, 208  
12          volt. So, all the wiring in there, we know that  
13          that's put together. They're not electricians and so  
14          we're installing this heater just last year and get to  
15          studying it, and I looked in there and the parallel  
16          conductor is coming over. Whoever put them in, they  
17          were stranded conductors were scored through. They  
18          were like -- they were number 8's or number -- I think  
19          they were number 8 parallels, maybe number 6's. So,  
20          they were scored all the way through. There were like  
21          five strands left that weren't scored. So, that was  
22          done by a non-electrician. Didn't have a clue what he  
23          was doing, using the wrong stripper on his automatic  
24          stripper tool, I guess, or something, but that's what  
25          -- and I find stuff like this constantly. So, I agree

1 with you, if you've got a job where you've got a  
2 thousand receptacles to put in, you can probably train  
3 somebody, but I don't know how you make that jump, how  
4 you oversee it. I don't know. I don't even know how  
5 I happened to find what I found that day. But, you  
6 know, it was just trouble brewing. Probably would  
7 have been fine, but I mean, wouldn't have caught on  
8 fire, because it was contained. But, you know, those  
9 are a lot of the problems.

10 Wing: Understood. Appreciate your comments. Anybody else?  
11 We've got well running program where nobody's got too  
12 many concerns?

13 [CROSSTALK]

14 Wing: We're gonna shake it up a little bit, though, huh?  
15 Welcome to HVAC.

16 Male: You want me to start it off for you.

17 Wing: You want to start us off? Okay, so the next topic has  
18 been coming up quite a bit, is the ID of ratios and  
19 registration itself. So, a couple years ago, the  
20 legislature, they withdrew the apprenticeship ratios,  
21 and it left this wording right here. So, it left --  
22 it shall be the responsibility of the employee and  
23 contractor to assure that each apprentice trainee and  
24 provisional journeyman performing electrical work only  
25 under the constant on the job supervision and training

1 of a journeyman or installer. That was the language  
2 that was left. The Board got together, and through a  
3 special board meeting and emergency rules, traded a  
4 ratio they put back in there that created ratios where  
5 it says on one and two family dwelling units, it's a 1  
6 to 4 ratio, and everything else is a 2 to 1 ratio,  
7 okay? So, we've heard everything from there should be  
8 absolutely no ratio to all the way to, you know, 3 to  
9 1 ratio where there's three journeymen to one  
10 apprentice, okay? Part of our ZBR, and as we look at  
11 this what we've got to do, kind of like I mentioned  
12 earlier, is we've got to look at other states and  
13 we've got to say, okay -- I mean, literally the  
14 language is if it's more restrictive in other states,  
15 explain why Idaho has to -- or if it's less  
16 restrictive in other states, explain why Idaho has to  
17 be more restrictive. Okay? That's one of the things  
18 that we're tasked with. So, there's the ratio topic.  
19 You know, what is the correct ratio, right? Or should  
20 it be like the legislature left it? Should it be  
21 strictly up to the contractor to determine what the  
22 ratio is based upon the work they're performing. The  
23 other topic that's come up relating to apprentices is  
24 the idea of do we even need a registration, because at  
25 the end of the day, the requirements to become a

1 journeyman electrician is you've got to show the 8000  
2 hours and you've got to show that you've got your  
3 school done, right? That's the first route. The  
4 other route in Idaho is 16,000 hours of experience.  
5 So, the argument, if you will, is if at the end of  
6 they day they've got to show that anyways, why have  
7 the actual registration -- 'cause registration right  
8 now, what it does, it -- well, it does a lot of  
9 things, and I'm sure we're gonna hear some of those.  
10 We'll be hearing a lot about, well, it helps us track  
11 them. That's legitimate. It is a great tool for  
12 tracking apprentices, right? And it gives them a  
13 sense of pride, okay? If it gives them ownership in  
14 what they're doing. We hear that quite often. We  
15 also hear that it provides a way for the state to  
16 penalize them if they're not registered. It provides  
17 a way for the state to penalize a contractor if  
18 they're not registered, and it provides a way for the  
19 state to deny them hours if they're not registered.  
20 So, it's -- the argument is that having the  
21 registration just creates penalty system, where it  
22 actually does no good at the end of it, because at the  
23 end of the day, they had to show the hours and  
24 schooling anyways. So, if you'd like to talk about  
25 any of those ratios, supervision -- not supervision,

1 supervision is completely another topic, but you're  
2 welcome to talk on it or anything else that you like  
3 to address. We have about half an hour. And the  
4 floor is yours. That's what happens when you sit in  
5 the Lonnie, you've got to walk all the way up.

6 Wearin: I sit in an office all day, it's good for me to walk  
7 once in a while. So, this is Lonnie Wearin again.  
8 Let's talk about the licensing apprentice hours. So,  
9 if an individual is working 16,000 hours, who is  
10 supervising that person? A journeyman. And by the  
11 topics here, we have discussed already, we've had some  
12 good journeyman, we've had some bad journeyman, right?  
13 Just because you're a journeyman doesn't mean you're  
14 qualified. Being a journeyman, to me, is a lot more  
15 than just twisting a wire, not -- you know what I  
16 mean? I can pass the test, but being a journeyman, I  
17 think we all know here is a little more than that if  
18 you put some effort into it. If you get a lackadaisic  
19 journeyman for 6000 hours, the training for that  
20 person is probably not as good as a person who has  
21 8000 hours, and you're going through some type of  
22 state accredited right, apprenticeship program, a  
23 federally accredited apprenticeship program. So, the  
24 state requires 8000 hours plus 180 hours in class  
25 training to get your -- each year -- I mean, for each

1 year and 8000 hours to take the state test. Is that  
2 correct?

3 Wing: It's 8000 hours and 576.

4 Wearin: So, it's 180 times -- whatever. You get what I'm  
5 saying. So, when you have a controlled environment  
6 where you have some testing and some accreditation, I  
7 believe we're turning out a much higher quality  
8 product than just somebody working 16,000 hours in the  
9 field. So, what is that guy's qualification in the  
10 field? He might be a journeyman, but he might be the  
11 -- just barely scrap the bottom of the barrel  
12 journeyman or is he the best journeyman ever that  
13 that's working that has the 16 hours accredited? I  
14 think you guys can understand some of that. Also,  
15 with that, if you increase the ratios -- if you have  
16 one journeyman now supervising four apprentices, what  
17 is that training doing? So, if you're allowing  
18 multiple apprentices to one journeyman, he's spending  
19 a quarter or less of his time with each apprentice.  
20 And to me that seems like a road to a train wreck how  
21 about? It's a road to disaster, so.

22 Wing: Okay, can I ask you a question? Like I said, part of  
23 what we're tasked with is explaining, you know, why  
24 some states can do this, but we can't. So, what's the  
25 explanation that Idaho has to have these increased --

1   Wearin:   Well, I think when you have an accredited education  
2                   program, you're promoting safety, you're promoting the  
3                   industry.  And we've had several people testify here  
4                   when you just aren't doing things right, when things  
5                   are unsafe, bad things happen, right?  Do you want to  
6                   live in a house where an apprentice had no supervision  
7                   had you're sleeping your head now in that house?  The  
8                   possibility for disaster of that house is much greater  
9                   than one that was license accredited and professional.

10   Wing:     Do you know of any quantifiable evidence that you can  
11                   point to that says in this state where they don't have  
12                   this or they have a ratio, that it's unsafe, things  
13                   are unsafe?

14   Wearin:   I don't have data for that, but I think we all as  
15                   professionals in here -- and pretty much everybody has  
16                   gray hair, right, for the lack.  So, I think we've seen  
17                   those half ass installations and wondered, wow, how  
18                   did this pass?  Wow, how did this not catch on fire?  
19                   You know what I mean?  And just because the problem  
20                   isn't straight up evident doesn't mean it doesn't  
21                   exist now -- or what's happening now may not attribute  
22                   itself in five years to a disaster.  Does that make  
23                   sense.  So, I don't know that I have any physical  
24                   statistical evidence I could point to right now.  I  
25                   could probably look up some, but --



1 Wing: If you could find some, you can send it to me.

2 Wearin: Okay, I would love to do that. Okay.

3 Wing: Yeah, that's absolutely what we're looking for, so.

4 Wearin: Okay.

5 Wing: I mean, if you read what we're being asked to do and  
6 what we have to do is that, you know, straight up word  
7 -- not word for word, but we can't use anecdotes, we  
8 have to give them actually quantifiable evidence.

9 Wearin: And I understand your looking --

10 Wing: If you can find that, send it to me.

11 Wearin: I know you're looking at states like -- what is it,  
12 Maine and Oklahoma have less regulation and you're  
13 trying to point another finger at -- let's say Oregon  
14 and Washington have a little more stricter  
15 regulations, you're trying to find -- you have one  
16 group of people saying no, we should be like Oklahoma.  
17 The other groups is saying we should be like Oregon.  
18 I don't know what the balance is. My answer to that  
19 is we're Idahoans and we pick our own rules. And I'm  
20 a native, so I like to live by my own Idaho rules, so.

21 Wing: Yeah, that's not the first time we've heard that  
22 either.

23 Wearin: No, I'm a fourth generation electrician -- no, fourth  
24 generation electrician. I take it to heart. I'm a  
25 native Idahoan. I'm 30 years in the trade. I think

1           some years or experience could speak with -- for some  
2           for some of that, so.

3 Wing:       Appreciate your comments.

4 Male:       I might be able to clarify in hard evidence a little  
5           bit. I'm originally from North Dakota. I moved here  
6           about oh, almost a year and a half ago now, almost two  
7           years, something like that. The oil boom in early --  
8           mid -- like 2010, I think it was probably, when the  
9           oil boom in North Dakota was going real big and  
10          strong, we had hacks coming from all over the country  
11          up there, and just throwing up oil wells as fast as  
12          they could. There was no way to regulate the  
13          electrician, so we didn't have enough inspectors,  
14          nothing. And as a result, we ended up with five oil  
15          wells catching on fire over the last 6 or 7 years,  
16          because of seal offs that were poured in a class I,  
17          div I, or just other crazy scenarios. And I don't  
18          know what the ratio is in North Dakota at the present  
19          moment, or if there was one at that exact moment. All  
20          I know if the result is five oil wells catching on  
21          fire. And seven or eight guys died, one of the two.

22 Wing:       Can you -- you said you can point to some evidence.  
23           Is there a way to look at that and say well this is a  
24           ratio problem, or this is a supervision problem, or  
25           this is a licensing problem, or -- you know, is there

1 a way to point and say what actually created that?

2 Male: Yeah, you can look it up online. Keene, North Dakota  
3 was one of the oil well fires. That one is actually  
4 still burning, I believe. They might have got that  
5 one out recently. There were two that were just  
6 recently burning, and Keene I believe is still going.  
7 And you can look up exactly how it got started. I  
8 believe that was one where a seal off didn't get  
9 poured in a class I, div I location.

10 Wing: Okay. And you don't recall, but you said that was  
11 because of a ratio or because of --

12 Male: No, I honestly don't know there. I can't tell you  
13 that one.

14 Wing: Okay.

15 Male: So.

16 Wing: Appreciate it.

17 Larson: I'm not trying to hijack the meeting. He's got lots  
18 of opinions. John Larson again. And the reason I want  
19 to speak to this is I humbly do this as an apprentice  
20 electrician, but I do have a professional context to  
21 the experience I'm going through, embracing it. And I  
22 take my education very seriously. I apply myself  
23 diligently in a classroom, I work hard, and what I can  
24 tell you is it's not enough. Like prepare me for that  
25 test, get me ready for the codebook and how to

1           decipher it and demonstrate that competency on a test.  
2           However, my development as a professional to be an  
3           electrician is -- relies on my relationship with my  
4           journeyman. I need that journeyman to answer my  
5           clarifying questions. There are days where I go in  
6           and I will work as an installer. When I get loud out,  
7           I'm gonna put all these lights in, or I'm gonna put  
8           all these receptacles, and it's a rinse and repeat  
9           process. But everyday doesn't work out that way. And  
10          so, it's imperative that you have a relationship with  
11          your journeyman so that you can learn and have someone  
12          to answer those clarifying questions or to take what  
13          you learned in the books and figure out how it  
14          translates into the field and how it's applicable.  
15          How do I do my voltage drop calculation? Why would I  
16          do it in this context or why would we do it here. And  
17          it's important to learn those things. And the  
18          relationship I have with my journeyman is critical to  
19          that. And I happen to work at a shop where we work on  
20          a 1 to 1 ratio, and at that ratio I still don't know  
21          that I have enough time with my journeyman sometimes,  
22          because he's still slated with his tasks and his  
23          productivity. So, the more you dilute that, the less  
24          -- you're starting to compromise the professional  
25          development of your apprentices in terms of turning

1 out competent apprentices. If the goal was to have  
2 people who can do work and there will be some turnover  
3 in as part of like the conveyor belt model, I guess --  
4 you could go that route, but if you want to have  
5 development of professionals who have a competency to  
6 go forth, you have to preserve the ratios, or at least  
7 appreciate what they are, so that learning is truly  
8 happening, that you have people who are turning out  
9 who have a professional competency, whether it can be  
10 demonstrated on a test or not, but they can go into  
11 the field and perform work and do -- perform work  
12 that's done safe. So.

13 Wing: I appreciate your comments.

14 Brown: Tom Brown again. I think, Warren, when you say you  
15 want to compare to other states, I don't think you  
16 want to take the lowest state and compare us to that.  
17 But in turn, I don't think we want to take the highest  
18 state. I think Idaho needs to be in the middle  
19 somewhere. I don't think you need three journeyman to  
20 one apprentice ratio, but I can see no apprentice  
21 ratio. I don't understand that. I don't understand  
22 how the -- you can even consider safety without having  
23 some kind of a ratio. I do a ratio in my business,  
24 and we do 2 to 1, on a residential we'll do 4 to 1,  
25 but it depends on the apprentices we have on that

1 residential. I take apprentices that have two years  
2 or three years, and then I'll increase my ratio, so  
3 that they can watch the first year and the second year  
4 guy and teach him. It used to be in the state of  
5 Idaho a fourth year apprentice could work by himself.  
6 No supervision. He could go out and do installations.  
7 He could do service calls. Your chairman of the Board  
8 remembers that. He was one of them. And then, the  
9 state said wait a minute, that's not how the law is  
10 written. We've got to change that. I think a fourth  
11 year apprentice, by the fourth year, he should be able  
12 to help teach, and he should be able to watch others.  
13 There is jobs -- I use a 1 to 1 ratio just because of  
14 the circumstances of what we're dealing with. If I  
15 feel is dangerous, I don't need a bunch of guys there.  
16 I want one guy with me or no guys. And I want to  
17 teach them, so I like one guy, but I want to be right  
18 there beside him watching what he's doing. I don't  
19 want anybody hurt. I don't want anybody else on the  
20 job getting hurt. I think it's very important if we  
21 go to a ratio of more than 2 to 1, it should say the  
22 other additional ones need to have experience. And I  
23 don't know how you do that when you don't want to  
24 register. I'm not sure how what an apprentice does if  
25 you don't register. Small outlets, thousands and

1 thousands of outlets for 1600 hours or -- and now we  
2 consider him to be a journeyman? I think we're wrong  
3 for safety. We need to have ratio. I think there's  
4 room to expand it, but only if it's somebody that's  
5 watching and somebody that's already been trained.

6 Wing: We've heard that quite a lot about a fourth year.  
7 Would the -- in your mind, would the fourth year -- if  
8 he can go out and work on his own, would you count in  
9 the ratio at that point then?

10 Brown: Yes.

11 Wing: He would still count in the ratio?

12 Brown: If you go to a 4 to 1 ratio, I think you could take a  
13 third and fourth year and put them in that ratio. I  
14 don't believe you should have 4 first year. There's  
15 no way I could track 4 first year apprentices. I just  
16 started an apprentice, first year. He has no  
17 experience with electrical. I just started him, and I  
18 thought what am I doing at my house teaching another  
19 guy this? And I have to watch him constantly. It is  
20 really tough. And you forget when we've done this so  
21 long, it's automatic to us. When you bring somebody  
22 new in, those first two years are -- there's a lot to  
23 learn, and there's a lot to learn even for me. I'm  
24 still learning.

25 Wing: All right, appreciate your comments. Any additional

1           comments?

2   Larson:    I agree with what he said.  I do --

3   Wing:       Come on up.

4   Larson:    I -- John Larson again.  And I just wanted to  
5           elaborate on -- I like listening to Bob speak.  I like  
6           that you can just tell that he cares that he's here,  
7           the way he speaks to his company.  He puts thought  
8           into it, and -- but I don't want that to mislead what  
9           the state's -- clearly, he can self-regulate, right?  
10          He cares about his business.  But at the end of the  
11          day, there are plenty of hat contractors that don't  
12          care enough to even be here to have these discussions.  
13          And at the end of the day, those are the people that  
14          you're slated.  That's the bottom that the  
15          regulations have to exist for and to manage, so that  
16          they might not care if they have four first year  
17          apprentices.  They just -- they want bodies in there  
18          making up outlets, or installing lights, or whatever  
19          they're having them do.  It's imperative that you guys  
20          make rules that managed -- you say what are the value  
21          of the rules, and the value of the rules is that it  
22          creates a minimum standard for this industry to  
23          conduct itself by.  And there will always be people  
24          like Bob who will go above the standard and will be  
25          professional and create environments where there's



1 growth and learning happening, but not all contractors  
2 are going to do that. If you're to eliminate that, we  
3 won't self-regulate, just the natural goodness of  
4 people won't preserve -- the greed in people wanting  
5 to make quick dollar and do it by coming in with lower  
6 skill trade and diluted ratios is what will prevail if  
7 the state doesn't manage that. And so --

8 Male: Can I ask you a question? So, are you saying then  
9 that industry or the consumer wouldn't weed those guys  
10 out? I mean, after I pay a 25 --

11 Larson: The consumer wouldn't weed them out as fast as they  
12 would reemerge and exist. If you didn't have barriers  
13 to entry and regulation in place. If anyone could  
14 just do it, anyone would. You'd have a lot of people  
15 come up and fail, and their failures are at the  
16 public's dismay. If they come up and they can't  
17 perform, if they can talk the talk but they can't  
18 perform someone pays for that.

19 Male: I understand somebody pays for it, but I mean, you  
20 know, word gets out that these -- you know, they might  
21 burn a few people, not literally, but, you know, money  
22 wise and everything. You know, it gets out there.  
23 You know, pretty soon they know not to call X,Y,Z  
24 electrical.

25 Larson: Well, I guess where I come with -- I don't have a hard

1 data for you. I'm not prepared to refute that with  
2 direct data, but I would reference like the roofing  
3 industry in the -- like 2008 time period when we had  
4 hail emerging across the country, everyone in the  
5 world wanted to become a roofing contractor. It was  
6 quick money, you could work with the insurance  
7 companies, you could -- and at the end of the day, a  
8 lot of bad roofs were put in, and you had a lot of  
9 roof leaks. And I would hate to have -- create an  
10 environment where we do that in the electrical field.  
11 I think it's important to preserve our industry and  
12 hold all contractors to a minimal standard knowing  
13 that ultimately the reputation of quality guys will  
14 prevail, but for the safety of the public, there has  
15 to be minimum standards put in place and considered.

16 Wing: Are there any examples of states where they've been  
17 doing this for a long time where they haven't had a  
18 ratio for 30-40 years and that type of stuff is  
19 happening?

20 Larson: I don't know of any states that don't have any. I  
21 think electrically the electrical industry as a whole  
22 has been pretty dialed in for coming on 150 years  
23 progressively and working with -- from OSHA and all  
24 the way through, a lot of the safety standards have  
25 been driven from the electrical industry. We've been

1           leaders for that for a long time. And I think our  
2           jobs are gonna be come more complex as technology  
3           becomes more integrated into homes. So, I don't think  
4           our job is gonna get easier. I think they're gonna  
5           get more difficult. And it's required that  
6           contractors are actually better than they are  
7           currently, because, you know, lighting control  
8           modules, and step downs, and there's just more -- the  
9           technology going into houses is a big deal. When I  
10          did my -- I built a house three years ago, and I had  
11          to install all the boxes for my -- so, I can get data  
12          in five different rooms. I get the data boxes  
13          hardwired. Well, by the time I went to move in my  
14          house, and it was built, all those boxes are obsolete,  
15          because everything is Wi-Fi now. Now, as you guys are  
16          seeing, you see a lot more lighting control modules go  
17          in, so things can be ran with low voltage. So, you'll  
18          have, you know, the stepdown transformers being  
19          installed and things like that, it's just getting more  
20          and more technical, and I think that's the way of our  
21          industry. It's gonna get harder.

22 Wing:       Appreciate your comments. Any additional comments on  
23               anything?

24 Male:       I've got a few minutes. I can waste a few minutes for  
25               you. I'm gonna talk a little bit about electrical

1 contractor. And I'm not preaching to you guys, I  
2 just want to let you know anybody in the state of  
3 Idaho can be an electrical contractor. I don't care  
4 if it's a doctor, a lawyer, the director, plumber, the  
5 heating man, anybody can be an electrical contractor.  
6 What an electrical contractor needs according to the  
7 state of Idaho is a master journeyman to sign and say  
8 the work is being done correctly, or if the work goes  
9 bad, he's the one that's got to be responsible to get  
10 it fixed. So, my question is why does it have to be a  
11 master? And I agree, back then they raised the bar,  
12 because they said too many guys were doing it.  
13 Probably shouldn't have been doing it, but it didn't  
14 make any difference whether he was a master or a  
15 journeyman. It was what he was taught and the lack of  
16 schooling. So, when you say you need to be a master  
17 to be a contractor. That's not right. Don't say that.  
18 We have apprentices that are contractors. I don't know  
19 if you guys know that, but there are, there's  
20 apprentices. We have a homebuilder that's a  
21 contractor, an electrical contractor I should say.  
22 But he employs a master. So, if we're gonna raise the  
23 bar, let's get rid of -- the governor, or the  
24 legislator, or the government would like to thin this  
25 down, let's get rid of the master. That's one thing

1 we can do without but raise the bar on the journeyman.  
2 Raise them up to the master's testing. But you still  
3 -- I question why you have a master if you're a one  
4 man shop and you're a journeyman. I question why a  
5 shop that has 200 employees only has one master. What  
6 is overseeing? I don't understand this. it doesn't  
7 make sense in our state that we're so worried about  
8 contractors. If a guy wants to be a contractor, let  
9 him become a contractor. Let him see (inaudible -  
10 01:16:07), but let's set a bar. As he said, here is  
11 the bar, meet it. If you can meet it, be a  
12 contractor. If you go broke because you do something  
13 financially wrong, that's nothing to do with  
14 electrical. What electrical is is for safety. Now,  
15 when people say, well, I like this ratio of 2 to 1 on  
16 commercial and 4 to 1 on residential. I don't  
17 understand that. Commercial, you get a set of prints.  
18 It's a drawn out. It tells you the circuits. The  
19 size of the wire, the size of the conductor. And  
20 engineer has done it. He stamped it. Go do a house.  
21 You can hand a set of blueprints, maybe. Wire it.  
22 The residential guy has to know calculations, the  
23 code. He's got to do all of that out of his head.  
24 So, I don't think where the ratio should be any  
25 different for commercial or residential. If anything,

1 the residential needs to be watched a little closer,  
2 'cause you guys and your families are sitting in  
3 houses asleep. Hopefully, you have smoke detectors  
4 that work. You have no protection. You're working in  
5 commercial. You're in a building that's usually fire  
6 sprinkled. You're alert. Hopefully, you're not  
7 sleeping. But I don't understand this trying to  
8 compare commercial to residential. It doesn't make  
9 sense on ratio. Ratio is -- journeyman can look at,  
10 and watch, and train at a given period of time.  
11 There, I got a few more minutes for you.

12 Wing: Appreciate that. Additional comments? Go ahead,  
13 Lonnie.

14 Wearin: Just like having number apprentice ratios to a  
15 journeyman, I work at Quality Electric, and we happen  
16 to have about 200, I think, 60 electricians right now.  
17 On my job alone, we have at least five guys that have  
18 master's licenses. So, not that that's required, but  
19 we do as a collective group go above and beyond. I  
20 applaud your above and beyond. In our world, our  
21 apprentices come out at 50-60%. We need a lot more  
22 checking of our prints. Our engineers are not  
23 stamping apprentices. We're doing along of  
24 engineering for the guys I think. It sounds like you  
25 residential guys are also doing a lot of re-

1 engineering for the engineers. Engineers aren't what  
2 they use to be. They're flipping them out of school  
3 pretty quick, throwing prints out. They're not  
4 complete. Us as electricians are having to check  
5 those apprentices, so our education level needs to be  
6 higher. We almost have to be engineers or architects  
7 in our own aspect to catch their problem so that we  
8 can do our job safely and efficiently. So, I think  
9 education should be stepped up not down in our  
10 industry. Just my two --

11 Wing: No, I appreciate your comments. A few more minutes.  
12 Would anybody else like to bring up anything? Well,  
13 you guys have done something that know one else is  
14 done and get out of here 5 minutes early. I know it's  
15 not easy to come here in the middle of the day to do  
16 this. You're all busy. You're all, you know, out  
17 there trying to do your jobs, but we really appreciate  
18 the comments, your feedback. We are gonna compile  
19 this. We've got to weigh all of this within the  
20 parameters that we've be given. Now, nothing is gonna  
21 happen. You know, people come up to me and say does  
22 that mean ratios are gone today? No, not that's not  
23 what happened, all right? Thijs is an information  
24 gathering tour. There -- this will go through a  
25 process where we'll have to compile it as the

1 individual program managers. It will be discussed  
2 with the Board. You guys will all be invited to be in  
3 the Board meetings where whatever decision the Board  
4 and the industry comes up with and, you know, can help  
5 us put rules back in, or change them, or make them  
6 better. It'll all to go through negotiated rule  
7 making. It will go in front of the legislature, and  
8 the legislature has to be approved them just like --  
9 you know, I heard several times that you guys, the  
10 state -- you know, you guys did this. All this stuff  
11 through legislative review. It's all approved by your  
12 legislators and your Board, all right? We don't have  
13 authority to do any of this stuff. We can't make any  
14 of this stuff. It all has to go through legislative  
15 review and the Board. And that's all weighed from the  
16 Board by you through negotiated rulemaking, so it's  
17 important. I'm glad you guys are out here today, and  
18 it's been important in you being involved in the  
19 negotiated rulemaking process too as that gets  
20 announced. So, with that, we'll --

21 Male: (inaudible - 01:20:57)?

22 Wing: Yes, sir.

23 Male: Kevin is our inspector up here and he referenced  
24 something about a point system on an apprenticeship.

25 Wing: A point -- no. So, I can -- for a point of



1 clarification on that, the rules allow for us to  
2 expand a ratio for contractors who have, you know,  
3 peculiar situations or doing, you know, peculiar work  
4 or whatever. So, what we do internally as an agency  
5 is when an apprentice brings us his hours and his  
6 school, we'll put what level he is on a card.

7 Male: Okay.

8 Wing: Right? So, we have yearly registration for  
9 apprentices, so if they'll bring us their hours, and  
10 if they'll bring us their schooling every year, we'll  
11 -- once they give us 2000 hours and a year of school,  
12 we'll say you're an apprentice level one. And that  
13 way, they can take that, and they can go to their  
14 employer or whatever and say hey, look, I'm an  
15 apprentice level 2 or 3, and the employer knows by  
16 that card that that apprentice has worked a certain  
17 number of hours and has completed a certain amount of  
18 school, okay?

19 Male: So, it varies --

20 Wing: With --

21 Male: -- (inaudible - 01:22:03) you have six points --

22 Wing: No, what that is is that we're -- and I think there's  
23 like three contractors right now who have been given  
24 an expanded ratio for apartment buildings where  
25 they've been told as long as -- if you have three

1 apprentices, those hours have to add up to six on  
2 their card. So, the inspector goes out and says,  
3 okay, give me your apprentice's cards. If it adds up  
4 to six, he's good to go. If he has four apprentices,  
5 it has to add up to eight. So, it's kind of like what  
6 you addressed with the make sure they have more  
7 experience in order to get that. That's something  
8 that we've been doing through policy for several  
9 years.

10 Male: Okay.

11 Wing: I think there's like three, maybe four contractors who  
12 have that ratio adjustment right now.

13 Male: All right. So, it's --

14 Wing: Does that answer your --

15 Male: -- preapproved basically?

16 Wing: It has to be approved by the administrator. Does that  
17 answer your question?

18 Male: Yeah.

19 Wing: Okay, that's probably --

20 Male: Yeah, he didn't really specify.

21 Wing: That's probably where you're getting that points thing  
22 from, so.

23 Male: Yeah.

24 Wing: Any other question? We've got a few minutes. If  
25 there are any other questions, I can absolutely

1 entertain questions. No?

2 Male: Yeah, actually, on the solar aspect of -- I mean, most  
3 sparkies don't do a bunch of that, and it's usually  
4 just roofers or, you know, other folks that are from  
5 other states that just but solar together. And I know  
6 that there's a demand for that. But it's also where  
7 the legislature created rules that you have to show  
8 what kind of THWN wire you're using and specify that  
9 on a cut sheet. Are we gonna go that way, or is that  
10 just strictly just solar, or is that even something  
11 you --

12 Wing: Are we gonna go what way?

13 Male: Like where you have to have cut sheets on the wire  
14 you're using.

15 Wing: For general installations?

16 Male: Yeah.

17 Wing: No. So, the thing with the solar you've got to  
18 understand is that when -- you know, seven years ago,  
19 I was an inspector seven years ago, and I maybe  
20 inspected solar jobs.

21 Male: Sure.

22 Wing: For the entire year and a half I was an inspector,  
23 right? When solar started getting big, the industry  
24 actually came to us, and said, hey, look, we want you  
25 guys to do a plan review in lieu of a rough-in

1 inspection, because having to wait for someone to come  
2 -- wait for an inspector to come out, we can have this  
3 job up and done before an inspector ever shows up.  
4 So, it was a compromise we made with the solar  
5 industry. We said fine, we won't do rough-in  
6 inspections, but, you know, you guys submit plans so  
7 that we can see exactly what you did.

8 Male: Sure.

9 Wing: And so, we're basically kind of -- it's an honor  
10 system type thing. We're not gonna go up there and  
11 tell them to tear the panels off the roof and all this  
12 stuff, so we can see -- we're gonna take -- you know,  
13 you show us that you can make a code compliant  
14 installation on a piece of paper and we're not gonna  
15 hold you back with a rough-in. Now, that's being re-  
16 weighed right now.

17 Male: Yeah.

18 Wing: Because there's a lot of what you're saying is going  
19 on up there right now. There's a lot of guys who --  
20 roofers, right? If you know a roofer that does that,  
21 let us know, because we'll send them civil penalties  
22 for acting as an electrical contractor. If you know  
23 of, you know, anybody else that's doing it that's not  
24 licensed, we send civil penalties for acting as an  
25 illegal electrical contractor. All that stuff has to

1 be -- you have to be licensed to do all that work.  
2 You know, we're in the process of weighing the plan  
3 review policy, because we're just having a hard time  
4 getting guys that can actually tell us on paper that  
5 they're gonna make code compliant installations.

6 Male: Yeah.

7 Wing: So, we're looking at options on how to do that and  
8 make sure these installations are code compliant,  
9 because they're not simple installations.

10 Male: I mean, they aren't and they are. It depends on who  
11 you are and what you're experience level is, but it's  
12 also where -- you know, if you've given an honor  
13 system to someone who is a roofer, you're potentially  
14 putting a -- you know --

15 Wing: There's no honor system for roofers.

16 Male: Yeah, but I mean, you don't know. You're not there.  
17 You're not coming to the job and --

18 Wing: Yeah.

19 Male: -- not actually -- you know, where Kevin stops by and  
20 says, hey, how is going here?

21 Wing: Right. That's a bigger problem. That's an illegal  
22 contractor. That's someone who is not even supposed  
23 to be doing the installation, so that goes above and  
24 beyond the issue with the compliance.

25 Male: And some of these are, you know, way back in the back

1 country where you're not just cruising along the road  
2 just seeing that someone is on the roof with solar  
3 panels and you stop in.

4 Wing: Yeah. And we -- I don't have a satellite that floats  
5 around and tells me where every illegal installation  
6 is going on.

7 Male: Police officers in the electrical trade, that's not  
8 really -- you know, I --

9 Wing: Yeah, the only way we can know is for you to tell us  
10 most of the time, or we receive complaints from  
11 contractors or homeowners is usually when we find out  
12 about it. So, does that answer your question?

13 Male: Yeah. No, that's good.

14 Wing: All right, with that, we'll go ahead and wrap up.  
15 Thanks for coming.

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I, Holly Massanelli, do hereby certify that I have listened to the recording of the foregoing; further that the foregoing transcript, Pages 1 through 61, was reduced to typewritten form from a digital recording of the proceedings held in this matter; and that the foregoing is an accurate record of the proceedings as above transcribed in this matter.

DATED this 28th day of September, 2021



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