

FOR THE CASE OF  
Department of Labor

TRANSCRIPT OF  
Quarterly Meeting  
March 21, 2018

*Stone & George*

COURT REPORTING

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STATE OF TENNESSEE  
DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT  
BOARD OF BOILER RULES

QUARTERLY MEETING OF THE  
STATE BOARD OF BOILER RULES

March 21, 2018

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APPEARANCES:

Brian R. Morelock, Chairman  
Owner-User Representative

David W. Baughman, Board Member  
Owner/User Representative

Harold Bowers, Insurance Representative

Terry Fox, Boilermaker Representative

Sam Chapman, Chief Boiler Inspector

Chris O'Guin, Boiler Inspector

Kim Y. Jefferson, Esq.  
Administrator, State of Tennessee

Dan Bailey, Esq.  
Legal Counsel, State of Tennessee

Lynn Kirby  
Board Secretary, State of Tennessee

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Attached at end:

Public Notice

Meeting Agenda

Meeting Sign-in Sheet

## P R O C E E D I N G S

1  
2 CHAIRMAN MORELOCK: Good morning,  
3 everybody. I want to welcome you to the March  
4 quarterly meeting of the Tennessee Board of Boiler  
5 Rules, and glad to see everybody here and they  
6 didn't have any weather-related issues. I'm glad  
7 everybody got here safe and sound.

8 We do have agendas on the back table  
9 and a sign-in sheet as well, so make yourself  
10 available to that. We do have some refreshments in  
11 the back as well.

12 I want to call this meeting to order.  
13 And in doing so, we'll begin with introductions and  
14 announcements. So I'm going to begin with our court  
15 reporter, Elisabeth.

16 THE COURT REPORTER: I'm  
17 Elisabeth Lorenz.

18 MS. KIRBY: I'm Lynn Kirby, board  
19 secretary.

20 MR. O'GUIN: Chris O'Guin, deputy  
21 inspector.

22 MR. CHAPMAN: Sam Chapman, chief  
23 inspector.

24 MR. BAUGHMAN: I'm Dave Baughman, board  
25 member.

1 CHAIRMAN MORELOCK: Brian Morelock,  
2 board member.

3 MR. BOWERS: Harold Bowers, board  
4 member.

5 MR. FOX: Terry Fox, board member.

6 MS. JEFFERSON: Kim Jefferson,  
7 assistant commissioner.

8 MR. BAILEY: Dan Bailey, legal counsel.

9 MR. KURLE: Don Kurle,  
10 Becht Engineering.

11 MR. ESKRIDGE: Chip Eskridge,  
12 Jacobs Engineering.

13 MR. PISCHKE: Mike Pischke,  
14 National Board.

15 MR. TOTH: Marty Toth, Boisco Training  
16 Group.

17 MR. HORTON: David Horton, Jack Daniel  
18 Distillery.

19 MR. COLLINS: Clint Collins,  
20 Jack Daniel Distillery.

21 MR. ROTH: Denis Roth, Jack Daniel's.

22 MR. HOUSTON: Ansley Houston,  
23 Rinnai America.

24 MR. KNOBLETT: Michael Knoblett,  
25 Rinnai America.

1 MR. WOOD: John Wood,  
2 Sunbelt Marketing.

3 MR. PAULEY: Brian Pauley,  
4 Dow Chemical.

5 MR. BYRD: Wes Byrd, Dow Chemical.

6 MS. RHONE: Deborah Rhone, Boiler  
7 office supervisor.

8 MR. GOODWIN: George Goodwin,  
9 comptroller of the Treasury.

10 MS. MALONE: Christine Malone,  
11 comptroller of the Treasury.

12 MR. ORMANOSKI: Kevin Ormanoski,  
13 Nucor Steel, Memphis.

14 MR. SIMPSON: Rob Simpson, Nucor Steel,  
15 Memphis.

16 CHAIRMAN MORELOCK: All right. Again,  
17 welcome. I'm glad you're here.

18 Our next item is adoption of the  
19 agenda. I just have one item here to report on.  
20 Item 18-04, Holliston Holdings, they had sent a note  
21 to the state of Tennessee requesting to have this  
22 item removed from the March agenda, and they'll  
23 bring that back hopefully at the June meeting.

24 So 18-04 will be -- will not be handled  
25 today. We'll move that out to the future agenda.



1                   Are there any other additions or  
2                   corrections to our current agenda?

3                   Okay. Hearing none, do I have a motion  
4                   to accept our agenda?

5                   MR. BAUGHMAN: So moved.

6                   CHAIRMAN MORELOCK: Second?

7                   MR. BOWERS: Second.

8                   CHAIRMAN MORELOCK: All in favor say  
9                   aye.

10                  In Unison: Aye.

11                  CHAIRMAN MORELOCK: Opposed,  
12                  abstentions, not voting? Okay. We have an agenda.

13                  Our next item is approval of the  
14                  December 13, 2017, meeting minutes. Those have been  
15                  published on the website.

16                  And so are there any questions or  
17                  corrections to the December minutes?

18                  All right. Hearing none, do I have a  
19                  motion to accept these minutes?

20                  MR. BOWERS: Motion to accept.

21                  CHAIRMAN MORELOCK: Second?

22                  MR. BAUGHMAN: Second.

23                  CHAIRMAN MORELOCK: Any discussion?

24                  All in favor say aye.

25                  In Unison: Aye.

1 CHAIRMAN MORELOCK: Opposed,  
2 abstentions, not voting? December minutes have been  
3 approved.

4 That will take us to Item V, which is  
5 the chief boiler inspector's report.

6 MR. CHAPMAN: Thank you, Chairman.

7 Members on an inspection, state  
8 inspector is 2,564; insurance agency, 4,752; giving  
9 us a grand total of 7,316.

10 Total delinquent inspection is -- out  
11 of Bessell is 65,000 -- excuse me, 68,941. State  
12 inspector is 1,724; insurance agency, 452, those are  
13 for the delinquent reports; giving us a total of  
14 1,676.

15 Number of code violation is 12;  
16 uncorrected was 9.

17 The variance report, Chris O'Guin will  
18 be giving information on that.

19 CHAIRMAN MORELOCK: Okay.

20 MR. CHAPMAN: Business report from  
21 October through December 2017.

22 CHAIRMAN MORELOCK: Okay.

23 MR. CHAPMAN: That's the chief report.

24 CHAIRMAN MORELOCK: Any questions or  
25 comments about the chief's report?

1                   Okay. Thank you, Mr. Chapman.

2                   MR. CHAPMAN: You're welcome.

3                   CHAIRMAN MORELOCK: We'll have our  
4 deputy inspector's report.

5                   MR. O'GUIN: Thank you, Chairman.

6                   As of today on the variance report, we  
7 have 116 known variances; 9 require a follow-up  
8 inspection; 52 have been verified and approved; 8  
9 require a reinspection; 47 are dormant.

10                  As of this quarter, we have completed  
11 15 variance audits with 12 approved and 3 requiring  
12 a follow-up audit.

13                  CHAIRMAN MORELOCK: Okay.

14                  MR. O'GUIN: PML, Vi-Jon, and Nucor  
15 were rejected at this point.

16                  CHAIRMAN MORELOCK: All right. Any  
17 questions about the deputy inspector's report?

18                  Yes, sir.

19                  Let me just -- when you speak, please,  
20 make sure it's loud enough that us old people can  
21 hear it and certainly the court reporter can record  
22 it. Please introduce yourself.

23                  When you come up to present an item,  
24 same protocol, introduce yourself and make sure you  
25 speak loudly so we can get your words properly

1 captured in the minutes.

2 Yes, Mr. Toth.

3 MR. TOTH: Marty Toth, Boisco Training  
4 Group.

5 May I ask what three were rejected and  
6 why?

7 MR. O'GUIN: PML was rejected due to  
8 training. E-stop wasn't installed. Excessive  
9 response, like 8-1/2 minutes.

10 We had Vi-Jon rejected. Update  
11 required of recall list. Recall list was incorrect.  
12 Post new colored recall list.

13 Nucor was rejected due to no audio  
14 alarm, no E-stop, and the training.

15 MR. TOTH: Thank you.

16 CHAIRMAN MORELOCK: Okay. Yes, sir.

17 MR. ORMANOSKI: Kevin Ormanoski with  
18 Nucor.

19 Rejections, what is the difference  
20 between the rejection and the reinspection? When is  
21 that scheduled for?

22 MR. CHAPMAN: I'll answer that one.

23 As far as being a rejection on it, it  
24 was due to the fact that training wasn't there.

25 Then once y'all give us a call again

1 that y'all have taken -- because we did send a  
2 letter out on what we found.

3 Once all that has been corrected and  
4 you contact us, we will put you back on the list to  
5 come back and do a reinspection.

6 MR. SIMPSON: Rob Simpson, Nucor Steel,  
7 Memphis.

8 For the record, we did receive that  
9 letter. Those items have been corrected. We're  
10 here today with multiple copies of our revamp  
11 variance report. E-stops have been installed.  
12 Training is underway. We're ready for inspection  
13 when you are.

14 MR. CHAPMAN: Oh, okay. We didn't know  
15 that because there hasn't been anyone that notified  
16 us of that.

17 MR. SIMPSON: Understood. That's why  
18 we're here.

19 CHAIRMAN MORELOCK: Very good.

20 Any other questions or comments?

21 Very good report. We certainly  
22 appreciate you coming and sharing that with us  
23 today. That's great information. Excellent,  
24 excellent.

25 Before I move into old business, I did

1 want to take just a minute and give us a safety --  
2 quick safety topic here. And just so you're aware,  
3 in the event that we'd have an emergency or natural  
4 disaster in the building or nearby, we do have  
5 security forces and security personnel that would  
6 help the attendees to a safe place, whether inside  
7 the building or direct them to exit the building on  
8 the Rosa Parks side.

9 Just be aware of that. I wanted to  
10 make sure you were aware of that. If we have to  
11 take any safety measures.

12 The other item too is as we get into  
13 discussion of our new -- old business and new  
14 business items today, again, when you come forward  
15 to present your item, make sure you introduce  
16 yourself. Speak clearly and loudly enough to convey  
17 your information.

18 Also, out of respect for the  
19 presenters, I would ask everyone to silence your  
20 cell phones so that way there won't be any music or  
21 ring tones or things going off while they're making  
22 their presentations.

23 Moving on to Item VII, which is Old  
24 Business, we do not have any old business.

25 Moving on to Item VIII, which is New

1 Business, our first new item is Item 18-01,  
2 Dow Chemical Company. And they are here to present  
3 a -- one vessel to be designated as a Tennessee  
4 Special. So if you'll step forward and present your  
5 item.

6 MR. ESKRIDGE: I'm going to be handing  
7 out a supplement to our submittal that we provided  
8 45 days in advance. I'm not sure -- you have that,  
9 I see.

10 I'm Chip Eskridge, E-S-K-R-I-D-G-E. So  
11 introducing ourselves, I'm Chip Eskridge with  
12 Jacobs Engineering.

13 MR. PAULEY: And I'm Brian Pauley,  
14 senior project manager for Dow Chemical located at  
15 Knoxville.

16 MR. KURLE: Don Kurle, K-U-R-L-E, with  
17 Becht, B-E-C-H-T, Engineering, working out of  
18 Jacobs' office.

19 MR. BYRD: Wes Byrd, B-Y-R-D, and I'm a  
20 piping mechanical engineer with Dow.

21 CHAIRMAN MORELOCK: Before you present  
22 your item, I would ask that -- the board members if  
23 there's a conflict of interest on this item?

24 All right. There is none, so you may  
25 proceed.

1 MR. ESKRIDGE: All right. Per the  
2 regulations, we had submitted a package 45 days in  
3 advance of this meeting, which many of you have. I  
4 have an identical -- two identical copies of what  
5 you received.

6 Again, I handed out a supplementary  
7 attachment to that.

8 What -- I'll start it off. I'll --  
9 what we have basically is a German-built vessel.  
10 It's -- Tennessee requires an ASME-stamped vessel.  
11 But more and more the world is getting more  
12 international, so -- especially the automobile  
13 plants here. You're probably seeing Japanese-built  
14 equipment here.

15 So we have a German-built vessel that's  
16 going to operate at Knoxville as a -- as a -- as  
17 a -- it's actually not going to be in service, but  
18 it's an emergency -- in case of emergency would  
19 happen, they would put a chemical in it to inject it  
20 to reactor.

21 I'll let Brian here explain the  
22 process. And then Don's here, who sits on the ASME  
23 code, to talk a little bit about the calculations we  
24 did to show equivalency to ASME. And Wes is the  
25 engineer representing Dow that knows about the



1 contents of this.

2 I'll turn it over to Brian first to  
3 talk about the process.

4 MR. PAULEY: Yes. This is -- this is  
5 the ninth layer of protection for any runaway  
6 polymerization on two of our acrylates and two of  
7 our acids, which are -- they react to caustics or  
8 any types of bases.

9 So the cart itself is normal in our  
10 line of business. As a matter of fact, it was  
11 originally designed by BASF. We bought it as a  
12 shelf item in Germany so that we could put it onto  
13 the job site.

14 It will remain empty unless there is a  
15 runaway polymerization. In that case, we'll put  
16 phenothiazine in the vessel, and we will inject it  
17 into the tanks that have the runaway reaction.

18 Runaway reaction takes about 48 hours,  
19 so it's not anything very abrupt. We don't have to  
20 really rush it, but we do need to stop the reaction  
21 if we can. So it will remain in a shed hopefully.  
22 We haven't used it in 38 years, and hopefully it  
23 will last a lifetime because it is the last layer of  
24 protection, the last line of defense. And we have  
25 eight more lines of defense in front of it, so...

1 MR. ESKRIDGE: Let me -- this was  
2 handed to -- the package was handed to all y'all.  
3 Here is what the vessel looks like on a skid, and  
4 here is a schematic of how it works.

5 There's a reactor. If necessary, they  
6 can inject this inhibitor into the reactor. The  
7 idea is that it will never, ever have to be used.  
8 In fact, in, what, 30 something years --

9 MR. PAULEY: 38 years so far.

10 MR. ESKRIDGE: Being the Dow plant is  
11 in the Knoxville area and it's a high populated  
12 area, they've added another layer of a way to shut  
13 down what's called a runaway reaction.

14 Anyway, this is in Section 1 of the  
15 submittal. This is exactly what it would look like  
16 sitting there empty. Hopefully never have to be  
17 used.

18 Thank you, Brian.

19 So -- go ahead.

20 MR. PAULEY: He has a question.

21 MR. BOWERS: Comment.

22 Is the purpose of this -- because you  
23 have the media, I guess, that goes in here, right,  
24 on site?

25 MR. PAULEY: Yes.

1 MR. BOWERS: Is the purpose of this to  
2 make it more mobile?

3 MR. PAULEY: It's to make it more  
4 mobile, and it allows us to inject into the  
5 unloading system of these tanks so that we can  
6 inject air and the PTZ into the tanks.

7 MR. BOWERS: So it's also mobile and  
8 provides equipment to inject this thing.

9 MR. PAULEY: That's correct. It's got  
10 an AOD pump, a diaphragm pump that will inject air  
11 and PTZ into the vessel.

12 MR. BOWERS: Okay.

13 MR. ESKRIDGE: Any other questions up  
14 to now? That's the process.

15 And the reason this was German vessel  
16 is -- think of this as somewhat like a fire  
17 extinguisher. The company that makes this product  
18 makes a system.

19 So if you buy a fire extinguisher from  
20 a company, they're going to charge it. They're  
21 going to provide their fire extinguisher to certify  
22 that this is a UL fire extinguisher. This was built  
23 by a company similar to UL in Germany called T-U-V,  
24 TÃœV. So they provide a certification to this.

25 So if we change the vessel out, it

1 could impact the certification of their system,  
2 which has liability there.

3 CHAIRMAN MORELOCK: So could you just  
4 give the board a brief presentation on how you  
5 compared the design of the vessel to AD-Merkblatter  
6 2000 to the current requirement in Tennessee rule to  
7 satisfy ASME code requirements.

8 MR. ESKRIDGE: Chip. I'll let you do  
9 that, Don.

10 MR. KURLE: Don Kurle. I'm sorry.  
11 We looked at how the vessel was  
12 fabricated, all the information, the inspections and  
13 examinations that were done to the vessel. We then  
14 supplied the Codeware COMPRESS program to do the  
15 calculation, which does ASME Section VIII Division 1  
16 calculations.

17 So we did that, which is the report  
18 that's attached to the supplement here.

19 We found initially -- in the initial  
20 report you had, we had two issues. One was hand  
21 hole or inspection opening did not meet the same  
22 requirements for opening reinforcement that ASME  
23 has. It met the AD-Merkblatt, but it didn't meet  
24 ASME. There's just little differences in the rules.  
25 Very minor, but it just caused it enough to not

1 pass.

2 Since then, we discussed with the Dow  
3 people, and we reduced the pressure from 16 bar to  
4 14.5 bar, and that took care of that issue because  
5 there were plenty -- opening reinforcement doing  
6 that.

7 We also applied Code Case 2695, which  
8 allows us to go to the Div 2 rules still using the  
9 Div 1 allowable stresses and all of that. But we  
10 were able to use it. And that is a pressure area  
11 methodology for opening reinforcement, which is very  
12 similar to what the Europeans use in the  
13 AD-Merkblatt.

14 It's a pressure area; whereas, the  
15 traditional Division 1 is an area replacement  
16 method. But we -- all of us in the -- in the  
17 engineering world in the pressure vessels feel that  
18 the pressure area is actually a better methodology.  
19 It's more engineering involved and everything. So  
20 anyway, that issue went away.

21 We still have one issue that -- it's  
22 called UG-45, the paragraph in Division 1. It has  
23 two parts to it. One is that the nozzle -- this --  
24 this is the discharge nozzle. It's a two-inch  
25 nozzle coming out of the top head. It has a pipe

1 that goes down to the bottom.

2 That -- that nozzle meets the safety  
3 requirements of UG-45, which says that it has to be  
4 thick enough to handle the pressures. It meets that  
5 with flying colors. It's just like more than ten  
6 times thicker than it has to be for the pressure.

7 The other part of UG-45 is what we call  
8 a robustness factor. It's to prevent you from  
9 having small nozzles that are too -- I don't want to  
10 say too thin, that might not be the right word --  
11 thin nozzles because these nozzles a lot of times  
12 are on sides of equipment, and people hang tools  
13 from them. They hang very large pieces of  
14 instrumentation from them. They use them for  
15 stepping ladders and things like that.

16 To prevent these things from bending,  
17 not for normal operation but from bending from  
18 abuse, the code has a requirement in there. And the  
19 basis for that is the thickness of standard weight  
20 pipe in the U.S. traditions.

21 These nozzle -- this particular -- all  
22 the other nozzles meet it without any issue. Just  
23 this one is just slightly thinner than what would be  
24 required for this robustness part, again keeping in  
25 mind the safety part is no issue.

1                   And the German -- the European  
2                   schedules and stuff like that are slightly different  
3                   for their thicknesses than the U.S. thicknesses. It  
4                   does meet the minimum thickness for the German  
5                   standard weight, but it doesn't meet the one for the  
6                   U.S.

7                   But this nozzle is in the top head. It  
8                   is piped up. It has piping. There are no piping  
9                   loads on it, any significant loads. It's  
10                  essentially attached to the -- to the skid and  
11                  everything like that.

12                  So there's really no unusual loads or  
13                  anything that would cause any issues with it.

14                  With that, we submit that, you know,  
15                  this is a safe vessel, safe as a Section VIII  
16                  Division 1 vessel.

17                  CHAIRMAN MORELOCK: Do I have a motion  
18                  for discussion from the board on this item?

19                  MR. BAUGHMAN: Yes.

20                  MR. BOWERS: Second.

21                  CHAIRMAN MORELOCK: I'm going to open  
22                  the floor for question, comments.

23                  Anybody have question or comment?

24                  MR. BAUGHMAN: Yes.

25                  What -- what pressure does the unit

1           actually operate at?  What do the nozzles need for  
2           proper operation?

3                       MR. PAULEY:  Well, we're -- right now  
4           we've -- we've set the pressure relief at 210 psi.  
5           It operates around 150.

6                       MR. ESKRIDGE:  Yeah, 150.

7                       MR. KURLE:  And the nozzle design was  
8           done at the 14.5 bar, which is 210 -- essentially  
9           210 psi.  So it was done at the MAWP of the vessel.

10                      MR. BAUGHMAN:  In reducing it from 16  
11           bar to 14.5, the unit will still operate properly?

12                      MR. PAULEY:  Yes, sir.

13                      CHAIRMAN MORELOCK:  Well, I will --  
14           while you're thinking, I will state that I did go  
15           through the COMPRESS model, had some conversations  
16           with these gentlemen, and we worked out -- and we  
17           went through all the radiography requirements, the  
18           calculations, the discrepancies.

19                      To put this in perspective, they do  
20           have a very small concern on that one nozzle in a  
21           new construction code.

22                      But evaluating this as a completed  
23           vessel that's been certified by the German code, and  
24           we're now trying to place a new code to it in a  
25           postconstruction situation, if we did a fitness for



1 service on this nozzle per API 579, it would pass.

2 So I don't have any reservations.

3 I think Mr. Kurle has addressed it  
4 correctly. It's just the nuances between the German  
5 code and ASME code that they're wrestling with.  
6 That's my comments on this. It is a safe vessel.

7 MR. ESKRIDGE: If I could add. That  
8 one nozzle on the top that we're talking about that  
9 actually the product discharges up and out, the ASME  
10 code would require a wall of 3.4 millimeter, and  
11 they have 3.2 millimeter. So we're off  
12 .2 millimeters, which is about the thickness of a  
13 piece of paper, the wall thickness.

14 CHAIRMAN MORELOCK: So I want to open  
15 it up now.

16 Are there any questions from the  
17 audience?

18 Hearing none, do I have a motion from  
19 the board to approve this vessel as a Tennessee  
20 Special?

21 MR. BOWERS: Motion to approve.

22 CHAIRMAN MORELOCK: Second?

23 MR. BAUGHMAN: Second.

24 CHAIRMAN MORELOCK: Any more  
25 discussion?

1           Hearing none, all in favor say aye.

2           In Unison: Aye.

3           CHAIRMAN MORELOCK: Opposed,  
4           abstentions, not voting? You have an approved  
5           Tennessee Special.

6           I will add to the minutes to make you  
7           aware of the requirements of a Tennessee Special,  
8           this vessel will be stamped as such. Any repairs,  
9           any repairs to this vessel will have to come through  
10          the boiler unit and the chief inspector.

11          Any alterations to the vessel will have  
12          to be brought back to the board. And we meet  
13          quarterly, so just bear that in mind. I know if  
14          you're in a shutdown situation and something comes  
15          up, if it's a repair, you'll get service. But if  
16          you have an alteration, we may have to talk, you  
17          know, so -- if it was a critical thing where you  
18          needed an emergency meeting or something like that.

19          Just bear that in mind as you move  
20          forward with it. I appreciate your time.

21          Now, the only question I have -- and  
22          y'all can talk about this offline.

23          If this vessel is sitting on your plant  
24          site inactive, does it need certificate of  
25          inspection because it's not being operated? Like I

1       said, I'm just throwing it out there.  It's just  
2       come to mind.

3                 Really the only time the vessel is  
4       going to be in operation is during an emergency.

5                 And the other thing is, correct me if  
6       I'm wrong, but this vessel would be considered a  
7       noncorrosive surface.  It's stainless steel, so your  
8       requirement to maintain a certificate of inspection  
9       would be an external inspection.  Wouldn't have to  
10      have an internal.  Just bear that in mind as well.

11                MR. PAULEY:  Our GMIS requires us to  
12      inspect every vessel.  This one will be on a  
13      five-year GMIS plan, and we will do the pressure  
14      relief device on a yearly basis.

15                CHAIRMAN MORELOCK:  As long as it has a  
16      certificate of inspection on it and a Tennessee  
17      number, it will require inspection every two years  
18      unless you implement a risk base inspection program  
19      and extend that inspection frequency out.

20                Mr. Toth.

21                MR. TOTH:  Marty Toth, Boisco Training  
22      Group.  I may want to add, inspection by the state.

23                CHAIRMAN MORELOCK:  Yes.

24                MR. TOTH:  So there's no confusion  
25      at -- because they do their own inspections.

1 CHAIRMAN MORELOCK: That's true.

2 That's a good add, yes.

3 What was that? I'm sorry.

4 MR. TOTH: It has to be inspected by a  
5 state inspector or an insurance inspector licensed  
6 with the state of Tennessee, not just your  
7 inspectors.

8 CHAIRMAN MORELOCK: Thank y'all very  
9 much.

10 MR. PAULEY: Thank the board for your  
11 time.

12 CHAIRMAN MORELOCK: Our next item is  
13 18-02, Parkridge Medical Center, and they are  
14 requesting a variance for two vessels.

15 Gentlemen, if you will come and  
16 introduce yourself and present your item, please.

17 MR. NEVILLE: Good morning. I'm  
18 James Neville with Neville Engineering.

19 MR. BUSCH: My name is Clem Busch. I'm  
20 the director of Parkridge Medical Center.

21 MR. NEVILLE: We're here today to  
22 request a variance for two power boilers.  
23 Parkridge Medical Center is a hospital in  
24 Chattanooga, Tennessee. Our request is for two  
25 pressure boilers. These boilers are used on demand

1 24 hours a day, 7 days a week. They provide steam  
2 for sterilization, space heating, domestic hot water  
3 production.

4 The boiler room and the remote station  
5 is located at the PBX operator's station, which is  
6 shown on Figure 1. It's approximately 175 feet from  
7 the boiler room to the PBX operator's station.

8 As far as the individuals that will be  
9 monitoring this, it will be a PBX operator at the  
10 remote station. They will be trained as far as  
11 responding to boiler alarms and contacting the  
12 boiler attendant that's on duty for that shift.

13 The boiler attendants, as have been  
14 outlined in the manual, are the shift engineer and  
15 the security guard. The security guard will be  
16 doing monitoring activities, but they are trained as  
17 far as boiler operations.

18 The equipment that we list on here is a  
19 Cleaver-Brooks CB780E controller, and that is shown  
20 in the -- in Appendix B as far as under the  
21 equipment.

22 The details in Appendix A, there was  
23 some information we didn't have at the time of  
24 publishing on the deaerator. We do have a Tennessee  
25 number on the deaerator now. I can give that to you

1 now. That is T46414 on -- and that's Appendix A1.

2 If you would like to go through some of  
3 the training for the different positions as far as  
4 safety training on -- and boiler operations.

5 MR. BUSCH: Like with the engineers, is  
6 what I do, I do the training for them. They're  
7 taught chemical analysis of the boiler, how to test  
8 it and treat, what they're looking for. We have a  
9 chemical company that comes in. They have ratings  
10 that we're going to maintain through what they  
11 recommend.

12 They're taught the low-water cutoff,  
13 how it works. They're taught how to test the  
14 low-water cutoff. They're taught how to blow the  
15 boiler down. I usually have it done once a shift,  
16 once on the day shift for, like, ten seconds  
17 depending on the reading of the chemicals.

18 They're also blowing down the low-water  
19 cutoffs to make sure the boilers will shut off like  
20 they're supposed to. That's done every day.

21 They're taught where the emergency  
22 stops are. There's one in the boiler room, and  
23 there's also one in the PBX operator.

24 They're also taught where the main  
25 shutoff is. They're taught to switch the boilers

1 from oil to gas, which that only happens when the  
2 gas company requires us, which is thankfully not  
3 that often.

4 They're taught where all the steam  
5 valves are shut off, where the feed water is, where  
6 the feed water pumps are. They're taught how to  
7 switch the pumps, and they're taught how to blow the  
8 DA tank down.

9 CHAIRMAN MORELOCK: One quick question.

10 Is what you just said captured in this  
11 manual? I don't know that I read that.

12 MR. NEVILLE: As far as the --

13 CHAIRMAN MORELOCK: His responsibility  
14 shown on the org chart and the verbiage and the  
15 training, I don't see that in the manual. What you  
16 said is fine, but it needs to be in the manual.

17 MR. BUSCH: But security is only taught  
18 how to shut the boiler off and how to take readings.  
19 They're not taught how to blow the stuff down.

20 CHAIRMAN MORELOCK: As far as your  
21 boiler attendant and boiler operator, what you just  
22 told us the training for them, we need that captured  
23 in the manual.

24 MR. NEVILLE: We can add that training  
25 details to the --

1                   CHAIRMAN MORELOCK: That would be very  
2 helpful. Thank you.

3                   Is the training annual?

4                   MR. BUSCH: Yes, sir.

5                   CHAIRMAN MORELOCK: Okay.

6                   MR. BUSCH: It goes with their  
7 evaluations I have to do.

8                   CHAIRMAN MORELOCK: Pardon the  
9 interruption because I wanted to ask that question  
10 while it was fresh.

11                  MR. BUSCH: That's fine.

12                  CHAIRMAN MORELOCK: So continue.

13                  MR. BUSCH: That covers all my  
14 maintenance people, but I do have one designated for  
15 day shift and one for afternoon shift.

16                  MR. NEVILLE: Are there any questions?

17                  CHAIRMAN MORELOCK: Are there any  
18 conflicts of interest from the board on this item?

19                  Hearing none, do I have a motion to  
20 discuss this item?

21                  MR. BOWERS: Motion.

22                  CHAIRMAN MORELOCK: Second?

23                  MR. BAUGHMAN: Second.

24                  CHAIRMAN MORELOCK: I'm opening the  
25 floor up for any questions or comments.



1 Any questions or comments?

2 MR. BAUGHMAN: Sure.

3 CHAIRMAN MORELOCK: Okay.

4 MR. BAUGHMAN: So is this system hard  
5 wired to the security?

6 MR. NEVILLE: To the PBX operators,  
7 yes.

8 MR. BAUGHMAN: Which low water actually  
9 alarms back to the PBX?

10 MR. BUSCH: When the boiler trips down.

11 MR. BAUGHMAN: Which one?

12 MR. BUSCH: Both boilers.

13 MR. BAUGHMAN: No.

14 Which low water? There's a primary and  
15 a secondary. Which one actually alarms back over to  
16 the PBX?

17 MR. BUSCH: I have a McDonnell & Miller  
18 makeup, and it's just got one alarm on it.

19 MR. BAUGHMAN: Code requires two  
20 low-water cutoffs. So being that you're in charge  
21 of training --

22 MR. BUSCH: Yes.

23 MR. BAUGHMAN: -- and you're going  
24 through the training with these operators on how to  
25 test the low-water cutoffs, I would assume that

1 you'd know there's two low-water cutoffs on the  
2 boiler by code. The boiler has been inspected  
3 previously. These are 2005 year model boilers.

4 I'm interested to know which one of  
5 those alarms back to the PBX.

6 And you're saying that there's only one  
7 low-water cutoff, McDonnell & Miller.

8 MR. BUSCH: I'm looking at my boilers.

9 MR. BOWERS: I understand.

10 MR. BUSCH: Yes, there are two.

11 There's a small one and large one. The large one,  
12 McDonnell & Miller, is the one that activated. Then  
13 the smaller one, it's also McDonnell & Miller, shuts  
14 it down. There's two balls there. That's how  
15 they're tied in. They are tested by Combustion &  
16 Controls and the insurance company when they come  
17 out every year.

18 MR. BAUGHMAN: It leaves me some bit of  
19 concern that you're not extremely familiar with the  
20 unit itself being that you're the one that's also  
21 training them. And it still didn't quite answer my  
22 question on which one of those McDonnell & Millers  
23 is the one that's enunciating back to the PBX.

24 MR. BUSCH: Then I'll have to get you  
25 that information.

1 MR. BAUGHMAN: Thank you.

2 Also you said that there's two shifts  
3 of maintenance personnel?

4 MR. BUSCH: Yes.

5 MR. BAUGHMAN: What about the third  
6 shift? I take it we're running the boilers three  
7 shifts.

8 MR. BUSCH: Security is doing the  
9 monitoring of the boiler. They're coming in there,  
10 taking the readings.

11 CHAIRMAN MORELOCK: So if you had an  
12 alarm, would it just shut the boiler down?

13 MR. BUSCH: If there's an alarm, PBX  
14 would hit the kill switch inside there, and the  
15 boilers will shut down on alarms.

16 CHAIRMAN MORELOCK: Meaning you just  
17 wait for somebody to come in and --

18 MR. BUSCH: Then she would make phone  
19 calls. She'll call the -- either shift engineer  
20 or the man on call. Then it keeps working down to  
21 where it gets to me. Then we all come in.

22 But the boilers are shut down  
23 automatically then.

24 CHAIRMAN MORELOCK: Sorry, go ahead.

25 MR. BAUGHMAN: That's okay.

1           So if the boilers shut down, who  
2 diagnoses -- in other words, the boilers before  
3 they're started back up and reset, the trouble  
4 should be diagnosed before starting the boiler back  
5 up.

6           Who would do that diagnosis?

7           MR. BUSCH: The shift engineer, but we  
8 would leave that boiler down. We would switch to  
9 the secondary boiler until either I come in or the  
10 engineer comes in. And if it's something we don't  
11 know, we would call a company in, Combustion &  
12 Controls. They would do --

13          MR. BAUGHMAN: If both boilers just by  
14 chance happen to go down --

15          MR. BUSCH: Oh, God --

16          MR. BAUGHMAN: -- tell me what would --

17          MR. BUSCH: Murphy's law. The shift  
18 engineer again would be called. I would be called.  
19 We would troubleshoot to see what it is. If it's  
20 low water, why? Did a pump fail? Did a fuse blow?  
21 Did -- were McDonnell & Miller involved? We would  
22 check. And if it's something more than that,  
23 Combustion & Controls would be called in. They  
24 would do the troubleshooting from there.

25          MR. BAUGHMAN: Super. Okay.

1 CHAIRMAN MORELOCK: Yes, sir.

2 MR. BOWERS: Question I have, the third  
3 shift boiler get alarm, the PBX operator is there at  
4 third shift, correct?

5 MR. BUSCH: Yes. That's a 7/24  
6 position. We have to.

7 MR. BOWERS: Do they shut the boiler  
8 down?

9 MR. BUSCH: They have a shutoff right  
10 there, yes.

11 MR. BOWERS: Who verifies -- there's no  
12 maintenance guy on third shift, correct?

13 MR. BUSCH: Correct.

14 MR. BOWERS: So who verifies the boiler  
15 actually shut down?

16 MR. BUSCH: Security would go back  
17 there.

18 MR. BOWERS: So he would go in that  
19 room and make sure that boiler is off?

20 MR. BUSCH: That boiler is off, yes.

21 CHAIRMAN MORELOCK: As we -- those are  
22 things you'll need to add to your manual just to  
23 make it clear, please.

24 Go ahead.

25 MR. BAUGHMAN: For your E-stop, when

1           you hit your E-stop in the boiler room itself, does  
2           it kill an individual boiler?

3                       MR. BUSCH: Yes, sir. We have two of  
4           them.

5                       MR. BAUGHMAN: One for each boiler?

6                       MR. BUSCH: Yes, sir.

7                       MR. BAUGHMAN: The same thing out at  
8           your PBX?

9                       MR. BUSCH: Yes, sir.

10                      MR. BAUGHMAN: One for each boiler?

11                      MR. BUSCH: Yes, sir.

12                      MR. BAUGHMAN: It's a hard-wired  
13           mushroom?

14                      MR. BUSCH: Right. If you push it in,  
15           you have to pull it out to reset.

16                      MR. BAUGHMAN: There's no reset off a  
17           computer screen or what have you?

18                      MR. BUSCH: No, no.

19                      MR. BAUGHMAN: We don't have the  
20           capabilities of doing any kind of remote reset,  
21           being that the control you've got has got that  
22           option, but we are not utilizing that option; is  
23           that correct?

24                      MR. BUSCH: No, sir. No, sir.

25                      CHAIRMAN MORELOCK: Any other comments?

1 I've got just a few. I have a basic question.

2 When I looked through this manual,  
3 where is Page 1 and 2?

4 MR. NEVILLE: You should have -- and  
5 that may have been a printing error.

6 CHAIRMAN MORELOCK: Because I have a  
7 table of contents --

8 MR. NEVILLE: Do you have Current  
9 System Description, Page 1? You do not have that?

10 CHAIRMAN MORELOCK: I have Table of  
11 Contents, and then I have Page 3.

12 MR. NEVILLE: You don't have a site  
13 plan either?

14 CHAIRMAN MORELOCK: I don't have  
15 Page 1.

16 MR. NEVILLE: This is -- let me hand  
17 you -- this is Page 1. It must have been a printing  
18 issue.

19 Did anyone else not have a Page 1?

20 CHAIRMAN MORELOCK: Thank you, sir.

21 Then pertaining to the site plan, what  
22 is the distance from the boiler room to the remote  
23 station?

24 MR. NEVILLE: Approximately 175 feet.  
25 We can add that to the diagram.

1 CHAIRMAN MORELOCK: Yes, please.

2 And I did not -- and it may be -- I  
3 guess it is on Page 1. I didn't know who was  
4 responsible for the boilers and manual and all that.

5 I'm assuming that's going to be  
6 Mr. Busch.

7 MR. NEVILLE: Mr. Busch, yes.

8 CHAIRMAN MORELOCK: Page 1 handles that  
9 question. Thank you.

10 I -- we've kind of touched on this, but  
11 where are the boiler attendant requirements for the  
12 shift engineer? They're contained in Appendix G,  
13 and there's mention of boiler duties in G7, G13, and  
14 G14. But we need some verbiage in the front end of  
15 the manual about their duties too.

16 MR. NEVILLE: Okay. Yes.

17 CHAIRMAN MORELOCK: Appendix G states  
18 security guards relieve PBX operators during their  
19 breaks.

20 So would security guards also serve as  
21 remote monitors then if they're going to relieve the  
22 PBX operators? Would they be in a position to be  
23 considered a remote monitor as well?

24 MR. BUSCH: I have two officers that  
25 make rounds. So, yes, I would have someone to still



1 be going back there. And they have to make their  
2 rounds.

3 CHAIRMAN MORELOCK: Again, just make  
4 your manual clear. I know you know what you're  
5 doing, but as we read it, we may not understand it.  
6 So thank you.

7 So is the Parkridge security guards  
8 contracted from Walden Security? Is that the way  
9 that works?

10 MR. BUSCH: Yes, sir.

11 CHAIRMAN MORELOCK: I just needed to  
12 clarify that.

13 And I did not see where it states in  
14 your manual in Appendix G that the security guards  
15 are boiler attendants. G24 only states they check  
16 the boiler.

17 You may want to label them on your  
18 organizational chart and in Appendix G that they do  
19 serve as boiler attendants, especially if they're  
20 going to walk into that boiler room and make sure  
21 that's shut off. That's a boiler attendant  
22 responsibility, not a remote monitor responsibility.

23 MR. NEVILLE: You're talking the  
24 security guard as a boiler attendant?

25 CHAIRMAN MORELOCK: Yes.

1                   Y'all just said that on that third  
2 shift, if the remote monitor shuts that boiler down,  
3 then a security guard is going to walk out there and  
4 make sure that boiler is shut off.

5                   MR. NEVILLE: Yes.

6                   CHAIRMAN MORELOCK: That's a boiler  
7 attendant duty right there.

8                   MR. NEVILLE: Page 7 we list the  
9 security guard as a boiler attendant.

10                  CHAIRMAN MORELOCK: Again, just make it  
11 clear.

12                  Appendix H is your training log, which  
13 I see, but I don't see any reference to it in the  
14 system manual.

15                  My last comment is, the phone number  
16 for the boiler room in Appendix J and the list of  
17 manual holders, just make sure all that is correct  
18 as the way you're implementing your manual because  
19 it -- the boiler room telephone number is blank in  
20 the manual --

21                  MR. BUSCH: I do not have a phone in my  
22 boiler room.

23                  CHAIRMAN MORELOCK: You don't?

24                  MR. BUSCH: No, we work off of radios.

25                  CHAIRMAN MORELOCK: Just write radio in

1           there or something.

2                         That's all the comments I have.

3                         Any other comments?

4                         MR. BAUGHMAN:  Yes.

5                         MR. BAILEY:  I have a question.  It may  
6           be totally dumb.  It may not have anything to do  
7           with the variance either.

8                         Are these remote monitoring systems  
9           connected to the internet?

10                        MR. BUSCH:  No.

11                        MR. NEVILLE:  Not in this case, no.

12                        This is a hard-wired shutoff and alarm.

13                        MR. BAUGHMAN:  That was exactly one of  
14           the questions that I asked earlier, was, is it hard  
15           wired, or is it V-I-A, via a connection that's  
16           utilizing others.

17                        I have another question.

18                        CHAIRMAN MORELOCK:  And there's --  
19           Mr. Baughman can speak to that later, but there's  
20           some work going on with that concern that you have  
21           with cyber security.

22                        MR. BAILEY:  Right.

23                        CHAIRMAN MORELOCK:  I just sent an  
24           article to the board members last night about a  
25           recent article.  I'll send that to you as well.

1 Any other comments?

2 MR. BAUGHMAN: Yes.

3 How often is the low-water cutoff being  
4 blown down and checked? Is it once each shift? Is  
5 it --

6 MR. BUSCH: Once on the day shift, on  
7 the first shift.

8 MR. BAUGHMAN: First shift only?

9 MR. BUSCH: Yes.

10 MR. BAUGHMAN: And what actually  
11 enunciates an alarm back to the PBX? In other  
12 words, we've got alarms that are selectable. But  
13 what is actually alarming back to the PBX? Is it  
14 strictly off that 780 controller?

15 MR. BUSCH: Yes.

16 MR. BAUGHMAN: So what alarms do you  
17 have hooked up into that?

18 MR. BUSCH: It's the low-water cutoff  
19 and whenever the boiler shuts down. Because they  
20 don't have a digital display at PBX to let them know  
21 if it's low fire, high fire, high steam pressure,  
22 low pressure.

23 But the low water shuts it off. The  
24 high steam pressure would shut it off. That would  
25 initiate the alarm. Anything that shuts that boiler

1 down, all they get is a red light. They don't get a  
2 cause, what caused it. That's why we're called.

3 MR. BAUGHMAN: Is there anything else  
4 besides the low-water cutoff and the high limit?

5 MR. BUSCH: No.

6 MR. BAUGHMAN: That's it?

7 That raises some concern to me also.

8 MR. NEVILLE: Our fault -- fault list  
9 in Appendix C, is that what you're --

10 MR. BAUGHMAN: Well, that's selectable,  
11 so that doesn't mean that's everything that's hooked  
12 up.

13 My question was very specific, and what  
14 is hooked up to alarm back? I'm taking it that the  
15 man that's in charge of training should know  
16 specifically what -- and being intimate with those  
17 boilers, what is being alarmed back.

18 MR. BUSCH: Whenever that boiler goes  
19 off, trips off, it gives me a code inside the  
20 display inside there. I would go to that display,  
21 and then we would go to our book to see what that  
22 code is.

23 That is how we would determine what  
24 tripped that boiler off. It's usually low water  
25 when we have a pump -- we've had a pump that blown a

1 fuse lately. And we found the motor bad. We  
2 replaced that.

3 But that's usually the only thing that  
4 trips that motor -- that boiler, rather. Sorry.

5 MR. BAUGHMAN: Okay.

6 MR. NEVILLE: We can get a more  
7 detailed list of what exactly -- we can have them  
8 check every alarm on that boiler --

9 MR. BAUGHMAN: That's part of what I'm  
10 getting at is within these variances --

11 MR. BUSCH: That would be taken care  
12 of.

13 MR. BAUGHMAN: -- all of these alarms  
14 need to be checked. For one to check the devices  
15 themselves, low oil pressure switch, low gas switch,  
16 high gas switch, both low-water cutoffs, high  
17 limits, you name it, all those resets need to be set  
18 into this message enunciation.

19 MR. BUSCH: And what I'm going to do  
20 when I get back, I will get Combustion & Controls  
21 who tests everything of ours, I will have them get  
22 with my men as well as myself, and we'll go through  
23 each and every alarm. And they can explain it all.

24 MR. BAUGHMAN: The inspector will do  
25 the same when they come out to do their variance

1 inspection.

2 MR. BUSCH: They do.

3 MR. BAUGHMAN: I'm just a little amiss,  
4 let me say, that I'd like you to be as intimate with  
5 everything that's on there. I feel like you're in  
6 this position of being here to propose this, but  
7 you're not as intimate as what --

8 MR. BUSCH: I should be, yes.

9 MR. BAUGHMAN: -- you should be.

10 MR. BUSCH: I'll take care of that.

11 MR. BAUGHMAN: Very good.

12 CHAIRMAN MORELOCK: Well, and just  
13 while we're talking about fault codes, in the past  
14 we've had manuals come to the board, and they've  
15 just put the manufacturer's fault code list in  
16 there.

17 Then the state of Tennessee, the chief  
18 inspector, deputy inspector go out and do a site  
19 visit, and they say, Well, I want you to actuate  
20 this alarm, and it's not built into your system.

21 So put the fault codes in your manual  
22 that you will actually be using day in, day out,  
23 because when they come on site, they can pick any of  
24 those fault codes on that list. Make sure they're  
25 all active fault codes that you're using.

1 MR. BUSCH: Yes, sir.

2 CHAIRMAN MORELOCK: Okay. Any other  
3 comments?

4 MR. BAUGHMAN: Do we need to bring that  
5 up?

6 MR. CHAPMAN: Yes.

7 MR. BAUGHMAN: We've got a -- that's  
8 under Appendix -- or the checklist.

9 What about the date? Is the date --

10 MR. CHAPMAN: That's it.

11 MR. BAUGHMAN: Sam has got a different  
12 revision.

13 CHAIRMAN MORELOCK: Do you have 9?

14 MR. CHAPMAN: 10, but we're on 5/17,  
15 and there's no date on this one.

16 CHAIRMAN MORELOCK: As far as the  
17 checklist goes?

18 MR. CHAPMAN: Yes.

19 CHAIRMAN MORELOCK: The one in our  
20 manuals is Revision 10.

21 MR. CHAPMAN: Yeah, but the one that  
22 we're using is 5/17 as the date.

23 CHAIRMAN MORELOCK: Over here instead  
24 of October?

25 MR. CHAPMAN: Yes.



1 CHAIRMAN MORELOCK: They need to  
2 provide you with the latest?

3 MR. CHAPMAN: Yes.

4 CHAIRMAN MORELOCK: Make sure the chief  
5 inspector has the latest checklist. Ours are dated  
6 October 2, 2017; his is dated May 2017.

7 Any other comments?

8 Hearing none, do I have a motion?

9 MR. BAUGHMAN: Motion to approve  
10 contingent upon the inspector's approval site visit.

11 MR. BOWERS: I second.

12 CHAIRMAN MORELOCK: I have a second.

13 Any more -- any more discussion,  
14 comments, concerns, questions?

15 Call a vote. All in favor say aye.

16 In Unison: Aye.

17 CHAIRMAN MORELOCK: Opposed,  
18 abstentions, not voting?

19 Gentlemen, you have a contingently  
20 approved variance. Update your manual based on the  
21 comments from the meeting today. Get that revision  
22 to the state, and then they'll do a site visit to  
23 see how that works out. It's contingent on their  
24 successful review of your site.

25 MR. BUSCH: Thank you.

1 CHAIRMAN MORELOCK: Thank you.

2 Our next item is 18-03, Jack Daniel's  
3 Distillery. They request a new variance for two  
4 vessels.

5 So if you will come forward.

6 While you guys are being seated,  
7 there's a conflict for this item? One? We do have  
8 one conflict.

9 MR. BAUGHMAN: Do I need to state what  
10 that is, Mr. Bailey, to be able to --

11 MR. BAILEY: Yes.

12 MR. BAUGHMAN: We provided training to  
13 Jack Daniel's within our boiler training school. So  
14 it's been limited to that training. It's regarding  
15 safe boiler operations and concerns.

16 CHAIRMAN MORELOCK: If you will  
17 introduce yourselves and present your manual,  
18 please.

19 MR. ROTH: Good morning. My name is  
20 Denis Roth. I'm the distillery plant manager for  
21 Jack Daniel's.

22 MR. COLLINS: I'm Clint Collins. I'm  
23 the boiler/by-products supervisor for Jack Daniel's.

24 MR. HORTON: I'm David Horton. I'm the  
25 boiler/by-products production manager for

1 Jack Daniel's.

2 MR. ROTH: So we're here this morning  
3 to request a new variance on two of our gas boilers.  
4 This is to replace a variance that was granted 2015.

5 The reason for this new variance, we  
6 have installed a new Limpsfield burner for our  
7 Nebraska boiler and a new control system for both  
8 Autoflame Mark 8. These boilers provide steam for  
9 our distillery operations and our by-products  
10 operations. We run 24/7, 365 days a year.

11 The boilers are operated by boiler  
12 operators, at least two on two 12-hour shifts. One  
13 is always in a control room. One will be roving in  
14 our plant operations.

15 CHAIRMAN MORELOCK: Okay. Do I have a  
16 motion to discuss this variance?

17 MR. BOWERS: I'll make a motion to  
18 discuss.

19 CHAIRMAN MORELOCK: Second?

20 MR. BOWERS: Second.

21 CHAIRMAN MORELOCK: I have a second.

22 I'll open the floor for questions or  
23 comments.

24 MR. BAUGHMAN: You've got the  
25 Limpsfield burners.

1 English made?

2 MR. COLLINS: Yes, sir.

3 MR. BAUGHMAN: Autoflame controls?

4 MR. COLLINS: Yes, sir.

5 CHAIRMAN MORELOCK: So I have a basic  
6 question.

7 This is a renewal, correct?

8 MR. COLLINS: Yes, sir.

9 CHAIRMAN MORELOCK: So with a renewal,  
10 the only thing we really need to address is the  
11 changes to your variance.

12 So is the only change the new  
13 controllers?

14 MR. ROTH: The new controller and the  
15 new burner on the Nebraska.

16 CHAIRMAN MORELOCK: With that said -- I  
17 will say your manual is very well written, and we  
18 appreciate the time it took to put all that  
19 together.

20 The only questions I have is, can your  
21 computer control -- controls DCS and all that, can  
22 the computer alone shut down a boiler during an  
23 emergency?

24 MR. COLLINS: We have an emergency  
25 shutoff system that's --

1                   CHAIRMAN MORELOCK: So it still takes a  
2 human interface to shut it down?

3                   MR. ROTH: Yes.

4                   CHAIRMAN MORELOCK: The only other  
5 thing I'd add to that, in your manual, you do say if  
6 you shut the boiler down you're going to correct the  
7 problem.

8                   If you for some reason cannot correct  
9 that problem, I would just suggest you put in your  
10 manual you go back to operating on 20-minute rule  
11 until you correct that -- whatever issue that may  
12 be. That's the only other comments I have.

13                   Yes, sir, go ahead.

14                   MR. BAUGHMAN: Is the new burner UL  
15 listed?

16                   MR. COLLINS: I'm not sure.

17                   MR. BAUGHMAN: It has to be UL listed.

18                   MR. COLLINS: I'm sure that it is.

19                   MR. ROTH: We'll follow up on that.

20                   MR. BAUGHMAN: Yeah. It's one of the  
21 things -- and being that it's a foreign  
22 manufacturer, it's just one of those crossing T's,  
23 dotting I's, and dotting lower case J, just to make  
24 sure that it's UL listed, the Autoflame is UL  
25 listed.

1                   But it has to have that listing on  
2                   there and has to cover your guys' selves also.

3                   MR. ROTH:    Okay.

4                   CHAIRMAN MORELOCK:  Any other questions  
5                   or comments?

6                   Mr. Toth?

7                   MR. TOTH:  Marty Toth, Boisco Training  
8                   Group.

9                   What was the burner again?  What burner  
10                  are you putting in?

11                  MR. COLLINS:  Limpsfield.

12                  MR. TOTH:  Limpsfield?  It had its own  
13                  control system, I assume.

14                  MR. COLLINS:  The Autoflame is the  
15                  control system.  They're sister companies.

16                  CHAIRMAN MORELOCK:  Any other comments?  
17                  Hearing none, do I have a motion for  
18                  this item?

19                  MR. BOWERS:  Motion to approve.

20                  CHAIRMAN MORELOCK:  Contingent approval  
21                  on successful site visit by the chief inspector?

22                  MR. BOWERS:  Yes.

23                  CHAIRMAN MORELOCK:  And any  
24                  corrections -- or recommendations from the board  
25                  today?

1 Any further discussion?

2 Hearing none, I'm going to call the  
3 question, all those in favor say aye.

4 In Unison: Aye.

5 CHAIRMAN MORELOCK: Opposed,  
6 abstentions, not voting? One not voting -- is it  
7 abstention or not voting if you're conflict of  
8 interest?

9 MR. BAILEY: It would be not voting.

10 CHAIRMAN MORELOCK: Gentlemen, you have  
11 an approved variance dependent on the visit from the  
12 chief inspector.

13 MR. ROTH: Thank you.

14 MR. COLLINS: Thank you.

15 CHAIRMAN MORELOCK: Item 18-04 has been  
16 removed from the agenda, so that completes our new  
17 business.

18 Our next item is Section IX, which is  
19 Discussion Items. Our first discussion item will be  
20 the status of the 2018 Tennessee Boiler Safety  
21 Conference.

22 MS. RHONE: Good morning.

23 Deborah Rhone, boiler office supervisor.

24 To provide the update for the 2018  
25 Tennessee Boiler Safety Conference, the planning is

1 in process. The dates are the week of September 17  
2 through the 21st here in Nashville. And, of course,  
3 during that time, that Wednesday, September 19, we  
4 will conduct the board of boiler rules meeting.

5 The trainings will be held here in the  
6 building. Announcements will be going out as soon  
7 as we select a host hotel. We have been out on some  
8 site visits around the area for the host hotel. No  
9 final decision has been made. We will be providing  
10 that information shortly.

11 Any other questions?

12 CHAIRMAN MORELOCK: Any questions or  
13 comments? Yes, Mr. Toth.

14 MR. TOTH: Marty Toth, Boisco Training  
15 Group.

16 I just want to commend the Department  
17 of Labor, Kimberly, and your group for continuing  
18 the conferences. It's something that we started a  
19 few years back, and I think it's really beneficial  
20 to bring together not only the state inspectors but  
21 also the insurance inspectors and people of  
22 industry.

23 So I commend y'all for continuing that  
24 tradition. And also I'm there to help wherever I  
25 can.



1                   CHAIRMAN MORELOCK: So for clarity for  
2                   the audience too, this will be an open conference,  
3                   right?

4                   MS. RHONE: Yes, yes.

5                   CHAIRMAN MORELOCK: To local chiefs in  
6                   neighboring states, National Board, companies, I  
7                   mean, it's a great opportunity for everybody to get  
8                   together at these conferences as Mr. Toth stated.  
9                   It's a wonderful opportunity for training, technical  
10                  information, building relationships, safety topics.  
11                  It's an excellent venue, so I highly recommend it.

12                  So will you -- will the boiler unit be  
13                  getting the information out so we can publicize  
14                  this?

15                  MS. RHONE: Yes. We'll be working on a  
16                  flyer once we get more information regarding the  
17                  agenda topics too. We have to make contact with  
18                  several presenters. We also have a couple of new  
19                  items that we want to get approval from our  
20                  assistant commissioner as well as board members and  
21                  chief as well as we're discussing things we'd like  
22                  to include in this year's conference that we think  
23                  is going to be fun and exciting and very  
24                  knowledgeable.

25                  So we're excited about doing that as

1 well.

2 CHAIRMAN MORELOCK: All right. Very  
3 good.

4 Again, thank y'all for the support and  
5 hard work.

6 Any other comments?

7 All right. We're looking forward to  
8 it.

9 MS. RHONE: All right. Thank you.

10 CHAIRMAN MORELOCK: Our next item is  
11 update on administering the National Board  
12 Commission Exam.

13 MS. JEFFERSON: Mr. Chairman, I want to  
14 provide an update on the proposed legislation, the  
15 status of the legislation that was proposed during  
16 the 2018 legislative session.

17 As y'all know, a bill was proposed to  
18 update the current code. We wanted to reflect the  
19 current code to the current processes that we  
20 actually performed within the boiling unit as well  
21 as the processes for the National Board.

22 So that's what we did.

23 This legislation will align the current  
24 statute to those current processes.

25 And the status -- unless y'all want me

1 to talk about it a little bit -- if you want me to  
2 talk about it, we will. I believe we may have  
3 already addressed that in the previous meeting.

4 CHAIRMAN MORELOCK: I think so.

5 MS. JEFFERSON: Just to give y'all a  
6 status, it has been approved by the legislative  
7 committees. It's gone through that process. It's  
8 been approved by both houses. And it has been  
9 signed by the speaker and the lieutenant governor.  
10 It's been sent to the governor's office to be  
11 signed. So we're waiting for it to be signed.

12 CHAIRMAN MORELOCK: Correct.

13 MR. BAUGHMAN: Super.

14 CHAIRMAN MORELOCK: Any questions or  
15 comments about that? That's going to clarify the  
16 language on presentation of the commissioning exam.  
17 Our language is a little bit out of date. It's  
18 going to mirror what you see in the National Board  
19 guidance as far as the way the test -- the exam is  
20 administered. So it's going to be a welcomed  
21 improvement.

22 Thank you for all the hard work.

23 Yes, sir.

24 MR. BOWERS: Yeah, the question I have,  
25 once the governor signs it, does that change the

1 rules -- our rules?

2 MS. JEFFERSON: Well, the rules have  
3 already been changed. That was the issue. The  
4 rules have been changed, but the law was  
5 inconsistent. So we wanted to make the --  
6 everything consistent.

7 CHAIRMAN MORELOCK: 800-3-3 had been  
8 updated. It was in conflict with 68-122-109, so  
9 they have now fixed 109.

10 MR. BAILEY: Once it goes into effect,  
11 in other words, the rule will actually be in effect.

12 CHAIRMAN MORELOCK: Yes.

13 MR. BAILEY: Right now the statute is  
14 trumping the rule.

15 CHAIRMAN MORELOCK: That's right.

16 MR. BOWERS: Okay.

17 CHAIRMAN MORELOCK: Any other questions  
18 or comments? Very good.

19 Moving on to Item X, which is Rule  
20 Cases and Interpretations, Rinnai America is  
21 requesting to change Rule Case 98-03 to eliminate  
22 the 18-inch required clearance from the sides of  
23 tankless water heaters.

24 Gentlemen, if you will come forward,  
25 we'll be happy to discuss this item.

1 MR. HOUSTON: Good morning. I'm  
2 Ansley Houston, director of the commercial water  
3 heating group at Rinnai America.

4 Also with us is John Wood from  
5 Sunbelt Marketing, now representative here in the  
6 Tennessee area; and Michael Knoblett, product  
7 development manager who will lead the discussion.

8 MR. KNOBLETT: I'll pass these out. So  
9 as we -- as you stated, we're here to address the  
10 18-1/2-inch clearance requirement for tankless water  
11 heaters. The first couple of pages of this document  
12 are just citing the specific code where it calls out  
13 that 18-inch clearance.

14 CHAIRMAN MORELOCK: Can I ask one quick  
15 question?

16 MR. KNOBLETT: Yes.

17 CHAIRMAN MORELOCK: Is this item  
18 revised from what was provided to us in the packet?

19 MR. KNOBLETT: No, same thing.

20 CHAIRMAN MORELOCK: The other thing, if  
21 you'll permit me, are there any conflicts of  
22 interest for this item?

23 Thank you. Proceed.

24 MR. KNOBLETT: The basis of our request  
25 is, one, to eliminate the 18-inch clearance and

1 change that to manufacturer's recommendations.  
2 We've backed that up on our own manufacturer level  
3 by testing to the ANSI standard for clearance.

4 And I believe the other objection to  
5 this was access to the rating plate. So we've  
6 requested that the code was changed to default to  
7 manufacturers. And then if access to that rating  
8 plate is an issue, put that specifically in the code  
9 to read that that rating plate must be visible.

10 We have some ideas how we could get  
11 around that on our own equipment. One is either  
12 putting it up on the front of the machine or  
13 creating some kind of tethered-on access plate so it  
14 could be easily viewed from the front.

15 CHAIRMAN MORELOCK: Do I have a --  
16 well, let me ask a basic question.

17 Is this -- are you -- are we just  
18 discussing this? I don't see a proposed change to  
19 the rule -- to the board case, do I?

20 MR. KNOBLETT: So on -- next to the  
21 last page where it says request for rule  
22 amendment -- we don't have specific verbiage in  
23 the -- what we would want the code to be because  
24 we -- our request is to just change that to -- from  
25 18-inch to manufacturer's recommendations, but we

1 don't have that specifically detailed out.

2 CHAIRMAN MORELOCK: We'll be happy to  
3 discuss, but I don't have a proposal.

4 Is that okay with y'all?

5 MR. KNOBLETT: Yes.

6 CHAIRMAN MORELOCK: Just wanted to  
7 clarify that.

8 So I'm going to open it up for  
9 discussion since we're not taking action on  
10 anything.

11 What questions, comments do you have?

12 MR. CHAPMAN: My first question, you  
13 mentioned that -- changing that to the front cover.

14 MR. KNOBLETT: Potentially, yes.

15 MR. CHAPMAN: I've found out that when  
16 you take those covers off -- and most of the time  
17 there's more than one unit inside that space, who  
18 says that's only going to have one cover off at a  
19 time? Most people take them off, and they have  
20 three or four laying there. The average person  
21 picks them up and sticks them back on.

22 Is it saying that that's the same unit?

23 MR. KNOBLETT: Our request isn't  
24 necessarily to put it on the front. Our request is  
25 to change maybe to permanently attached visible from

1 the front, something like that.

2 We can come up with a method to attach  
3 based on your actual requirement.

4 Putting it on the front cover was just  
5 one of our ideas, but it really depends on how that  
6 code is written.

7 MR. CHAPMAN: I'm just asking the  
8 question on that because a lot of the other units  
9 out there -- because you're speaking for just  
10 Rinnai.

11 MR. KNOBLETT: Correct.

12 MR. CHAPMAN: We have different  
13 companies out there. They don't change it. So if  
14 we change that 18 inches to the manufacturer's --

15 MR. KNOBLETT: With a -- an additional  
16 comment that the rating plate must be visible -- or  
17 word that in such a way that even if you were to  
18 reduce that to two inches in our case, there would  
19 still be part of the code that says the rating plate  
20 must be visible and permanently attached.

21 MR. CHAPMAN: I discussed it with other  
22 jurisdictions. Right now I have 24 comments from 24  
23 other jurisdictions. Some of them doesn't inspect  
24 water heaters under 400,000. Other ones say they  
25 got to have 3 feet.



1 MR. KNOBLETT: What is the basis of the  
2 concern? Is it -- is it a safety issue, or is it  
3 a --

4 MR. CHAPMAN: Well, with Tennessee --  
5 and I can only speak for Tennessee. Tennessee  
6 states you must have 18 inches of clearance  
7 because -- it used to be 3 feet. Then we went in  
8 and made a rule case and broke it down to 18.

9 MR. KNOBLETT: Based on temperature or  
10 safety or --

11 MR. CHAPMAN: Clearance, because they  
12 knew at that time -- at the time, my predecessor  
13 knew that you didn't need 3 feet of clearance on a  
14 stand-up water heater. So he took it and brung it  
15 to the board, and they came up with 18 inches.

16 CHAIRMAN MORELOCK: Mr. Toth, do you  
17 have a comment?

18 MR. TOTH: Yeah, sure. Marty Toth,  
19 Boisco Training Group.

20 For those that may not know, I was  
21 former chief boiler inspector for the state of  
22 Tennessee. I was not the chief at the time that the  
23 initial board case back in 1998 was addressed.  
24 However, it was during my tenure that we started  
25 addressing these type of interpretations as board

1 cases and board interpretations; board case being  
2 something that went -- I wouldn't say against but  
3 extended to what the written rule was. A board  
4 interpretation is just that, it was an  
5 interpretation of what the meaning of a rule was.

6 So with that said, the intent of  
7 BC98-03, I believe is the number, BC98-03 was to  
8 address water heaters and unfired pressure vessels.  
9 So what ended up occurring was, as we went through  
10 time during my tenure, we started finding the  
11 introduction of tankless water heaters into the  
12 market, modular water heaters into the market, and  
13 stacked heaters into the market.

14 And so the need was to address that,  
15 and we did so in BC06 -- help me. I was trying to  
16 look it up. I think it was BC06-23. So that  
17 specifically addressed wall mounted water heaters,  
18 stacked water heaters, and modular water heaters.

19 For those that don't know, the modular  
20 water heaters would be, in essence, separate units  
21 actually put together side by side, just so you  
22 understand what that means.

23 Now, the thing is when a manufacturer  
24 goes through and gets their listing and gets their  
25 ULs and things of that nature, what's taken into

1 consideration is usually most cases fire protection.

2 So this gentleman, you were asking,  
3 well, why -- what was the intent, and I believe  
4 Chief Chapman alluded to the facts that it used to  
5 be three feet. Well, the purpose of the three feet  
6 is for proper inspection. It's not for fire  
7 protection. It's the ability to actually get in,  
8 see the unit from all sides.

9 The board case that was presented back  
10 in 2006, obviously we can't inspect the back side of  
11 a wall mounted unit, but we can inspect the sides,  
12 the top, the bottom.

13 And now what you're proposing is to  
14 even make it smaller, even make -- give less  
15 opportunity for the inspector to inspect.

16 The reason for the board case was to  
17 allow for proper inspection.

18 MR. KNOBLETT: So to that point as  
19 well, we offer clearance, but we also offer service  
20 clearance. So the front panel in our case, we were  
21 recommending 24 inches, so the cover is removed.

22 We do not need to inspect from the side  
23 other than to see the rating plate as it stands out.  
24 There's no -- there's nothing to inspect on our  
25 product.

1 MR. TOTH: Well, you say that, but,  
2 again, your product.

3 MR. KNOBLETT: Right.

4 MR. TOTH: Another manufacturer that  
5 has the same type of wall mounted unit, maybe a  
6 different -- the board has to set rules, and the  
7 board sets board cases. You have to think more  
8 broad stroked with that.

9 CHAIRMAN MORELOCK: Well, and if you  
10 don't, your competitors can come in and say we're  
11 providing prejudicial treatment to you; you're  
12 penalizing us. ASME National Board faces the same  
13 concern when they write rules, that they're not  
14 limiting -- I forgot how they call this, not  
15 limiting commerce or something like that; that we're  
16 being unfavorable to one manufacturer and more  
17 favorable to another.

18 MR. BOWERS: Yeah, I know on yours it  
19 looks like the safety valves come off the bottom.  
20 But there's some units the safety valves come off  
21 the side. So you go and limit the side, and also  
22 the data plate exactly.

23 Sam is exactly right, these covers get  
24 taken off. Sometimes they'll get put back on. You  
25 can't have mix matched. The data plate has got to

1 be attached to that hot water heater where it cannot  
2 be removed by removable cover.

3 MR. HOUSTON: Ansley Houston, Rinnai.

4 To your comment about -- I totally  
5 agree with every manufacturer is different.  
6 Therefore, our proposal would be to write it such  
7 that manufacturer safety clearance requirements  
8 would be recognized, rather than a generic 18-inch,  
9 because that would give them manufacturer -- the  
10 manufacturer the right -- or the ability to test and  
11 design for minimum clearance that passed the ANSI  
12 standard, and that -- they would be -- there  
13 wouldn't be prejudicial treatment for any particular  
14 manufacturer.

15 If they want to design it and test it  
16 to the standard, put that in the manual like we've  
17 done, like a lot of them have done. That would -- I  
18 think would cover that.

19 CHAIRMAN MORELOCK: Mr. Toth.

20 MR. TOTH: Marty Toth, Boisco Training  
21 Group.

22 Again, that ANSI standard is going to  
23 be addressing things as fire protection; it's not  
24 addressing inspection. And that's something that we  
25 have dealt with in the industry long before the

1 tankless water heaters really became popular in this  
2 state.

3 I came on -- I'm trying to remember  
4 what year now -- 1993 with the state. And I  
5 remember the first introduction of the Rinnai units  
6 into a commercial application. It really brought a  
7 lot of discussion about.

8 Even before that, we had other  
9 manufacturers, coiled fin units, Lochinvar, which is  
10 a very popular brand here locally. They had the  
11 same claims. There's no service area servicing on  
12 the back side or on the sides. We've had these same  
13 discussions with them for years.

14 So I do understand where you're coming  
15 from with the ANSI, but I believe the board and the  
16 inspectors are looking at it from an inspection.

17 CHAIRMAN MORELOCK: What we would need  
18 to see as a board is all the manufacturers of these  
19 tankless water heaters need to get together, and  
20 your question is going to have to pick the worst  
21 dimensions from all of those different manufacturers  
22 to build that envelope. It doesn't matter if it's  
23 your unit or somebody else's unit. If it goes into  
24 that space, it can be properly inspected.

25 So yours may be more compact, but the

1 distance required to inspect those, it's going to  
2 have to be a uniform application so none of your  
3 competitors can cry foul.

4 So, I mean, it's -- you know, what the  
5 board needs is a proposal that's been researched and  
6 you've got documented research, because, for  
7 instance, in your -- in your proposal under the page  
8 that says Burn Hazard Data, and in the bottom, it  
9 says, What are other states doing, your second  
10 bullet says, All states but Tennessee accept  
11 tankless water or tankless rack systems.

12 Is that a true statement?

13 MR. HOUSTON: Absolutely.

14 CHAIRMAN MORELOCK: Not according to  
15 what he's got in e-mail. So we need facts.

16 MR. HOUSTON: You've got a statement  
17 that says they don't allow our clearances to be  
18 accepted?

19 MR. CHAPMAN: I have from Hawaii,  
20 Hawaii says 3 feet. I have Ohio, say it's 3 feet.  
21 I have a couple other states that's stating -- some  
22 of them saying 18 inches; some say 3 feet. Some of  
23 them say, We don't even inspect them. I have --  
24 Washington states that it has to be outside.

25 We have different criteria on it. So

1 where it all -- where all of them say, It can be  
2 manufactured, is not a true statement.

3 MR. HOUSTON: It's never enforced, so  
4 that's a issue with that particular state.

5 We sell hundreds, thousands in the  
6 state of Ohio that are mounted one inch apart on a  
7 daily basis, so that's something I'm interested --  
8 that's the first time I've ever heard that.

9 Same thing in Hawaii, I can show you  
10 pictures of units in Hawaii mounted one inch apart  
11 from years ago. And even more recently, we've  
12 shipped our preconfigured systems in the state of  
13 Hawaii on a boat, by the way. It's interesting.  
14 That's the first time I've heard that. So that's  
15 good information. Thank you.

16 MR. CHAPMAN: I shot this e-mail to the  
17 jurisdiction Thursday, and they started --

18 MR. HOUSTON: You said Ohio,  
19 Washington, and Hawaii.

20 CHAIRMAN MORELOCK: So we as a board  
21 need something standardized that we can review and  
22 vote on for the state of Tennessee.

23 But in a larger sense, we want to make  
24 sure -- these chiefs meet annually -- twice annually  
25 for this very reason to make sure -- we're trying to



1 be uniform in our application of rules.

2 So we really want to make sure that  
3 what is put forward could be used as a model for  
4 other states to implement for consistency sake.

5 So I'm not going to tell you how to do  
6 that or what to do, but -- but that's what I would  
7 strive for is something that doesn't restrict  
8 commerce, that all your competitors can live with,  
9 all the states are agreeable to it. Then that way  
10 we get uniform enforcement, which makes every --  
11 which makes your job as a supplier easier, so the  
12 rules are the same no matter who you sell to.

13 MR. PISCHKE: Mike Pischke,  
14 National Board.

15 I guess one of the things that I'd like  
16 to know is, what part of these need inspection?  
17 Does the sheet metal cover, which isn't a, you know,  
18 pressure boundary, does that really need to be  
19 inspected? Or is it the -- the pressure -- just the  
20 pressure boundary parts, the pressure relief parts,  
21 of course, the name plate, and things like that?

22 So I think defining what needs to be  
23 inspected is probably a first step in.

24 MR. HOUSTON: That was my next  
25 question.

1 Do you have any discussion on that?

2 CHAIRMAN MORELOCK: We can't do that  
3 for you. You'll have to do that.

4 MR. HOUSTON: I think I'll speak for us  
5 and the other manufacturers, that there's nothing to  
6 be inspected. That's where we're at. I think we  
7 probably went too fast past that point, but there's  
8 nothing accessible from the sides.

9 There's nothing -- you can't take a  
10 cover off from the side. The cover is -- front  
11 cover. Once removed, there's clearance and access  
12 to every component for serviceability and inspection  
13 on the -- in the products. By design, that's the  
14 way it is.

15 So we in our mind would go more toward  
16 the safety aspect, which is why I keep referring to  
17 that.

18 MR. BAUGHMAN: To that extent, from the  
19 guy that's installing it is typically not the same  
20 guy that's servicing it. So you've got required  
21 clearances, let's say, in the front of the heater  
22 where your accessibility is being -- and you're  
23 showing six inches, if it's a -- both to  
24 noncombustibles to combustibles.

25 But then you made a comment earlier

1 about recommended clearance in front of you, the  
2 24 inches for servicing. So it needs servicing.  
3 But the guy installing that is going to look at that  
4 and go, I can do 6 inches. So the guy that comes in  
5 to service it has no accessibility into it to  
6 service it.

7 There needs to be some definition too  
8 for the poor guy that's coming behind the guy that  
9 installed it to make sure that there is enough room  
10 in front of the unit, even though from a clearance  
11 standpoint there's not. The guy still has to  
12 service it. If he can't service it, he's going to  
13 replace the heater, which isn't a bad thing for the  
14 heater manufacturer.

15 But if there's a clearance that's  
16 recommended, then that should also go into the  
17 clearance for the installation in my mind.

18 MR. HOUSTON: You said recommended, but  
19 is it required?

20 MR. KNOBLETT: It's a serviceability  
21 requirement, so in other words --

22 MR. BAUGHMAN: Okay. There's a  
23 conflict then because it says clearance requirement,  
24 6 inches. But then down below, it says clearance  
25 for servicing is 24 from the front.

1 MR. KNOBLETT: So items could be  
2 removable. That's the difference between the two.

3 MR. BAUGHMAN: It's just that -- you  
4 can see how there could be a misinterpretation for  
5 two sets of numbers, and it needs to be more clear  
6 when this gets proposed as far as the actual  
7 clearances that are going to be required.

8 CHAIRMAN MORELOCK: Mr. Toth.

9 MR. TOTH: Marty Toth, Boisco Training  
10 Group.

11 If you look at BC06-23, one thing  
12 you'll notice from that is that was actually a  
13 submission that came from the boiler inspection  
14 provision. It wasn't from the manufacturers. It  
15 wasn't from the industry of wall mounted tankless  
16 water heaters.

17 So to what Chairman Morelock alluded  
18 to, if you get together and you put together your  
19 request per the outlines and guidelines for  
20 submitting it, you know, you're better suited to  
21 explain your side of it more than I was back in 2006  
22 when I submitted that for clarification.

23 So, hey, I like your unit. I have your  
24 V75I in my garage, so we're good. But other than  
25 that, you need to --

1 MR. HOUSTON: Is it six inches off the  
2 wall?

3 MR. TOTH: It is. I know how this  
4 works.

5 No, I would suggest that you come look  
6 at that and you make it more specific to your  
7 market, your industry.

8 Thank you.

9 CHAIRMAN MORELOCK: Well, and just a  
10 comment. Through ASME and National Board, we see  
11 this a lot. People are developing products and  
12 pressure equipment. One of the things those  
13 organizations recommend is that everybody gets  
14 together and make up a common set of rules.

15 That's kind of what we're suggesting is  
16 just, put this proposal together, find out what is  
17 reasonable not only for installation but certainly  
18 inspection, because these inspectors are going to  
19 have to look at this equipment.

20 The recent revision to Rule 800-3-3  
21 states that if you're at 199,999 BTU per hour, it  
22 does not have to be built to ASME code. But if it's  
23 between 100 and 199, it's got to be registered with  
24 the state of Tennessee, so they're going to inspect  
25 it.

1                   And if you go over 199,999, if you go  
2                   to 200,000, then it's got to be built to Section IV.

3                   You're not alone. I mean, there's been  
4                   some manufacturers that used to build some of this  
5                   equipment to Section VIII, and now they're building  
6                   it to Section IV. There's a lot of that going on.  
7                   You're not the only ones struggling with what this  
8                   all looks like.

9                   Again, my advice would be, certainly  
10                  work with folks that are building these for code  
11                  applications, noncode applications. Even get  
12                  together and come up with what is going to work for  
13                  the installer and the inspector, put it in writing,  
14                  bring it to the board, and we'll be happy to review  
15                  it.

16                 MR. HOUSTON: So we need to get on the  
17                 next agenda obviously, right, to --

18                 CHAIRMAN MORELOCK: If you're going to  
19                 present a board case for approval, yes, you will.  
20                 If you'll be ready in June, fine. If not, you can  
21                 bring it in September or December or whenever you're  
22                 ready.

23                 MR. HOUSTON: And do our best to get  
24                 with the major manufacturers of the tankless  
25                 products?

1 CHAIRMAN MORELOCK: Yes.

2 MR. HOUSTON: Okay.

3 CHAIRMAN MORELOCK: That's the  
4 advantage of --

5 MR. HOUSTON: At this point, just  
6 speaking frankly, where -- it is impeding commerce  
7 in the state of Tennessee, because some of our  
8 customers with the real estate constraints and the  
9 tight quarters in restaurants and the like, to free  
10 up more space, prefer to mount them -- six units  
11 close together on a wall with the manufacturer's  
12 clearance, and we do it all around the country.

13 At this point, we have --  
14 affectionately known as the Tennessee 2. It's a  
15 similar access that we've -- I believe John named  
16 it. I would actually hate to see it go away because  
17 it's a really cool name.

18 But it does have the 18-inch --  
19 18-1/2-inch between them. That actually impedes our  
20 ability to sell it if somebody needs three units on  
21 a wall.

22 So we -- that's something we do want to  
23 get past quickly, and we'll do our best to pull this  
24 together before June.

25 CHAIRMAN MORELOCK: Just a counterpoint

1 to that is that there's been longstanding  
2 installation practices for CO2 systems in  
3 restaurants, and a few years ago people started  
4 dying.

5 Now there's CO2 installation  
6 requirements in Part 1 of the NBIC. I'm sure it  
7 probably impedes commerce, because these new changes  
8 are a lot different than the way they used to  
9 install the old equipment. So we don't want our  
10 water heaters to have to have a fatality to get the  
11 rules fixed.

12 MR. HOUSTON: Real quick.

13 Can we have one more discussion on what  
14 exactly would be -- and if the people behind want to  
15 talk too, that's great -- what we're actually  
16 looking for on the sides other than the rating  
17 plate? What would you want to inspect on the side  
18 other than a rating plate?

19 MR. CHAPMAN: We'd have to be able to  
20 get around to see, because, like -- and I'll speak  
21 for myself. I've got a fat head, so I need to be  
22 able to get my head in there to see.

23 MR. HOUSTON: My point is, there's  
24 nothing to see. There's no connection points;  
25 there's no -- there's nothing that can't be seen



1 from the front cover off, so...

2 CHAIRMAN MORELOCK: Mr. Eskridge.

3 MR. ESKRIDGE: Chip Eskridge with  
4 Jacobs Engineering.

5 I think the same limitation on  
6 inspection exists in boilers where often remote  
7 scopes and stuff is used for inspection.

8 Why couldn't something like this,  
9 inspection mirrors be used?

10 To take it further, I think this issue  
11 is bigger than the Tennessee level. I've come  
12 across heaters in Pennsylvania where I found out  
13 owners were not complying with the Pennsylvania law.

14 I think it's the owners level of  
15 ignorance knowing what state laws -- how they're  
16 written. Everybody knows speed limits in every  
17 state; everybody knows, you know, general public  
18 information.

19 But at this level, the small heaters,  
20 small vessels tend to be a gray area.

21 I think what you need to do is take  
22 your issue to the National Board and try to get  
23 something at the National Board level approved so  
24 that it's all jurisdictions complied if it's in the  
25 National Board book, because you've got 3 feet,

1           you've got 18 inches.

2                         Conformity would be to work with the  
3           National Board on this.

4                         CHAIRMAN MORELOCK:   National Board  
5           Part 1 is for installation, so let me -- that's a  
6           very good recommendation.

7                         MR. TOTH:   Marty Toth, Boisco Training  
8           Group.

9                         Very good comment there.   Let me just  
10          make sure, recognize that just because it's in the  
11          NBIC doesn't necessarily mean the individual  
12          jurisdictions are going to accept it.

13                        With that said, these type of units, I  
14          agree with you, you talk about the inspection  
15          mirrors and scopes and things of that nature.  
16          Primarily the reason why is to have a better angle  
17          of inspection on the heat exchanger on your units.

18                        But, again, like I go back to my  
19          previous statement, you, the manufacturers of these  
20          type of units, are better suited for bringing this  
21          information to this body for this body to make the  
22          determination.   So continue with the discussion, but  
23          really it comes down to getting all your eggs in a  
24          basket, putting forth the request.

25                        I think this board is open-minded to

1           that.

2                       MR. BAILEY:   Anybody want to know how  
3           many inches it is from the front of Sam's head to  
4           the back?

5                       MR. TOTH:   Also, Mr. Chairman, let's  
6           remember that in the requirements within .08 -- I  
7           want to say 4B -- it's changed since I was chief --  
8           is that correct --

9                       MR. CHAPMAN:   Yes.

10                      MR. TOTH:   -- for installations?

11                      In B, there is a stipulation that  
12           allows for a chief's exemption.  So let's keep that  
13           in mind when you look at that.  You may want to  
14           think about that too that because we started a  
15           permit system under my tenure as chief, that got  
16           around the fact that some man -- or some owners were  
17           ignorant to it.  We in the state of Tennessee before  
18           we started our permit system, we were ignorant to a  
19           lot of installations.

20                      In doing so now, there are those  
21           requirements.  Those requirements require for  
22           clearance diagrams with the permit that is reviewed  
23           by the chief inspector and his designee.  So some of  
24           this could be handled under those areas too.

25                      CHAIRMAN MORELOCK:   Any other comments?

1           Excellent discussion.

2                       MR. HOUSTON: Thank you. Appreciate  
3 your help.

4                       CHAIRMAN MORELOCK: Go forth, put us  
5 something together, and we'll be happy to review it.

6                       MR. HOUSTON: Thank you.

7                       CHAIRMAN MORELOCK: Look at the board  
8 cases online. It will show you the format. If you  
9 have any questions, contact Mr. Chapman or me, and  
10 I'll help you put it into the correct format to make  
11 it a board case. You're really looking at a board  
12 case instead of a board interpretation. Put a board  
13 case together, get it on the agenda, and we'll be --  
14 get it to us 45 days in advance.

15                      We'll be able to review it and go  
16 forward.

17                      I do agree with Mr. Eskridge's  
18 recommendation, work with other manufacturers, work  
19 with the National Board, especially the ones that  
20 are going to be regulated. That would be a good  
21 thing. Typically things like that would be created  
22 as a supplement in the NBIC that would give specific  
23 rules for those installations.

24                      Anything else?

25                      MR. HOUSTON: I would like to -- Sam,

1 I'd like the Ohio codes afterwards.

2 Can you give me the exact code that  
3 they -- did they send back a code number or --

4 MR. CHAPMAN: I'll get it to you.

5 MR. HOUSTON: Thank you.

6 CHAIRMAN MORELOCK: Thank you for your  
7 time. Very good discussion.

8 We're down to Item XI. Our next  
9 meeting is scheduled for June 13 here at the  
10 Department of Labor. I'm going to have a -- I've  
11 got an announcement/adjournment.

12 We've asked Mike Pischke to be here  
13 today. Mike was on our board for almost a couple  
14 years. He came to us in September of 2016 and  
15 brought a great service to the board representing  
16 boiler manufacturers. We thank you for -- thankful  
17 for his service.

18 Mike has accepted a position of  
19 assistant executive director at the National Board,  
20 so he has relocated to Columbus, Ohio, and had to  
21 tender his resignation to the Tennessee board.

22 So we're going to miss his service,  
23 thankful for his friendship. As we adjourn, we're  
24 going to have a celebration of Mike's service, so  
25 hang around for that and have some refreshments with

1 us. We'll tell tales on him and all that fun stuff.  
2 Please stay for that.

3 If there's not anything else, I make a  
4 motion we adjourn.

5 MR. BAUGHMAN: So moved.

6 CHAIRMAN MORELOCK: Thank y'all for  
7 coming.

8 (Proceedings concluded at 10:35 a.m.)

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REPORTER'S CERTIFICATE

I, Elisabeth A. Miller Lorenz, RMR,  
CRR, Notary Public and Court Reporter, do hereby  
certify that I recorded to the best of my skill and  
ability by machine shorthand all the proceedings in  
the foregoing transcript, and that said transcript  
is a true, accurate, and complete transcript to the  
best of my ability.

I further certify that I am not an  
attorney or counsel of any of the parties, nor a  
relative or employee of any attorney or counsel  
connected with the action, nor financially  
interested in the action.

SIGNED this 29th day of March, 2018.

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Elisabeth A. Miller Lorenz, RMR, CRR

My Notary commission expires: 3/10/2019

Tennessee LCR No. 66  
Expires: 6/30/2018

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