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

QUARTERLY MEETING OF THE STATE OF TENNESSEE BOARD OF BOILER RULES

September 13, 2023

ORIGINAL

CASSANDRA M. BEILING, LCR# 371
STONE & GEORGE COURT REPORTING
2020 Fieldstone Parkway
Suite 900 - PMB 234
Franklin, Tennessee 37069
615.268.1244

APPEARANCES:

Brian Morelock, Chairman/Board Member

David W. Baughman, Board Member

Jeffery Henry, Board Member

Micah Lashley, Board Member

Richard Scott May, Board Member

Philip Hickerson, Chief Boiler Inspector

Justin Miller, Assistant Chief Boiler Inspector

Deniece Thomas, Commissioner
Tennessee Department of Labor

Thomas Herrod, Assistant Commissioner
Tennessee Department of Labor

Dan Bailey, Esq., Legal Counsel
Tennessee Department of Labor

Chance Deason, General Counsel (not present)
Tennessee Department of Labor

Michele Irion, Boiler Board Secretary
Tennessee Department of Labor

Jamie Diefenbach, Executive Admin Assistant
Tennessee Department of Labor

Mia-Lyn Wiley, Administrative Services
Tennessee Department of Labor

Tia XiXis, Chief of Staff
Tennessee Department of Labor

Additional appearances:

Marty Toth, ECS Consulting and Boisco Training Group

Branden Matue, FM GLOBAL

Appearances continued:

R. Duane Hoagland, Process Safety Manager
Wacker North America

Steve Courson, Director of Process Safety
Wacker North America

James Anderson
Ultium Cells

John Largen
Boiler Supply Company

Mark Edwards
Boiler & Property Consulting

Joe Hurt, Present
PBP Fabrication

Shannon Beeson
Rinnai America Corporation

STONE & GEORGE COURT REPORTING
Cassandra M. Beiling, LCR

** Reporter's Note: All names are spelled phonetically unless otherwise provided to the Reporter by the parties.

A G E N D A

I. Call Meeting to Order

II. Introductions and Announcements

III. Adoption of the Agenda

IV. Approval of the Meeting Minutes for June 28, 2023

V. Chief Boiler Inspector's Report

VI. Variance Report

VII. Old Business
23-02 TAMKO requests consideration for approval of a variance to boiler attendant

VIII. New Business
23-04 PBP FABRICATION, INC. requests approval for a license to engage in the erection, repair, and/or alteration of Boilers and Pressure Vessels in the State of Tennessee

23-05 WACKER CHEMICAL COMPANY requests the approval of variance for internal inspection intervals of pressure vessels

23-06 MEHARRY MEDICAL COLLEGE requests a variance to be granted for the operation of our four high-pressure steam boilers located on the campus of Meharry Medical College

IX. Open Discussion Items
None

X. Board Case & Interpretations
BC 23-01 ECS Consulting LLC requests a Board Case addressing stop valves to be used in the pressure relief systems of thermal fluid heaters.

XI. Upcoming 2023 Scheduled Quarterly Meetings
December 13, 2023

XII. Adjournment

I N D E X

* * * * * * * * *

CHAIRMAN MORELOCK: Good morning, everybody. I want to welcome you to the September Tennessee board meting, and so we'll get started here in just a minute.

All right. Let's see. Everybody -- we're good. All right.

So again, welcome. Thank you for coming down here and -- to participate in our review and discussion on our agenda.

And so with that, I'm going to call this meeting to order.

If you don't have an agenda, they are on the back table. So make yourself available to get one of those.

And our next item is to have introductions and announcements.

And we will start with you.

MR. MAY: Scott May, Boilermakers, Boiler Board.

MR. LASHLEY: Micah Lashley, insurance representative, Boiler Board.

CHAIRMAN MORELOCK: Brian Morelock, Board Chair, representing pressure vessels.

MR. BAUGHMAN: Dave Baughman Allied Boiler, board member.

MR. HENRY: Jeff Henry, board member, ATC.

MS. WILEY: Mia-Lyn Wiley, Boiler Admin Staff Supervisor.

MS. IRION: Michele Irion, Board Secretary.

MR. MILLER: Justin Miller, Assistant Boiler Chief.

MR. HICKERSON: Philip Hickerson, Chief Boiler Inspector.

MS. THOMAS: Good morning. Deniece Thomas, Commissioner.

MR. HERROD: Tom Herrod, Assistant Commissioner.

MR. BAILEY: Dan Bailey, legal counsel.

MR. HOAGLAND: Duane Hoagland, Process Safety Manager at Wacker.

MR. COURSON: Steve Courson, Director of Process Safety for Wacker North America.

MR. ANDERSON: Jim Anderson, Ultium Cells, Spring Hill, Tennessee.

MR. TOTH: Marty Toth, ECS Consulting and the Boisco Training Group.

MR. LARGEN: John Largen, Boiler Supply Company.

MR. EDWARDS: Mark Edwards, XXL Boiler & Property Consulting.

MR. HURT: Joe Hurt, President, PBP Fabrication.

MS. DIEFENBACH: Jamie Diefenbach, Executive Admin Assistant, WRC.

CHAIRMAN MORELOCK: Thank you.

Our next item is to adopt the agenda. So again, if you don't have one, they're on the back table.

And also, make sure that you sign in on one of the spreadsheets there to -- so we have your attendance.

And so with that said, do I have a motion to accept and adopt the agenda?

MR. HENRY: So moved.

CHAIRMAN MORELOCK: I have a motion. Second?

MR. LASHLEY: Second.

CHAIRMAN MORELOCK: Any discussion, any changes?

(No verbal response.)

CHAIRMAN MORELOCK: Hearing none, all in favor say "aye."

(Affirmative response.)

CHAIRMAN MORELOCK: Against?

(No verbal response.)

CHAIRMAN MORELOCK: Abstentions, not voting?

(No verbal response.)

CHAIRMAN MORELOCK: We have an agenda.

So the next item on the agenda is approval of the meeting minutes for the June 28, 2023 meeting.

Are there any questions, corrections about the minutes?

(No verbal response.)

CHAIRMAN MORELOCK: All right. Hearing none, do I have a motion to accept?

MR. HENRY: So moved.

MR. BAUGHMAN: Second.

CHAIRMAN MORELOCK: Okay. Good. So any changes?

(No verbal response.)

CHAIRMAN MORELOCK: Hearing

none, all in favor say "aye."

(Affirmative Response.)

CHAIRMAN MORELOCK: Opposed?

(No verbal response.)

CHAIRMAN MORELOCK: Abstentions, not voting?

(No verbal response.)

CHAIRMAN MORELOCK: The minutes are approved.

MR. BAUGHMAN: I just want to make a comment real quick.

Chairman, thanks for getting the minutes to us timely to where we're able to review them, too. I appreciate that because it's a lot of words to look over. But it really was sent to us timely and I appreciate that.

CHAIRMAN MORELOCK: Excellent comment.

Any other questions or comments?

(No verbal response.)

CHAIRMAN MORELOCK: All right. Next item on our agenda is the Chief Boiler Inspector's Report.

MR. HICKERSON: So on the Chief's report, today will be my last day as Chief

and for the board meeting. My last day will be Friday, September 15th. I've decided to take a position with Hartford Steam Boilers.

Other than that, we have Richard Campbell. He passed the National Board Boiler Exam on September 6, on Wednesday. He is in the process now of getting his Tennessee commissions, and then he'll be -- within two weeks, he'll be able to be inspecting for us. From there -- that's all on the Chief's report.

We'll go into the variance report. We have 87 active variances. We had -- on renewals or new inspections performed, 11 passed, zero had failed. And then we have eight that are board approved that are not ready, and they're -- you know, it's equipment not installed and things like that. But that's it.

CHAIRMAN MORELOCK: Okay. Any questions?

MR. BAUGHMAN: Chief, you mentioned that -- and I think we probably discussed this in the past, where we've got a variance that has been approved and ready for inspection, but the equipment is not installed yet or what have you.

What time frame do we have or do we have a time frame, or is that something we need to talk about, for the length of time between approval and time of --

MR. HICKERSON: To my knowledge, I don't know of anything that is set in stone for now, but I do believe it is something that needs to be discussed, because some of these are from 2021, that's not done yet, so...

MR. BAUGHMAN: Interesting. Okay. Thank you. Appreciate that.

CHAIRMAN MORELOCK: Any other questions, comments?

Go ahead.

MR. BAUGHMAN: You mentioned Richard Campbell.

MR. HICKERSON: Yes, sir.

MR. BAUGHMAN: What position is he going to be?

MR. HICKERSON: He will be -- he currently is a Boiler Inspector 1. He will be in Memphis area, doing inspections. Once his year is up, which will be, I think, right there around December, he'll move to Boiler Inspector 2.

MR. BAUGHMAN: Very good.

MR. HICKERSON: Yes, sir.

MR. BAUGHMAN: Thank you, Chief.

MR. LASHLEY: One more question. Did he replace anyone in the Memphis area?

MR. HICKERSON: Yes. There was an open position, but I don't know the name of who it was.

MR. LASHLEY: So we still have Dallas and Carl?

MR. HICKERSON: Yes. Dallas, Carl. Mike McGee came back. And then now Richard.

MR. LASHLEY: Okay. Thank you.

MR. HICKERSON: Yes.

MS. IRION: I believe he was taking Mike McGee's position originally, and then Mike came back.

MR. HICKERSON: That might have been what it was.

MS. IRION: Yeah. And Mike came back, so we were grateful for that.

MR. LASHLEY: Just couldn't leave.

MS. IRION: No. We're special.

CHAIRMAN MORELOCK: Very good.

Any other questions or comments?

(No verbal response.)

CHAIRMAN MORELOCK: All right. Very good. That will take us to Old Business.

Our first item is 23-02. TAMKO requests consideration for approval of a variance to boiler attendant requirements.

So as Mr. Toth is preparing to present this, is there any conflict with any of the board members?

(No verbal response.)

CHAIRMAN MORELOCK: I see no conflicts. All right.

MR. TOTH: Good morning, Mr. Chairman and Members of the Board and guests. My name is Marty Toth. I'm with ECS consulting and the Boisco Training Group. I am representing TAMKO for their modification of the current boiler remote variance.

As you may be aware, TAMKO just recently was reinspected under their current variance. This variance is going to handle their replacement of their Boiler Number 2, which is a brand spanking new Cleaver-Brooks water tube boiler that's being brought in.

TAMKO is a paper products manufacturing company out of Knoxville, Tennessee. As you may recall, at the last meeting, there were a lot of questions concerning the manual.

As the Board is very aware, the Boiler Unit has done a tremendous job over the course of the past decade to raise the level of the manuals that are being presented to the Board, and the Board seeing different manuals and more robust manuals. And that kind of was the case, I think, that we had here, was, the current manual that was produced by TAMKO was then revised and brought before the Board internally, and there were a lot of questions. And so they asked me to get involved.

I work closely with John Largen on other projects as well, and we took a look at it and agreed that there are some opportunities. I think that you will see that we put in a format that you're very used to seeing from ECS manuals. I spent a considerable amount of time with TAMKO. Matter of fact, I was there yesterday, as I was coming through Knoxville back to Nashville, and spent some time with them looking at it.

They have a very nice program in

place. They have some knowledgeable individuals. Currently, they are doing internal training. They have made the determination that they want a contract with Boisco Training Group, and we're going to continue with advancing that training. So they're really serious about remaining safe.

They understand that if their boilers go down, as you can see from the system that they have in place, it's very different than what you normally see with remote panels. Their particular panel, it only has one e-stop button. So that means if they have an issue, they're going to hit that e-stop. It doesn't matter if they have a second boiler. Both boilers are going to go down, very similar to what you see with a local e-stop, that secures both boilers.

So they are very serious with ensuring that their boilers are operating not only in a safe manner, but also an efficient manner so that they don't have those down times. Because if they go down, it takes quite a while for them to come back up and they lose product. And so they are very secure with that.

I am open to any questions that you may have.

Again, as I said, their Boiler Number 1 is the older boiler. When I say "older," it was built the year I was born. We won't talk about how old I am but -- and so it is going to be their backup boiler once we get everything finalized with the Cleaver-Brooks boiler, which should be in the next few weeks.

And so then once we get that inspected by the State, we get the Tennessee number put on that unit, we will then be requesting for the Boiler Unit to come out and do a reinspection again if we pass this variance.

So any questions that you may have, I'm willing to answer those.

CHAIRMAN MORELOCK: Do we have a motion to discuss?

MR. HENRY: So moved.

MR. BAUGHMAN: Second.

CHAIRMAN MORELOCK: Okay. What comments do the board members have on this variance request?

MR. BAUGHMAN: Thanks for bringing the manual back to us in a good form.

MR. TOTH: You're welcome.

MR. BAUGHMAN: It's always

difficult as we, as the Board, go through something and talk about these things, but we're all professionals in the industry and so, yeah, it's appreciated.

So the only comment I've really got is more -- and it goes to the whole, you know, they don't want downtime and what have you. And it doesn't relay anything to what our variance requires. But as I looked at page 15 on the DA data sheet, and I saw that really nice-looking DA that I'm sure would worry about anybody, being a 1970 John Blue Company, that I couldn't find any info regarding John Blue Company in this, and the Tennessee number's to be determined. And that was, again, somewhat worrisome.

The DA info wasn't in the first manual. I appreciate it being in the second. But as I looked at that DA and hear your comments about, you know, we're all about safety and downtime and what have you, and that -- just for comment, that's got every opportunity of giving them some headaches. And it might be a good opportunity to put a nice Spray Master in.

MR. TOTH: Yes, sir. And I do apologize. As the Board is aware, in most cases,

once we present the manuals, there's always time. And I get with my clients, and we will go through the manual again and we will make sure, because there's always something, for those that are familiar with going through quality control manuals. Every three years, we go through one. For some reason, we always find something missing. That was the case with this.

The information for the actual Tennessee number for the deaerator was provided. I reached out, and unfortunately, I did not present that, as I usually do in my opening monologue, if you would, of any inaccuracies that are in the manual, and that's one of them. And it's written here. So if you would like, you can pencil it in. That Tennessee number is Tennessee Number 113359.

MR. BAUGHMAN: Very good.

MR. TOTH: Okay. And while I was there, we did a thorough walk around, walked around and looked at the DA. There was a slight leak on that. Boiler Supply Company -- and the leak being in the gasket. Boiler Supply Company jumped right on it. The company jumped right on it and got that repaired. So they are -- they go

through their inspections, their required inspections. They just passed their inspections. They are up to date on that.

And, you know, just really just paying attention to it. And they have an understanding that when you find things of that nature, they need to be fixed right away. And it's kind of a test on my part with my clients, to see how long it takes them to get that taken care of. And they jumped on that right away. So I was happy to see that.

MR. BAUGHMAN: Good. And I appreciate that comment. Just looking at it and you don't know -- we're not intimate with the customer.

MR. TOTH: Sure.

MR. BAUGHMAN: So we don't know when the last NDE was done on it.

MR. TOTH: Right.

MR. BAUGHMAN: You know, you're looking at a DA that, from an external standpoint, just has a little roughness to it.

MR. TOTH: We'll put a little paint on there. We'll be good to go.

MR. BAUGHMAN: There you go.

But I just want to bring that up for the record itself, not that it pertains to our variance.

The next is on Appendix A, A-1, which is page 14 in the manual under Appendix A, on the new manual. The old manual showed that the Murray boiler was a 1969, which I don't know if that correlates to your birthday. The new manual shows 1968. So I didn't know which was which.

MR. TOTH: Uh-huh.

MR. BAUGHMAN: And then the other is the SRV setting. Old manual shows 300 psi. New manual shows 310/315.

MR. TOTH: Uh-huh.

MR. BAUGHMAN: So I was just interested in those two differences.

MR. TOTH: I did a little bit closer look, I think.

MR. BAUGHMAN: I'm sorry?

MR. TOTH: I think I did a little bit closer look, maybe.

MR. BAUGHMAN: Okay.

MR. TOTH: And as you are aware, you will see a lot of manufacturers that will put -- will have the actual data plate stamping. And then you'll have an external plate put on,

maybe outside of the refractory or outside of the shell or something like that. This is the number -- the 1968 was directly off of the data plate, not an external plate. So this boiler, again, we go back to the DA that was 1968. These were put in at the same time.

MR. BAUGHMAN: Interesting.

MR. TOTH: And then as for the safety valves, it was just a verification on the safety valves. And at this time, the safety valve readings are exactly the same.

MR. BAUGHMAN: Very good. And just to quantify that --

MR. TOTH: And if I may add to that, I had a concern with that as well because these are on a common header. So it raised my interest when I looked at the new boiler, and then I said, well, let me go look at the old boiler because the old boiler reads 300, to verify the actual safety valves, of what they read.

MR. BAUGHMAN: Do both boilers ever operate at the same time?

MR. TOTH: They do not. They're not intended to operate at the same time.

MR. BAUGHMAN: Okay. So the DA

is sized for the new boiler, being that it's --

MR. TOTH: I would have to look at that a little closer, as to the sizing for that. I did not go into --

MR. BAUGHMAN: Just curious.

MR. TOTH: Again, as -- the same problem that you have with it is the same problem that I'm going to have, with finding information from 1968. And so it's kind of one of those situations where we've got to take it for what it is, something that's been there, something that was able to handle both boilers, or at least one boiler at a time, from that point and just have to go with that.

MR. BAUGHMAN: And actually, there were some other boilers that were there previously.

MR. TOTH: There were.

MR. BAUGHMAN: The coal-fired boilers.

MR. TOTH: Very interesting layout, talking about space. And space that's being occupied by something that is no longer used probably has a lot of asbestos in it. So they're just going to leave those things where they are.

MR. BAUGHMAN: Very good.

MR. TOTH: And they are right across from -- if you look, they are right across from where the boiler control room is. Those would be where the dormant boilers are located. Boiler Number 1 would be on its left of the control room. Boiler Number 2 is right next to it in a newly built building. And you should be able to see that through the documents -- or the layout that I've provided.

MR. BAUGHMAN: Very good. Well, thank you. You've addressed the distance question that we had previously.

MR. TOTH: Yes.

MR. BAUGHMAN: The rule reference has been changed. That's all I've got, Mr. Toth. Thank you.

MR. TOTH: There is one thing that I would like to, again, is if we go to Section 5, the highlighted section, step Number 4 on that, the placard, we are going to remove that line of communication. So it's going to go directly from communicating via the two-way radio to the PA system, directly into communicating with the production manager.

Do you see how that works?

(No verbal response.)

MR. TOTH: And so -- and the reason is, this is just an oversight during the communication, because our shift supervisor is actually the remote attendant. So the remote attendant calling himself is not accurate, if that makes sense.

CHAIRMAN MORELOCK: Any more questions, comments on this variance manual?

MR. HENRY: Mr. Chairman, I just --

Mr. Toth, first of all, I appreciate your initial comments. And certainly, you deserve credit for some of the improvements in the overall approach to this, and appreciate your input on those things.

I've just got a couple of small comments that may be considered nitpicking, but where safety is involved, it's better not to leave anything unattended.

Page 6. First comment is, "Remote station for TAMKO Building Products will be manned by a shift supervisor," period.

Later on, there's a provision that

other individuals who will be appropriately trained could be included in that, and I think you ought to just include something in that first sentence that would say either shift supervisor or some other appropriately trained individual.

MR. TOTH: And Mr. Henry, if I may ask, where exactly -- which sentence or line was that?

MR. HENRY: Page 6, the first sentence.

MR. TOTH: The first sentence. Okay. Do I go a little further -- I can definitely do that.

In the next sentence, do I mention "other qualified individuals holding those certifications"? Is that satisfactory?

MR. HENRY: It would certainly be helpful, certainly. Sure.

MR. TOTH: So in that sentence, you would like for me to repeat what I put in -- what I have in the second sentence?

MR. HENRY: Right. Just so it's consistent.

MR. TOTH: Okay. Sure.

MR. HENRY: The second one,

again, is certainly not critical but just so there's no misunderstanding, in the second paragraph in regard to training, second paragraph, first -- or subparagraph 1, it says "a brief understanding of the equipment being attended."

Can you explain to me what "a brief understanding" is?

MR. TOTH: Yeah, absolutely. When we look at the difference between a remote attendant and a boiler attendant, if we look at a boiler attendant, because we use that terminology not only in our rules, attendant, versus using the terminology of an operator, and we've had vast communications throughout the industry of the difference between the two.

In my opinion, there is no difference between a boiler attendant and a boiler operator. The qualifications and the training that's necessary for a boiler attendant or a boiler operator is significantly more than somebody that's manning a remote station.

MR. HENRY: Right.

MR. TOTH: What I tend to communicate with my clients when they ask, why are we introducing the remote attendant, who is not an

operator, does not do anything with the boiler, why are we introducing them to boiler information? It's because they're responsible for engaging the e-stop. They should know what equipment is attached to that e-stop that they're pressing.

So when we say "a brief understanding," if we go into Section 4 and talk about a boiler attendant, you'll see that as a more thorough understanding.

MR. HENRY: Right.

MR. TOTH: And so what we're doing is -- what we do at Boisco Training Group is, we create a training program that's going to introduce those remote attendants to the equipment, but not go so deep into the weeds about the operations of the boiler.

Does that make sense, sir?

MR. HENRY: Sure. Sure. I got it. That's fine. I appreciate the comment. Yes. Thank you.

CHAIRMAN MORELOCK: Any other comments or --

MR. MAY: He got mine. Brief and thorough.

MR. TOTH: Brief and thorough.

That's right.

MR. MAY: That's a big gap.

MR. TOTH: Brief and thorough.

CHAIRMAN MORELOCK: All right. So last call for comments or questions.

(No verbal response.)

CHAIRMAN MORELOCK: Hearing none, do I have a motion for this variance?

MR. BAUGHMAN: Motion to approve upon inspection.

MR. HENRY: Second.

CHAIRMAN MORELOCK: Okay. So the action here is that we want to accept this manual with the comments of the Board and contingent on a successful site visit from the Boiler Unit, correct?

MR. LASHLEY: Successful initial inspection as well.

CHAIRMAN MORELOCK: Yeah. Okay. All right. And initial inspection. All right. So any other questions or comments?

(No verbal response.)

CHAIRMAN MORELOCK: Hearing none, all in favor say "aye."

(Affirmative response.)

CHAIRMAN MORELOCK: Opposed?

(No verbal response.)

CHAIRMAN MORELOCK: Abstentions?

(No verbal response.)

CHAIRMAN MORELOCK: Not voting?

(No verbal response.)

CHAIRMAN MORELOCK: You have a contingently approved variance.

MR. TOTH: Thank you, Mr. Chairman. May I ask a very brief question?

CHAIRMAN MORELOCK: Sure.

MR. TOTH: Would it be okay with the Board if we hold off on submitting the revisions to the Boiler Unit until after that initial inspection of the Cleaver-Brooks boiler so we can get that information, such as Tennessee number, put into the book and then we submit it to the Chief? And so then the Board also has a revised copy of that.

CHAIRMAN MORELOCK: So is your client in agreeance with you on that?

MR. TOTH: Of course.

CHAIRMAN MORELOCK: Okay. All right.

MR. TOTH: Thank you.

CHAIRMAN MORELOCK: Thank you.

All right. Our next -- well, that takes us to New Business.

And our first new business item is 23-04. PBP Fabrication requests approval for a license to engage in the erection, repair, and/or alteration of boilers and pressure vessels in the state of Tennessee.

So if you're ready to present that.

Any conflicts from the board members on this item?

(No verbal response.)

CHAIRMAN MORELOCK: Okay. There are no conflicts.

MR. HURT: We applied for a -- I've got a customer that's got an installation here in Tennessee and we -- in communication with our AIA, he asked us if we had a repair license. It turns out the vessel we were working on was exempt, but we didn't know that to start with and we applied for the repair license. And we've got a good customer who's putting in some gas processor and gas-treating units in Tennessee, above pools gap, and I don't know what might come up but we'd already applied for the license, and

we would like to get a license to repair pressure vessels in Tennessee. We've sent in our QC manual and filled out the application.

CHAIRMAN MORELOCK: Okay. So are there any questions from the board members on this application for a repair license in the state of Tennessee, or do you have any questions about that?

So I guess to be proper, do we have a motion to discuss? Let's do that first.

MR. HENRY: So moved.

CHAIRMAN MORELOCK: Okay. A motion is made.

THE REPORTER: Can he state his name?

MR. HURT: Joe Hurt, President of PBP Fabrication.

CHAIRMAN MORELOCK: All right. What questions or comments do the board members have?

MR. BAUGHMAN: Joe, thanks for being here. Dave Baughman.

So in the application, it says, "Does your company possess a repair license from any other state or jurisdiction?"

And it says no.

That's correct?

MR. HURT: That is correct.

MR. BAUGHMAN: Okay.

MR. HURT: That is correct.

MR. BAUGHMAN: Okay. So we would be the only -- I guess I'm a little confused, but we would be the only state that you would have the repair license for?

MR. HURT: Yes, sir. Our -- we're in Texas and we don't have -- you know, we don't have a -- there's not a pressure vessel law.

MR. BAUGHMAN: That's right. I'm sorry.

MR. HURT: We have to -- we do our repairs according to ASME and NBIC, but there's no -- we go through -- we have a -- we do have a boiler division in the state of Texas we have to go through. They come out for our joint reviews every three years and all that, but we don't have a pressure vessel law.

MR. BAUGHMAN: Yes, sir. And I appreciate that, and I knew the answer after I asked it and got to thinking about the state, so...

MR. HURT: Can I ask you-all a question?

CHAIRMAN MORELOCK: Yes, sir.

MR. HURT: We've got, like I said, a good customer that -- they're actually out of Mississippi, but we've done a lot of work for them for 20 or 30 years. But they're bringing in quite a few pressure vessels, but all of the vessels are in a -- for a gas, liquids-treating -- natural gas, liquids-treating facility. So all the vessels will have LNG in them. So are they all exempt?

CHAIRMAN MORELOCK: Will they stay in the same service?

MR. HURT: Uh-huh. I mean, it's a gas-treating unit for NGL Supply, basically, is who it's for. And this first vessel that we started was a big propane -- not propane but natural gas liquid storage vessel. And it weighed 390,000 pounds. We cut it in half in Texas and sent it over and put it back together.

CHAIRMAN MORELOCK: So are all of these vessels bearing ASME's mark on them?

MR. HURT: They'll all be ASME and registered with National Board. Yes, sir.

CHAIRMAN MORELOCK: Okay. So to bring that from Texas to Tennessee --

MR. HURT: Well, they're not coming from Texas. I think some of them are coming from different places.

CHAIRMAN MORELOCK: Well, but still --

MR. HURT: Anything into Tennessee.

CHAIRMAN MORELOCK: Yeah. So if it comes into Tennessee, you'll have to work with the Boiler Unit to get permission to bring it into the state of Tennessee, and it will require a deputy inspector to do that inspection before it's brought into the state of Tennessee.

Correct?

MR. HICKERSON: Well, if it's dealing with LP gases, it's exempt from State inspections.

CHAIRMAN MORELOCK: So it will be exempt --

MR. HICKERSON: Yes.

CHAIRMAN MORELOCK: -- from Tennessee law, right?

MR. HICKERSON: Yeah.

CHAIRMAN MORELOCK: Okay.

MR. HURT: If it's LP gases?

MR. HICKERSON: Uh-huh.

MR. HURT: Okay.

CHAIRMAN MORELOCK: Okay.

MR. HURT: I just want to make sure.

CHAIRMAN MORELOCK: Okay.

MR. HICKERSON: At least from our jurisdiction. I don't know if, you know, DOT or any other services do that, but if it's LP gases, it's exempt from --

CHAIRMAN MORELOCK: I just wanted to ask the question to make sure we get it in the minutes and we're clear. So that's good.

MR. HICKERSON: Right.

CHAIRMAN MORELOCK: All right.

MR. HURT: Thank you, guys.

CHAIRMAN MORELOCK: Thank you.

MR. HURT: Appreciate it.

MR. BAUGHMAN: Well, Joe, still.

MR. HURT: You've got more questions?

MR. BAUGHMAN: Yeah, we've got more questions. That's all right. You can sit

back down in the hot seat there for a minute. It gets a little warm.

So I'm taking that these projects typically run more than $25,000.

MR. HURT: Probably, yeah.

MR. BAUGHMAN: When it states that your company possess mechanical contractor's license in the state of Tennessee, which is a requirement by state law if a job is $25,000 or more to erect, install, repair, or alter in the states that you do not have the contractor's license.

MR. HURT: I know.

MR. BAUGHMAN: So being that that's part of the requirement, that's something for us to consider and discuss in this also, just for what that's worth. Business license for doing business in the state of Tennessee and the mechanical contractor's license. So just wanted to bring that up since it was honestly addressed in the application here.

MR. HURT: Right. So we need to get that. I don't think -- I think it's just pay a fee, correct?

MR. BAUGHMAN: I can't answer to

that.

MR. HURT: But we can figure that out.

MR. BAUGHMAN: Okay. So I don't know how it affects anything on here.

CHAIRMAN MORELOCK: Right.

MR. BAUGHMAN: But again, it's a requirement.

CHAIRMAN MORELOCK: That's out of our scope. Yeah.

Any other questions or comments from the Board?

(No verbal response.)

CHAIRMAN MORELOCK: All right. Hearing none, do I have a motion?

MR. BAUGHMAN: Motion to accept.

CHAIRMAN MORELOCK: Okay.

MR. HENRY: Second.

CHAIRMAN MORELOCK: Okay. Any other comments or questions?

MR. BAUGHMAN: Only thing --

CHAIRMAN MORELOCK: Go ahead.

MR. BAUGHMAN: I was going to say that --

MR. MAY: Fish are coming now.

MR. BAUGHMAN: So before any work can be implemented, we're approving the license to engage in the erection, repair, alteration, but before that can actually happen, the mechanical contractor's license has to be in place before any of that work can proceed.

MR. HURT: Yes, sir.

MR. BAUGHMAN: Okay.

MR. LASHLEY: So are you saying contingent on mechanical contractor's license?

MR. BAUGHMAN: Yes. Thank you for that wording.

MR. LASHLEY: Is it necessary, with this being strictly natural gas, LP, petrochemical?

MR. BAUGHMAN: Well, so as it states in here, it says it's a requirement by state law, in Tennessee Department of Commerce and Insurance, that any erection, installation, repair, or alteration to a boiler or pressure vessel within the state of Tennessee that is in excess of $25,000, the company that's involved in that erection, installation, repair, or alteration must possess a mechanical contractor's license.

So to me, that -- whether it's LP,

it's still a pressure vessel even though that it's not within jurisdiction. But that's my blinder view.

MR. LASHLEY: Right. And I'm just looking at it from an exemption standpoint.

MR. BAUGHMAN: I agree.

MR. LASHLEY: So I think contingent on -- go ahead.

CHAIRMAN MORELOCK: Mr. Toth?

MR. TOTH: I understand what Micah is referring to. The one thing that we need to remember is that if they are working on a vessel that is ASME National Board certified, and they do a repair, they have to be an R stamp holder in the state of Tennessee. They have to have a license. So it doesn't matter if it is exempt from inspection or not. For them to do an ASME National Board repair, they have to have a Tennessee license.

MR. LASHLEY: Okay.

MR. BAUGHMAN: Okay. That's a good clarification, Mr. Toth. Thank you.

So it will still hold true, then.

MR. LASHLEY: Okay.

MR. BAUGHMAN: Contingent upon

having a mechanical contractor's license. So that would be the motion.

MR. LASHLEY: We need to remotion to contingent upon --

MR. HURT: Well, he was talking about the R -- you've got to have an R -- you're talking about an R stamp, right, from the National Board?

MR. TOTH: Yes. Not only -- so you have an R stamp.

MR. HURT: From the National Board.

MR. TOTH: Right. You have an R stamp. So to do that repair, that's fine. You have an R stamp. But to do that repair in the state of Tennessee, you have to have a Tennessee license, and a Tennessee license requires that you have an R stamp from the National Board.

Does that make sense?

MR. HURT: Tennessee repair license.

MR. TOTH: Yes. Right.

MR. HURT: But you're talking about a repair license, not a contractor's license.

MR. TOTH: Right. I'm talking about a repair license. As for the contractor's license, the situation that they have is, if the job that he's looking for, if you have a job in play right now and it's less than $25,000, he's not required to have the contractor's license. But if at any point he does do a job that's over $25,000, you will have to have one at that point.

MR. HURT: Yeah. We can do that.

MR. TOTH: Okay.

CHAIRMAN MORELOCK: Any other questions or comments?

MR. LASHLEY: I think that's a good clarification.

CHAIRMAN MORELOCK: Okay. All right. So I'm going to call the question. All in favor say "aye."

MR. LASHLEY: Is it a new question, for contingent upon --

CHAIRMAN MORELOCK: It's contingent.

MR. LASHLEY: Okay.

CHAIRMAN MORELOCK: Yeah, it's contingent. I think we've got all that in the

minutes. So yeah. It's contingent based on what's been shared during this discussion.

Everybody agree?

(Affirmative response.)

CHAIRMAN MORELOCK: Okay. Good. All right.

All right. So hearing that, I'm going to call the question. All in favor say "aye."

(Affirmative response.)

CHAIRMAN MORELOCK: Opposed?

(No verbal response.)

CHAIRMAN MORELOCK: Abstentions?

(No verbal response.)

CHAIRMAN MORELOCK: Not voting?

(No verbal response.)

CHAIRMAN MORELOCK: You have an approved -- and what we can do is, after the meeting, I'll be happy to initial this for you.

MR. HURT: Okay.

CHAIRMAN MORELOCK: Because I have to do that. So make sure I initial that today for you.

MR. HURT: Okay.

CHAIRMAN MORELOCK: Okay?

MR. HURT: Yes, sir. Thank you, sir.

CHAIRMAN MORELOCK: All right. This takes us to New Business.

Item 23-05. Wacker Chemical Company requests approval for a variance for internal inspection intervals of pressure vessels.

So while you're getting ready to -- preparing to present this, are there any conflicts with any of the board members?

(No verbal response.)

CHAIRMAN MORELOCK: Okay. All right. We're good.

So go ahead, Steve.

MR. COURSON: Thank you, Board Members and Chairman, to bring this topic back up. We brought it to the board --

MR. BAILEY: Could you state your name.

MR. COURSON: Steve Courson, Director of Process Safety for Wacker.

We had this discussion started and we had some direction to move forward, and I wanted to kind of finalize that. I did send out a spreadsheet with the repair information on there.

And so a couple of items that I wanted to get alignment with the Board on was from our conversation last year, that we would be moving these inspections out based on this performance criteria that we're using, using the damage and corrosion mechanisms and our current inspections to extend these internal vessel inspection frequencies.

We are still keeping the external two-year requirements for the certificate as they are. We're not planning on changing those.

And our thoughts were -- one, is that an acceptable format to send you the inspection information to be able to review the -- because I think the question from the Board last time was seeing our inspection results as part of this. Is this format acceptable to send to you guys in advance of coming back and telling what vessels we're going to ask for the extensions on?

CHAIRMAN MORELOCK: Do you-all agree?

(Affirmative response.)

CHAIRMAN MORELOCK: Okay.

MR. COURSON: Yeah. This section is a subset of what we did, because before

we filled out hundreds of line items, we wanted to make sure that this was an acceptable format and would support this effort of moving these internal inspections out.

The second question around this is during this activity, we have found some instances where our vessels were designed with no corrosion allowance. However, our measurements in the field are less than what the previous or nominal thicknesses were. So we're doing fitness for service for those vessels.

Again, all of these are mainly within the mil tolerance levels of the original vessel. So as we do the fitness for service, we were planning on a similar format, saying here is what it is. Again, moving those out to a frequency not to, you know, exceed the code requirements, usually probably in-service time of the vessel, because we know we have that kind of history there.

Would that be an acceptable approach for those vessels?

MR. HENRY: Could I ask for clarification? You said that you're seeing wall thickness values that are lower than --

MR. COURSON: Yes.

MR. HENRY: -- the original nominal values. Are they below what would be calculated as a minimum wall thickness?

MR. COURSON: That's what we're doing the calculations on, because on some of these vessels, all we have is the original U-1 documents. We are in the process, can't find all the project documents. Probably, the hard copies are in document retention somewhere.

So our easiest route is, is to go in and calculate that and come up with what is the minimum value and make sure that these are well above that and following that process. Because, again, they were designed with no corrosion allowance built into them.

MR. HENRY: Okay. Again, if I could follow up, just to make sure I understand, someone at some point did an original calculation to determine what the minimum wall thickness was going to be for the particular operating conditions?

MR. COURSON: Right.

MR. HENRY: And the fitness for service is not necessarily tied into that. That

may be simply for the particular operating conditions. It may demonstrate that you can operate even with thicknesses below the minimum wall thickness required.

MR. COURSON: Right.

MR. HENRY: So, I guess, which one are you addressing? I'm just a little confused.

MR. COURSON: I think the T min values that they had originally were just based on what the design calculations were.

MR. HENRY: Right.

MR. COURSON: They didn't go into allowing for any corrosion to say what it is. And like I said, these values that we're reading are below those values, so we're making sure they're designed correctly.

MR. HENRY: Okay. All right.

CHAIRMAN MORELOCK: And just for the minutes and for clarity, this particular process, if they have to do an internal inspection, when they open it up, it creates more corrosion damage than if you leave it in operation. So that's why we're hearing this today and trying to get clarity to how they're going to

provide data to show that they're monitoring the thickness of the vessels in a position where it minimizes damage to the equipment. That's what they're after.

MR. COURSON: Yes. Thank you, Mr. Chairman.

CHAIRMAN MORELOCK: You're welcome.

MR. COURSON: That's our biggest concern on these is, again, getting moisture into the system. It creates the corrosion mechanism. We're as close to noncorrosive as design while we're running, but in these abnormal conditions is where you see the damage.

MR. HENRY: Are you doing the fitness for service days internally?

MR. COURSON: No. We've got a third party, Equity Engineering Group, that's doing those for us.

MR. HENRY: Okay.

MR. COURSON: The same one that's pulling all the data together for this and putting it together.

MR. HENRY: Okay.

MR. COURSON: They're doing the

comparison of the damage and corrosion mechanisms and everything so that we've got everything for this round. And then as we go on in the future, you know, some of that may be pulled in internally as we build the capability within the site there in Charleston.

MR. HENRY: Thank you.

CHAIRMAN MORELOCK: So just a quick question: How are you establishing your inspection interval for the inspection?

MR. COURSON: So what we would do is, based on these results, we would move those out to what our in-service frequency of those vessels are at this time because we know, based on this run time, that we're doing well and not damaging our vessels.

And then as we get future ones, we would come back and readjust those out to whatever the maximum we can get, either through establishment of the true RBI program or, you know, as per the PSM regulations for those that are dual cover.

MR. HENRY: So you do feel you have enough information that you can establish for any of the critical components in some kind of a

rate of loss?

MR. COURSON: Yes. Yes. I believe we do.

MR. HENRY: Okay.

MR. COURSON: And then I had one more. We do have some vessels that are very difficult to inspect. Using external -- one of them is one of the examples that I used in the last presentation, where we flew the drone around inside of it and saw it.

These vessels are all double-walled. So they've got a -- the interior wall, pressure-containing. But the exterior walls is designed to contain the pressure as well, and they're monitored with pressure interspaces.

Is it acceptable to exempt those from internal inspections if we're watching -- monitoring the space between the internal walls and the external walls?

CHAIRMAN MORELOCK: My initial is, ASME has not finalized what remote inspection is and isn't yet. They're looking at it, but there's not anything published in the code books as to what options you have, whether it be drones or whatever, robots going around the exterior.

All that is being discussed, but there's not anything published in the code yet. So I can't give you an answer for that.

MR. COURSON: Okay.

CHAIRMAN MORELOCK: So then you fall back on what's good industry practice.

MR. COURSON: Okay. So those, we would like to, you know, of course, extend out as long as we can because those are the ones that are very, very difficult to get clean. Some of them, we can take out of service. So, therefore, the risk isn't there once they're out of service. But when you go to clean the residual material out of those, the experience in Germany is, you usually end up ruining the vessel and having to replace it.

So we were just looking for guidance on options there. But we'll continue to try to do the drone-type thing in the interim until we can figure out. But we'll move those out to a longer frequency as well to help the planning.

CHAIRMAN MORELOCK: So as long as you've got data for your interval, we're fine.

MR. COURSON: Okay.

CHAIRMAN MORELOCK: But if you

don't have data, then you'll have to use what's in the log, rule.

MR. COURSON: Right.

CHAIRMAN MORELOCK: Okay.

MR. HENRY: If I could follow up on that, on this double wall-type design, if the inner wall is breeched, and the outer wall is designed to take the full internal pressure?

MR. COURSON: Yes, sir.

MR. HENRY: In a situation like that, what action would you take with regard to the operation of the --

MR. COURSON: We're required to shut it down.

MR. HENRY: Okay.

MR. COURSON: Our company policy.

MR. HENRY: Immediately? And is that monitored on a regular basis?

MR. COURSON: Yes.

MR. HENRY: Okay.

MR. COURSON: We haven't seen any of those happen, either the parent company or our company had this situation because of the design, but since we have the code requirement or

the state requirement here, we were looking at -- you know, make sure that we've got a path forward for those vessels.

MR. HENRY: Okay.

CHAIRMAN MORELOCK: Any other questions or comments?

(No verbal response.)

CHAIRMAN MORELOCK: All right. Hearing none, do I have a motion?

MR. BAUGHMAN: Well, let me ask just one thing, Mr. Chairman.

So this request, the approval of variance for inspection, internal inspection intervals of pressure vessels, specifically, what are we approving as far as the intervals go? What is being asked? Is it a varying interval? Is it -- what exactly is it that is being asked here?

CHAIRMAN MORELOCK: Well, that's Steve's question to ask. But, I mean, obviously, all this inspection is going to determine that interval, and then they'll have to report that interval. I mean, that's my take on it.

MR. COURSON: Yeah. So basically, the data set you have in front of you, those have been inspected, those vessels have been

in service approximately six years. They all have acceptable inspection results that meet our damage and corrosion mechanisms. And we would be requesting that we move those to six years.

CHAIRMAN MORELOCK: Okay.

MR. COURSON: The next batch of data, if we had some that were ran on a shorter frequency, say, for our gene silica side that had only been in service for four years, then we would want to request those out to a four year.

So the frequency of time and service, that we understand. So the performance-based side of it, we understand that we're good for this period of time based on the results. Then we would move into there. As we gather more data, we would want to move that on out until we got to the -- you know, the more traditional API inspection frequency.

MR. BAUGHMAN: My question is, how often will we review this data ourselves? In other words, we're approving the variance. When do we reevaluate this information? I don't want to leave it open-ended, and there's no precedent yet. We're not looking at an RBI to where we can come in and evaluate. So this is kind of giving a

broad stroke approval, and I don't feel real comfortable with that.

MR. COURSON: So my request here would be that we would -- we're at almost 700 of the 832 vessels completed as of now. Again, we were shooting for the end of this month to have it all done, but due to some of the -- again, the double-wall vessels being cleaned and some of the revision -- some of our vessels were taken in and out of service quite regularly, and those shouldn't be a problem because we'll be doing the inspections of those revisions, because we either have to clean them for them to perform correctly or we have to replace consumables inside of them.

So on those, you know, we still would like to extend that frequency so that if we ever have any longer run time, we could do that. Again, it's a very costly, very time-consuming activity, to take these down and get them purged and clean.

But, you know, for those, we were planning on getting everything done. We would -- based on the format that we provided for these 700 that we've got done, we would bring that data to you, then subsequent meetings going forward, and

then at least biennially, we would review our -- with our two-year certificate, okay, here is what we've done in the last two years and here is what the results of those were.

And then anything that we find that would have corrosion mechanisms or damage that wouldn't be acceptable, then we would also, you know, use the fitness for service or the API to reduce those frequencies back to a frequency that would be acceptable. At least half-life.

CHAIRMAN MORELOCK: Okay.

MR. HENRY: So if I understood what you're saying, then, you would be coming back here every other year for this Board to review that data?

MR. COURSON: At a minimum. Yes.

MR. BAUGHMAN: As long as we've got that and this isn't at fortuity and, you know, we've got it for the record, then I feel much better with that.

MR. COURSON: Right.

CHAIRMAN MORELOCK: And that's consistent -- we've got other companies that have a reporting every December, similar date of what

you put forth. So if your intervals of reporting to the Board every two years is agreeable, I think it will be agreeable to the Board.

Correct?

MR. BAUGHMAN: Yes. So this variance would actually hold true, then, for a two-year period of time, is what we're saying?

CHAIRMAN MORELOCK: Yeah.

MR. BAUGHMAN: Okay. Then that's what our motion should be.

CHAIRMAN MORELOCK: I agree, yeah.

MR. LASHLEY: Based on September meetings, every other September meeting.

MR. COURSON: At a minimum.

CHAIRMAN MORELOCK: Yeah. And as far as the meeting, whatever gives the Board the most up-to-date data would be the interval, would be advantageous for both of us.

MR. COURSON: I expect, you know, one of the advantages of this is, we'll be able to more level load instead of trying to do 800 vessels in a two-year period. It will be spread out over, potentially, a six-year period.

And at least every two years, you

would get those two-year subsets to say, here is what we've done in the last two years. Here is the results, the acceptable. Here is the ones that we've had issues with. And then you would move into the next batch the next two years and ongoing and -- as we extend those out.

MR. BAUGHMAN: I would like those -- just for what it's worth too, it was sent to us via email, but being able to have that in a little binder --

MR. COURSON: Okay.

MR. BAUGHMAN: -- to be able to review helps out a whole bunch.

MR. COURSON: We'll work on the format. I was more worried about the content. I knew as soon as I tried to send it or tried to turn it into a PDF, that the format wasn't going to be very user-friendly. So we will definitely work on a more user-friendly format to get it to you guys.

MR. BAUGHMAN: Great.

MR. HENRY: Again, this is just for my personal knowledge. I know there was an incident at your plant several years ago, and I'm not familiar with any of the particulars of that,

and I don't know to what extent that incident would have borne on what you're doing now in terms of the inspections, but is there anything that you learned from that particular incident that is forming what you're doing now in terms of the inspection?

MR. COURSON: Yes. Actually, for that specific incident, it was around a maintenance procedure that was done, and they were tightening the bolts on a metal-to-graphite component and cracked the graphite.

MR. HENRY: Okay.

MR. COURSON: Since that time, we have redesigned that and gone to a metal PTFE line section there and got rid of those graphite connections to the piping systems there.

MR. HENRY: All right. That helped. Thank you.

CHAIRMAN MORELOCK: What other questions or comments does the Board have?

(No verbal response.)

CHAIRMAN MORELOCK: Hearing none, do I have a motion?

MR. HENRY: I think you have a motion.

MR. BAUGHMAN: So just to word it right, motion to accept for a two-year variance?

MR. LASHLEY: Biennial reporting?

CHAIRMAN MORELOCK: Yes.

MR. BAUGHMAN: With biennial reporting.

MR. COURSON: So just to be clear, so this would be a variance that would be renewed every two-years based on that biennial reporting.

CHAIRMAN MORELOCK: Yes.

MR. COURSON: Would that be a better way to word that?

CHAIRMAN MORELOCK: I think so. Because we've got another -- a refinery, and they report every 12 months. So unless they have -- their data shows that they need to inspect more frequently. So as long as the two-year interval, if your corrosion rates and all are falling in line with that, then an every-two-years reporting that would be fine.

Correct?

MR. LASHLEY: Yes, sir.

CHAIRMAN MORELOCK: Okay. Any other questions or comments before I call for the question?

(No verbal response.)

CHAIRMAN MORELOCK: All right. All in favor say "aye."

(Affirmative response.)

CHAIRMAN MORELOCK: Opposed?

(No verbal response.)

CHAIRMAN MORELOCK: Abstentions, not voting?

(No verbal response.)

CHAIRMAN MORELOCK: You have a biennial reporting interval for this equipment.

MR. COURSON: Thank you, Board members.

CHAIRMAN MORELOCK: Thank you.

MR. BAUGHMAN: Thank you, Steve. It's a good discussion.

CHAIRMAN MORELOCK: It was a good discussion.

All right. The next new business item that we have is 23-06. Meharry Medical College. And from what I understand, that item has been tabled, correct?

MR. HICKERSON: Yes, sir.

CHAIRMAN MORELOCK: Okay. So it takes us to Open Discussion Items. There is none.

And so as far as Board Case and Interpretations, we have BC23-01. ECS Consulting, LLC requests a Board Case addressing stop valves to be used in the pressure relief systems of thermal fluid heaters.

MR. HICKERSON: Excuse me, Chairman.

CHAIRMAN MORELOCK: Yes.

MR. HICKERSON: There are going to be a couple discussion items. It just wasn't listed on there.

CHAIRMAN MORELOCK: What now?

MR. HICKERSON: There is a couple open discussion items.

CHAIRMAN MORELOCK: Okay.

MR. HICKERSON: Mark Edwards has one and then --

MR. BAUGHMAN: CO2 tank.

MR. HICKERSON: Yeah, CO2 tank.

CHAIRMAN MORELOCK: Well, it's not on my agenda. We can put them on there.

MR. HENRY: Mr. Chairman, do we

need to amend the agenda based on that?

CHAIRMAN MORELOCK: Yes, we do. So what items are we adding and what are we adding them to?

MR. HICKERSON: This is just -- basically, this was a CO2 incident. It's kind of outside of the boiler proper, but they wanted to have it addressed. And he has an NBIC code to reference.

CHAIRMAN MORELOCK: So, I mean, is this a discussion item or an action item?

MR. HICKERSON: Just a discussion item.

CHAIRMAN MORELOCK: Okay. All right. All right. So that's CO2.

MR. LASHLEY: MAPCO?

MR. HICKERSON: Yes.

CHAIRMAN MORELOCK: MAPCO. Okay.

MR. HICKERSON: And then I was going to, if we had time, to discuss repair licensee, what the expectation was on that.

CHAIRMAN MORELOCK: Okay. All right. And repair licenses. Okay. All right.

MS. IRION: Mr. Chairman, the

information in front of you with the photographs is for this open discussion item, that I placed by you. That extra information that Micah has, that is what this is for.

CHAIRMAN MORELOCK: Okay. All right. I'll tell you what. Let's take a 10-minute break. I'm sure you would like to take one. Let me get my agenda straightened up, and we'll reconvene.

(Recess observed.)

CHAIRMAN MORELOCK: Okay. We'll reconvene.

And we are going to work on some open discussion items. The first will be the CO2.

MR. EDWARDS: And I'm assuming that we have made the changes to the agenda to allow for it?

MS. IRION: Yes.

CHAIRMAN MORELOCK: Yes.

MR. EDWARDS: Okay.

Mr. Chairman and the Board, thank you for allowing me to visit with you today. My name is Mark Edwards, and I'm with XXL Boiler & Property Consulting.

And what I'm here to discuss is an

incident that occurred back in early August of this year at a MAPCO convenience store. What had happened is -- liquid carbon dioxide storage vessel is how they're referred to in the NBIC. So if -- from here, if we could call it a CO2 tank for ease of conversation.

A CO2 tank and the associated syrup rack was located inside a storage room. And their office for this MAPCO is in this same little room. One of their employees, what she was doing, I didn't ask. How a leak occurred, I didn't ask. But being in the same room and gas detection system being in that room, when the alarm sounded, the employee exited. And when she got out to the main part of the convenience store, due to inhalation, she had passed out and was taken to the hospital, and they determined that it was CO2 engulfment that had caused the problem with the young lady passing out.

And it was probably the next day or two days later, I was at, again, another MAPCO. Both of these, coincidentally, were in Murfreesboro. But the second one, I walked in, and the CO2 detection system was reading 2500 parts per million, which is below the

5000 parts per million threshold for the low-level alarm. But because -- what we are typically seeing is somewhere between 5- to 600 ppm indoors. Any quick Google search will say that a thousand is not out of the ordinary. So if I'm seeing 5- to 600, I'll see that as normal.

But when I saw that reading, the door to the same room, same kind of setup, was closed. When I left the door open, you could visibly see the levels going down. And it was slow, of course, to happen, but closed the door back and watched the levels go back up to about 2500.

I notified the store that you have an indication of a leak, and we need to notify your gas supplier and your vendor for your syrup rack and, you know, the person responsible for that maintenance.

They did come out the same day, found a leak that was on the syrup rack. The most common places that we're finding leaks to occur is on these syrup racks at the little plastic connections where the piping is on the pumps or other kind of plastic connections. That's the most common places that we're seeing leaks.

Now, I have seen several leaks on --

just, you know, listening to it. From an inspection, you can hear it from the tank in some cases. That's not normal. Again, the normal location is on the syrup racks.

So my concern is where we are installing the gas detection systems. National Board Inspection Code that I printed out here for everyone, supplement 3.4 addresses gas detection systems. And it is followed up also in NBIC Part 2 for a gas detection system in Supplement 12.5. And they read exactly the same.

The first location that they're saying that they shall be provided is in the room or area where the container systems are filled and used. And there's absolutely no one that I've spoke with in the inspection industry that would say otherwise.

And if we could look at the very first picture there, what we're seeing is a typical installation of where the CO2 tank is located. We see on the bottom left of that is a little white box with a blue face to it. And that is the detector, the sensor. It's located, by code, about 12 inches to the left of that tank, sitting right beside it. Just a little to the left on the

wall.

Right there. Yes, ma'am. Thank you very much.

As is indicated there, that sensor is located in the proper location by what the code addresses, that it's about 12 inches from the floor, in the area where the tank is used and filled. It's not uncommon for us to see --

Ma'am, if you wouldn't mind, to change to the second picture.

And this is a syrup rack at that same facility, where it's across the hall, in a separate room. And there is no sensor located in this room, which, while the same, is that this is not an uncommon place for a leak to occur.

And this is where I come into the second part of this. That's highlighted in both Supplement 3 and Supplement 12, where it says, "It's filled and used," comma, "and in areas where the heavier-than-air gas can accumulate," comma, "including below-grade, enclosed, or confined space outdoor locations."

No one ever, that I've spoke with that do an in-service inspection -- if there's a tank located, say, at the top of the stairs, everyone's

general consensus is that the sensor must be located at the bottom of the stairs, down in a basement or a low-lying area, something of that typical situation. But no one that I've spoke with believes that this location, and specifically in this example, where it should be located.

And in my opinion, I think that situation where the young lady was working, also in a MAPCO location, a couple days later where I did see that there was a leak, I think we were very fortunate to come across the leak itself, that they were together and that this young lady was able to exit the room without a fatality. And luckily, the system, as designed, was operating properly. She was able to exit before any, I guess, more issues occurred.

So what I'm asking is -- maybe one other area I would like for the -- you-all to consider is installation in the system description. Again, it does talk about the liquid carbon dioxide beverage system, including the liquid carbon dioxide storage vessel, parentheses, tank, and associated subsystem circuits, dash, liquid carbon dioxide-filled circuit, comma, and associated subsystem circuits and pressure relief vent line

circuits.

So my question here that I'm asking for you guys to consider is the NBIC Part 1 and Part 2 where it's addressing other areas from the tank and the system description where it's talking about other subcomponents, are we talking about areas such as a separate room, these beverage, these syrup racks? Because that's not a common -- that's not a place right now that's being required, during in-service inspections, for a sensor to be located. But I'm thinking that it should be.

So, and I would certainly invite and ask if you guys have any questions.

CHAIRMAN MORELOCK: Well, what I would say is -- and Mr. Toth may help me get my dates right. But there was a fatality in a McDonald's in Arizona, I think. And there was a fatality, and the National Board Inspection Code, Gary Scribner, took it upon the NBIC to go investigate that and see what happened and put words into the NBIC to improve this situation.

So bringing it to the Board is great. But my recommendation is you can participate in the NBIC even as a visitor. Their next meeting

will be in Charlotte in January. And you can take this and actually talk to the people who author the book and share your -- what you're seeing. And that could effect change to those paragraphs that you have shared with us to help not just the state of Tennessee but everybody that uses the National Board Inspection Code.

MR. EDWARDS: Yes, sir.

CHAIRMAN MORELOCK: Or you could reach out to Gary Scribner at the National Board and talk to him or email him or whatever.

MR. EDWARDS: Yes, sir.

MR. TOTH: No, I agree. Mr. Edwards and I discussed it before we came back from break.

My recommendation would be to look for an interpretation from NBIC as to the subsection subsystems, get an understanding of what that entails. I love the safety consciousness that you have. I think this may be a system that's outside of the scope. But I think that's your first step, is to get that interpretation.

Venus Newton serves with us on the NBIC. He can put it forth and have it set up and

be addressed. If we feel like it's something that's extremely needed before the January meeting, you can always convince him to put in an interpretation and do a letter ballot to the membership, and -- if it's something that we feel that it's pertinent to get done before January.

MR. EDWARDS: Yes, sir.

MR. MATUE: Branden Matue, FM Global.

Would this be more of a fire marshal issue? Because as a Nashville boiler inspector, we're looking at vessels. We don't have to follow out the whole CO2 lines and inspect everything in the restaurant. That'd even go beyond our scope or expertise, but it's far more to require a marshal then as carbon monoxide detectors used to be, years back, that'd be out of our wheelhouse.

MR. EDWARDS: I'm glad he asked the question, because the same has been spoken to me. And if the wording -- the way the National Board Inspection Code and the way the International Fire Codes are written is exactly the same; where a gas detection system should be used, it's exactly the same.

Their interpretation of how this is

written is that it is in more than one location. And because it's written the exact same way is why the question comes up to begin with. If our codes are written exactly the same and they've got an interpretation that it does include examples such as this, then the way the National Board Inspection Code -- if it was not intended for that scope, then it's certainly written improperly. An interpretation should be considered by the National Board. And I certainly do not disagree with that whatsoever, and it is the intention to address that.

Mr. Toth and I also discussed that there's two major suppliers of carbon dioxide that we do inspections for. And I do roughly -- Ms. Irion receives all of those inspection reports from me, and she issues the new tags for all of these vessels that we see monthly. I do about 200 of these inspections per month.

CHAIRMAN MORELOCK: Wow.

MR. EDWARDS: And so between now and the time that the National Board is going to meet, I'll do roughly 800 more inspections. In fact, I have about a dozen or 14 scheduled today to take a look at, which is not uncommon, anywhere

from 14 to 16 when I'm doing carbon dioxide inspections.

So we're looking at about a thousand inspections that I'm doing alone. And that's typical numbers with our other two inspectors that are located in Memphis and Knoxville. So our company alone, in the next four to five months, will do about 3,000 inspections. The ratio of how many are to this situation and how many of those are together, I wouldn't have a clue how to give you even a guess on that.

MR. LASHLEY: And these are the ones that are mounted externally?

MR. EDWARDS: The tanks are located outside?

MR. LASHLEY: Right.

MR. EDWARDS: Yes, sir. Yes, sir. NBIC Part 1 does say -- and it uses the word "should," that the tank should be installed outside.

It's something Mr. Toth and I did discuss as well, is that -- from my understanding from talking to business owners, that there's some municipalities that require the tank to be installed indoors or that it can't be outside.

And how that municipality writes that particular code, I don't know. We don't inspect to it. So I wouldn't be able to address that at all.

But yes, there are plenty that are outside. And I would say -- if I were to put kind of a guess on that, I would say it's about 30, maybe 40 percent. I'm looking at roughly two out of every five is outside and probably three out of five are inside installations.

MR. LASHLEY: Sounds about right.

MR. EDWARDS: Yeah.

MR. BAUGHMAN: So presently, the way the NBIC Part 1 is written, under S3.4 and highlighted, is that a continuous gas detection system shall be provided in the room or area where container systems are filled or used and in areas where the heavier-than-gas -- heavier-than-air gas can accumulate.

So it's already written in code to cover these areas, like the syrup or similar areas because that is where -- an area that this gas can accumulate. So it's not specific to being just at the tank. It can be at areas that are found or interpreted for it to accumulate. So that's

already in place. And the question then comes, is how that's inspected and enforced, then; is that correct?

MR. EDWARDS: I'm glad you asked the question because that's my question.

I'm sorry. What was your name again?

MR. MATUE: Branden. Branden.

MR. EDWARDS: Branden from Factory Mutual says with his statement --

And I don't want to put words in your mouth. Please tell me if I'm wrong.

MR. MATUE: I just don't see the point. I mean, I get what you're saying. We'll be chasing around, inspecting the whole system instead of the actual pressure vessel. We're inspecting the system at that point, right? Making sure they have the right sensors throughout the system, the right alarms throughout the different rooms that could have them.

And this would be something -- this is small. What about a bigger facility? I mean, at what point -- the National Board says we have to do it. Just, to me, it seems like it's outside the scope of a pressure vessel. You have an actual fire marshal-type system.

MR. EDWARDS: And that's exactly, I think, where the question just came from, from --

Mr. Baughman?

MR. BAUGHMAN: Yes, sir.

MR. EDWARDS: I think that was where his question was.

I believe, in my opinion, not my interpretation but my opinion, and of course, my opinion is why I'm here, is that if it was only the tank, what you're talking about, if it was only the tank, and anything other than that is outside the scope, there should be a period there instead of a comma, with the word "and" in areas where heavier-than-air gas, comma, including below-grade.

So I think when we have the comma instead of a period, the "and" and then the word "including," it means addition. It doesn't mean -- and it doesn't stop at the tank. It's just the way it's written.

And so when I go do these inspections this afternoon, it's going to be under the premise of what is the general consensus, is that as long as they have that sensor located at that tank,

that's operational, and that it's located, you know, 12 inches from the floor, typical to what we saw, that I would say yes on could it be issued a certificate.

It is in my heart that that answer should be no, because of the comma, with addition to the word "and." But as to not be someone that's causing hate and discontent or someone that's trying to set, I guess, code by inspection, I think that would be wrong of me to do that, to say no on those without other people having some influence on that decision.

So my inclination, even today after this meeting, without any other direction, I would say this situation, I would say yes, that it could have a certificate. But in my heart, I believe it should be no.

And it all goes back to the reason. If it wasn't for the way it was -- the code was written in Part 1 and Part 2, to follow along with International Fire Codes, and what their decision is on where these sensing points should be located, that a change needs to be made by the NBIC, the National Board. But by reference, we've adopted this code. And so, like I said, our

company alone has 3,000 inspections that's going to occur before.

So gentlemen, I don't know how to really -- other than to ask maybe for a conversation, for a decision, and maybe to include the Chief and Assistant Chief, deputy inspectors. Other people, of course, including Mr. Toth.

MR. TOTH: If I may, Mr. Chairman.

CHAIRMAN MORELOCK: Yes.

MR. TOTH: Again, I'm going to reiterate. Your best course of action here would be to bring that to the NBIC in the way of interpretation, because that's the code that we write. Okay? And you have a lot of individuals, volunteers such as Mr. Morelock and myself, that sit on those committees that will work diligently to get an answer back.

We've got to also -- one other thing, and I want to give you an example here. We address carbon monoxide detectors as well in the NBIC, which we've put into place here in Tennessee. It would be the same kind of thing, of saying, okay, well, we have a stack that runs through multiple stories of a plant. Are we going

to have carbon monoxide detectors as -- you know, go all three multiple stories? We wouldn't because there's an area where the vessel is located, is what the NBIC is looking at.

I agree with you about the verbiage coming from another code. Have you had an opportunity to go to a fire marshal and ask them how they enforce that?

MR. EDWARDS: I did not. I can tell you that based on what I'm seeing in our normal inspections day to day, I do not believe it to be addressed by any fire marshal, based on the number of violations that we're seeing every day.

MR. TOTH: Interpretation is your best bet, and I'll be more than happy to work with you and work with Venus and get a resolution for that.

MR. EDWARDS: Okay.

CHAIRMAN MORELOCK: Yes.

MR. BAUGHMAN: So for discussion, that takes a period of time for that to occur, and what we've got is a code that's written and adopted presently, and the verbiage is in front of us, and the last thing we want is to have a death or injury on our watch.

MR. EDWARDS: Yes, sir.

MR. BAUGHMAN: That's the whole reason why we're here, is safety.

And so my question for discussion, then, comes up, is, what do we do in the meantime that this interpretation gets addressed and written and talked about, voted on and so forth? As we've got it, you've already encountered incidences, so we know that that potential exists.

So instead of kicking the can around and going, well, is it between us or is it between a fire marshal, what should we do in the meantime to address this immediate issue until some other resolution comes about? I just don't want to -- I don't want to leave that potential for injury or death to be out there because we're waiting on a change of a comma or a period.

MR. EDWARDS: Thank you. Yes, sir. Thank you. And that's what I'm kind of asking of the Board.

MR. BAUGHMAN: Okay.

MR. HENRY: Mr. Edwards, first of all, I applaud you for bringing this to our attention. In my mind --

And Mr. Toth, with all due respect, the wording is already clear about what should be done.

I agree with you. You should answer no, as far as giving the approval on these things. It's in black and white already.

Now, what's going to happen is you're going to get pushback from the people that -- who don't get their licenses in this particular case, and that will be a vehicle to bring this to the surface and, hopefully, get a resolution that's an issue what standpoint is -- will hold. But you've got the -- in my opinion, you've got the ammunition right now to do what you already know is the right course of action.

MR. EDWARDS: Yes, sir. And I appreciate you saying so. To believe -- and I don't know. Maybe the word -- I don't want to use the word "ammunition." But to have a written code -- I also want to make sure that I have the support of the Boiler Board as well as the Chief before those kind of recommendations are made.

MR. HENRY: Well, I guess I would come from the standpoint of I'd want somebody to explain to me, how it's currently

worded would mean that you don't have to address that. Because I don't see it.

MR. EDWARDS: Yes, sir. Thank you.

MR. LASHLEY: And I'll add and kind of piggy-back on Mr. Henry's comments is, you know, as -- coming from the insurance side, if I were to see this recommendation, violation, however you issued it, I would stand behind it as well, strictly from your position with insurance. You know, you can go in and also, you know, add good engineering practices on top of what you're seeing.

MR. EDWARDS: Thank you.

MR. HENRY: Mr. Chairman, I don't know if this is appropriate or not, but could we take a vote on the sentiment of the Board in terms of -- I'm not sure quite how to word this, but in support of Mr. Edwards' position?

CHAIRMAN MORELOCK: I think that's possible. But I think what you said in your beginning statement is the words are already there to empower you to do your job. And so if you're getting pushback, then you come back and say, well, you know, you are not following what is

recommended or required in the NBIC. And we adopt the NBIC, so you're violating Tennessee law when you don't use it.

MR. BAUGHMAN: One other comment I would make, and it kind of gets back to Mr. Matue's, is -- so this is a fairly black-and-white type of scenario, tanks in one room, syrup rack in another, versus somewhere where it travels some distance, whether it be in a factory or be in a hospital environment, whatever it may be, that gets beyond, necessarily, the expertise of the inspector also to determine where these areas of congregation may be of these gases.

And so at some point, recommendation then comes of having an analysis done by a competent individual or company to determine where these points of contention may exist. But, you know, once those are identified, then it's easy enough to go through and hit those points of inspection versus asking an inspector to track the whole system down. That's not able to be done.

So where those systems exist, that go through multiple areas, I think that it's within the realm of the inspector or the company to ask for somebody to do an analysis to be able to

identify these points. But as Mr. Henry had said, and Mr. Lashley, the wording is already there.

MR. HENRY: My concern is that if there is a general practice that does not adhere to the wording right now, that if Mr. Edwards tries to enforce that on his own, he's going to suffer consequences related to that from, amongst others, the wrath of some of these convenience store owners who aren't going to be given permission to.

MR. MAY: But aren't you saying there's offices that's where the employees take a break and, you know, there's closed rooms as well?

MR. EDWARDS: Yes.

MR. MAY: Needs to be addressed under the word "safety." You need to push back on those.

MR. HENRY: I'm just suggesting that maybe a vote to -- just to indicate that we support Mr. Edwards' interpretation of this could help him in some circumstances where he may be unfairly penalized for doing his job.

CHAIRMAN MORELOCK: Yes, sir.

MR. MATUE: So as an inspector, we need to clarify. So these factories, they're

all going to have violations. I mean, they're all going to have them. So we don't withhold permits and all of that, the things that they have until they can do these analyses, because these are like little gas stations. Like, you're talking about big hospitals, big factories that we inspect. They have direct violations; do an analysis on it. If the Board wants us to do it, that's great. I just have to know that's where we want to be with it, if that makes sense.

CHAIRMAN MORELOCK: Mr. Toth.

MR. TOTH: One of the things -- when we created the installation permit application, we took into consideration vessels of lethal service. Something that the Board can consider is categorizing these as something of lethal service, and where they're required to put in a permit and identify the location within the facility, and the Chief Inspector or his designee could dictate that it's in an unsafe condition, such as an office occupied, so on, so forth. Again, you're going to go down a rabbit hole if we start asking -- you start asking inspectors to chase down CO2 lines.

MR. EDWARDS: I don't disagree.

MR. TOTH: So that's -- you know, that's a thought there about the permitting.

MR. EDWARDS: I don't disagree at all. I think it is going to be --

MR. TOTH: Huh?

MR. EDWARDS: I don't disagree at all. I think it is going to be an industry kind of hardship. I think the majority of the systems that we're seeing, though, is the smaller applications. Of course, every hospital is going to have these systems. Other, manufacturing, they use these kind of systems.

And I understand that -- I also think that the way it's written, we're not addressing, even in code, every inch of piping that's throughout the facility. It's where the points of where the leak could occur with accumulation of gas heavier than air.

And it's going to -- it will make sense to put a sensor at that particular location. To put a sensor when something is run through the overhead. Even in these restaurant facilities, putting a sensor inside a ceiling. That question has been asked to me as well.

I do think it's outside the scope of

our inspection, but I also believe that if there is a leak in that piping, that we're going to see it where it's going to be monitored at a location such as that syrup rack and at the tank itself.

CHAIRMAN MORELOCK: Mr. Toth.

MR. TOTH: Can I get one -- and I'm sorry for discussing this, but during my tenure as Chief Inspector, we did have an incident of one of these units leaking. It was in the state of Tennessee, but it was in a restaurant. The leak then caused an accumulation in a restroom. And in that restroom, that's when they found individuals that had succumbed and died. So take that into consideration when we start thinking about where you're going to be putting detectors.

MR. EDWARDS: Was a gas detection system used with that --

MR. TOTH: Well, now, let's remember, this was my tenure.

MR. EDWARDS: Yes, sir.

MR. TOTH: I left the Chief Inspector back in 2008 and we had just started inspecting these things.

CHAIRMAN MORELOCK: Right.

MR. TOTH: So there was no detector requirements at that time. But remember, we're talking about, it accumulated in a bathroom.

MR. EDWARDS: Yes, sir.

MR. TOTH: Not where the vessel was located at.

CHAIRMAN MORELOCK: Right.

MR. EDWARDS: And I'm aware of this particular incident. If the detection system wasn't used, I'm under the assumption that it would have been used to today's code. Would it have been --

MR. TOTH: I don't know.

MR. EDWARDS: Exactly.

MR. TOTH: But it accumulated in the restroom.

MR. EDWARDS: Where did the leak propagate?

MR. TOTH: In the piping, going through the ceiling. The design went through the ceiling, across, into the restaurant and went into the serve stations. So it's completely in a different direction because it was retrofit. So then it leaked. There's a leak in the line and the connection went down, went into the restroom

that was closed up, accumulated in the restroom. Individual went in there and succumbed.

CHAIRMAN MORELOCK: And I don't know if it would be helpful, but the Chemical Safety Board, they investigate such things, and then they publish information, even a reenactment of what happened. And I'm pretty sure there's one in there that was a convenience store where the CO2 tanks were just right outside a part of the store and CO2 got into the store. I don't know if that resource would help educate the people that you're inspecting.

And while you're asking this, along with you've got black-and-white words that say you need to do this, and you've got the force of the State of Tennessee, they adopt ASME and National Board, so you've got that at your -- you know, to make your point. Not to, you know, put somebody in financial hardship or whatever. You're saving people's lives, and that's why it's in there.

MR. EDWARDS: The cost of the sensor is over $200, under $300. The cost of a full system, we're seeing at about $600, $595, depending on the system and what it has associated with it. And that's from three different

companies that we're seeing their systems used in the majority of the places that I go to. I'll say probably in excess of 95 percent of seeing three different detection systems. The little sensor, that's -- it's under $300, like I'm saying.

MR. BAUGHMAN: So let's say that you go out and write up a violation. You give them X amount of time to correct that violation. If there's a leak, that gets addressed immediately. There's no wait time since it could cause death or injury. What's the lead time on these devices? How readily available are they?

I guess what I'm getting at, if you write a violation, you say you've got to take care of it within a four-week period of time. Are these available within that? And I don't know.

MR. EDWARDS: They are. If -- the two major suppliers that we inspect for, they have those on hand, and they've installed more than I can count of these systems all the time.

MR. BAUGHMAN: Okay.

MR. MATUE: What about survey? Is there a company that do surveys and stuff, because it would include that too. The survey times to see what they need, when they need, for

exempt. I know we're talking about a little gas station, but I do a lot of factories. And so the violation, it's going to take a lot of time to go through that whole system and -- which is fine, but is there a company that are -- is there a list of companies that come out and do that for them, asking for that, a list of companies that will come out and do that, surveys for them?

MR. EDWARDS: That, I don't know.

MS. XIXIS: And that's my question. Have you talked to the Grocers Association, Convenience Store Association, and the Hospitality Association? Because most of these people do not own this equipment either. They rent it and have maintenance plans, and those folks are supposed to be checking for the hosing and all the different compartments where there's other leak opportunities. So I wonder if there's not part of a bigger conversation here that we're missing. Because I think all those folks would want to protect their employees.

MR. EDWARDS: She's correct. The majority of the people that we are inspecting, again, they are convenience stores, restaurants,

that kind of -- and because the tanks are owned not by the facility; they're owned by the gas supplier, we're doing the inspection for the gas supplier. And the certificates, everything, recommendations, go to the gas supplier. Because of the way code is written, the -- of who owns the equipment, the inspection recommendations, violations, all of that, goes to the supplier.

Now, if we were inspecting for, let's say, ABC Convenience Store, if we're doing the inspection for ABC Convenience Store or one of the manufacturing facilities that you mentioned, now the inspection is for that particular customer, and my recommendations or violations would go to that particular customer, again, because that's the way the NBIC is written. We have to provide the communication and violations to whom our customer is.

And the Grocers Association and these people that you're talking about, she's correct. And it's usually by contract, that the gas supplier or the end user --

MS. XIXIS: Either IWC or whether it's, you know, one of the big soda companies, that they actually own the equipment

and do all the maintenance and have contracts with all these folks. So there's some contractual issues as well, I would think, that are -- need to be reviewed as a part of this before you-all make a decision.

MR. EDWARDS: And I can appreciate exactly what you're saying. By code. The conversation, recommendations, violations, everything, by code, has to go to whom we're doing the inspections for. And if we are doing the inspections for ABC gas station, then it would make valid exactly what she's saying. I don't do the inspections for those people. I don't even know the numbers of these particular locations that own their own. Their -- ma'am?

MS. XIXIS: I would say there's half a million soda machines out there easily.

MR. EDWARDS: Oh, I don't doubt that at all.

Now, the difference is, a lot of these places may be using the DOT-style CO2 tanks as well that's outside the bulk storage. There's a lot of places that I go to that -- I go to do a reinspection of a bulk storage tank similar to what we see there, and they've removed that

because of inspection requirements and they started using the small DOT-style cylinders that we see all over the place.

MR. BAUGHMAN: Which are exempt; is that correct?

MR. HICKERSON: Yes.

MR. EDWARDS: They are exempt.

MR. BAUGHMAN: But the syrup rack, it would still -- well, again, so you still have -- those tanks are exempt, but the code still relates to any other place, as far as the NBIC and that supplement under the -- and in areas where heavier-than-air gas can accumulate. So it doesn't exempt, necessarily, that sensor being installed somewhere else outside of the tank location.

MR. EDWARDS: If one of them is using the DOT-style tank, I do think it -- well, I know for a fact at that point, my inspection is complete because I'm not doing an inspection for the facility. I'm doing the inspection for -- and I'll go ahead and say it. It's NuCO and Aerogas. I'll be specific on that. I'm doing the inspections for them.

There's other large suppliers in the

area. We have Volunteer Welding that does quite a few CO2 tanks as well. So if they're using the DOT-style cylinders, it's outside our inspection scope.

CHAIRMAN MORELOCK: Mr. Herrod?

MR. HERROD: Yeah. I'm going to suggest that we -- if you give us time, the Boiler Unit time to make some contacts with the various agencies, departments, people involved in this, and perhaps have a subcommittee meeting here in a couple three weeks, maybe next month.

CHAIRMAN MORELOCK: Okay.

MR. HERROD: And then get all -- this open discussion is going to be open for a while here, I think, unless we get some real clarification. So if you give us time to sort that out, and we can see about a subcommittee meeting. Would that be good?

CHAIRMAN MORELOCK: And while you're gathering data, the National Board has a form for all the chiefs. And you can poll the other chiefs in the other states and see what -- you know, are they wrestling with this as well? And if they're not, you know, what have they done to be successful for compliance? Get some

information to bring to the table for the Boiler Unit as well.

MR. HERROD: Okay.

MR. EDWARDS: If I could ask, if that's going to happen, the conversations that I've had with some people, they've not looked at the code and read the code while we've had the conversation.

What's typical is that when you ask for that conversation, they'll have that conversation based on, well, I remember I was on that committee or that's not what -- the spirit of what we were trying to do.

And if someone's recollection of spirit or what they believe the intent was, it's got to be what's written in black and white. So the conversation must be -- in my opinion, the conversation must be what's written.

MR. HERROD: Yes, sir. That's what we'll do. We'll make sure it's code, exactly what's in black and white, what other jurisdictions are doing throughout the country, have done.

CHAIRMAN MORELOCK: And the thing is, these documents are living documents. I

mean, they're always being revised and updated. And so -- and you can attend these meetings as a visitor. You can submit an interpretation. You can write those paragraphs and say, I think this ought to be added to it. And that's what Mr. Toth was recommending. And you send that in to National Board as a request for interpretation. Or a revision to that paragraph, and they will take that and review that.

MR. EDWARDS: Yes, sir.

CHAIRMAN MORELOCK: So, but I really like what Mr. Henry brought to the table, is that you have the words you need to enforce that today. And if people want to dispute that, I mean, they can do that, but at the end of the day, it's black and white. You have -- you're empowered to use that to make that safe for people.

And then if you get pushback, you know, I don't know -- I mean, all we can do is just utilize the words that we have. Sure, I'm sure they could be written better, but that's an ongoing consensus process to make that -- those codes and standards better.

MR. EDWARDS: Yes, sir.

CHAIRMAN MORELOCK: And so, I mean, if I was you, if you've got something enforceable today, enforce it. They may not like it, but you're doing your job.

And if it gets elevated, it's going to come to the standpoint, the State of Tennessee has adopted these, and these documents, ASME and National Board, are just good technical information until a state or a province says, hey, we're going to write this into our law. Then it has teeth. It's got consequences if you don't follow it. And you've got that here in Tennessee.

MR. EDWARDS: Yes, sir.

MR. BAUGHMAN: And the liability also of, if you don't enforce what's in writing, and there is an injury or death, somebody comes back and says, why wasn't this addressed? Why didn't you, the inspector, anybody, bring this up to our attention? You know, and let alone, we all want to sleep well at night and know that we've done what we can for our fellow brothers and sisters, so...

MR. EDWARDS: Gentlemen, I really appreciate you taking the time to hear everything, and your conversation and comments.

Thank you very much.

MR. HENRY: Thank you.

CHAIRMAN MORELOCK: Thank you for bringing it to the Board.

MR. HENRY: Appreciate it.

MR. HICKERSON: I've got one quick question, Chairman.

CHAIRMAN MORELOCK: Yes, sir.

MR. HICKERSON: With that being said, about you wanting to have a company come in to say where the accumulation could be, in the meantime, until something is decided, could it be, you know, inspector discretion to say, at the end of the line, at the syrup tanks, that's where it needs to be, something along those lines as well?

CHAIRMAN MORELOCK: I mean, you've got the words to do that, yeah. I mean, you-all have -- you-all could pick that book up and use it. It's not just exclusive to a commissioned inspector.

MR. HENRY: I think to your point, there are some -- in the example, Mr. Edwards just brought it to our attention -- are so obvious that I don't think anybody would question it.

CHAIRMAN MORELOCK: Right. Right.

MR. HENRY: Now, there may be other areas where, as Mr. Toth pointed out, it's less obvious. There may be some study required, and then you take that into account when you're doing your evaluation. But this is black and white. Nobody can argue with this.

CHAIRMAN MORELOCK: Well, I mean, it's just -- you know, a few years ago, there was a big push to change your fire detectors and CO monitors in your house. And I did. I mean, my family is important. So I've got CO monitors and 10-year smoke detectors in my house.

And so this is kind of a similar thing. I mean, you've got black-and-white words. You're doing your job. And, you know, if it's cost or whatever, safety, you know, comes before all that. So if you're not comfortable with it, then say, you know, this is not acceptable.

I'm not saying that's easy. I know you're going to be -- that creates a lot of pressure.

MR. EDWARDS: Right. Yes, sir. It does.

CHAIRMAN MORELOCK: It does. It does.

MR. EDWARDS: Thank you.

MR. BAUGHMAN: It's the right thing to do.

CHAIRMAN MORELOCK: It is. It is.

MR. BAUGHMAN: Thank you, Mr. Edwards.

CHAIRMAN MORELOCK: Good discussion.

MR. BAUGHMAN: It was a good discussion.

CHAIRMAN MORELOCK: Okay. Let's see. Repair license.

MR. HICKERSON: Are you ready, Chairman?

CHAIRMAN MORELOCK: Yes, sir.

MR. HICKERSON: So what I was going to have an open discussion about is, for me, there was a lot of confusion on what's to be expected with a repair license; you know, being brand new repair license, renewals, emergency cases, and such forth. And so I was just trying to see what the expectation was, what they need to

look forward to from here forward, just so everybody is on the same page with it.

I do know, for example, after the agenda was created, there was a new license that was put in, but he wouldn't have been able to be here today because of that.

CHAIRMAN MORELOCK: Well, we used to have -- the Chair used to sign these. And I'll sign this one today because that's what we've agreed to do, or initial it. And I'll have to do some -- dig through the minutes, but there was an action taken to let the Boiler Unit handle that initial because the Board only meets quarterly.

And so then we stopped doing that, and now we're doing it again. Do I mind doing that? Not a bit. I don't have a problem with that. But if tomorrow somebody needs one, they're going to have to wait until December to get it approved. So I'm not opposed of the Boiler Unit having what they need to initial that. I'm not against it because it's just not practical for somebody to have to maybe wait a quarter of the year to get that signed off.

So like I said, we did initial them years ago. Then we went away from it and let the

Boiler Unit handle that. And then here of late, there was a push to have us to -- you know, we can read them, but there's a lot of ways we can skin this cat.

And so it could be something simple as, as you get one -- and Mr. Bailey can make sure I don't step over my bounds here. But we can have a called board meeting just for that and voice our approval of that, and then let the Boiler Unit initial it if it's going to be a hardship for them to wait until the next board meeting.

Mr. Toth?

MR. TOTH: Just to give my two cents on this. As you said, years ago, how we used to handle it. Emergency issuance is not a new thing.

CHAIRMAN MORELOCK: Right.

MR. TOTH: We did it back during my tenure. Mostly, what it was, is the Chief inspector receives the application, verifies that they have the applicable certificate of authorization from either the ASME or National Board, make sure that we have a copy of the quality control manual on file.

And if it's a situation where they

have a repair coming up that is an emergency situation, the Chief gives that tentative approval, and then it becomes formal when we presented it. And when it was presented -- the application didn't go out with the regular packet. Okay? It was presented at the meeting. And the board members would just simply flip through it, take a look, because they entrusted the fact that the Chief Inspector had looked at it.

I've been wondering over the years, as an attendee, that I had not seen licenses, but now it makes sense how you've been handling it, so...

And also, the applicant usually never came to the meeting, if you recall.

CHAIRMAN MORELOCK: That's true.

MR. TOTH: Yeah, so...

MR. BAUGHMAN: So as an application would come in, and if it's not coming before the Board, it would come in to the Boiler Unit. Then it's the responsibility, then, for that to go through the Chief's desk, come across the Chief, have him look at it, or Chief's designee, I would take it. But ultimately, the Chief is the one that's looking at this, since

it's technical-oriented and so forth; is that right?

MR. HICKERSON: Right.

MR. BAUGHMAN: Okay. So that's the -- and I'm just getting in my mind the protocol because I don't know the protocol.

MR. TOTH: And Mr. Baughman, that's a really good point. And the reason it came back to the Board is because, at that time, it possessed the signature of the Chairman. And so in that case there, the Board saw it because it had the Chairman's signature. Again, I'm not privy to if that has since changed. That's just kind of one of the reasons why it was presented --

MR. BAUGHMAN: Okay.

MR. TOTH: -- back then.

MR. BAUGHMAN: So I guess my question would be, coming up, if we don't have a sitting chief and we've got something that comes up, then what would be the protocol, just for my own end of things?

MR. HERROD: We'll have an acting chief.

MR. BAUGHMAN: We'll have an acting chief. Okay. So just as long as -- I'm

just trying to get my mind how things would go along that line. Okay.

MR. HICKERSON: And I would assume, if he was out of office, then it would be the next commissioned inspector.

MR. BAUGHMAN: Okay.

MR. HICKERSON: You know, his designee.

MR. BAUGHMAN: Okay. All right. I understand. Thank you.

CHAIRMAN MORELOCK: Okay.

MR. BAUGHMAN: Makes sense.

MS. IRION: If I can speak --

CHAIRMAN MORELOCK: Yes.

MS. IRION: -- from the admin side of the repair licenses.

Previously, we would -- if we got a new repair license, we would just give it to our chief, and he looked through them; yes, no.

As being part of the admin staff, Mia-Lyn as well, we know what to look for. We don't know the technical ins and outs of it, but we know, hey, if they marked this, it has to have an R-stamp. If they marked this, it has to have, you know, ASME certifications. We know that it

has to have a QC manual on file, that type of thing. So it was kind of put in our hands, especially -- renewals, we know what it is. You pay your fee. We're putting it through.

As far as the new ones, the Chief would look at them. We did not present these to the Board. Honestly, presenting them to the Board requires a lot more time and effort on our side and on your side. So without a -- I guess I'm just trying to figure out the best way to get these through for our customer's sake, for our admin's sake, and for the Board's sake as well, that we're putting them through efficiently.

Because like this, it takes -- we've had a couple of different times now where we had to actually send our customer's check back to them. They've sent in their information with their fee and now -- we can't hold on to money, per the state guidelines. We can't hold on to checks.

So now, for example, this -- these folks that are here today have paid, but now we have to send that money back to them. Now it takes another time for them to send us money again before we can process.

So I just kind of wanted to give you our -- the admin side of it that you don't normally see. So it can create a burden to our customers, for all of this waiting time.

MR. HICKERSON: And what I've done since then is I review all the renewals and approve them. Because with TCA, it does say any application goes through the Chief or the Chief's designee.

MR. BAUGHMAN: New or renewal?

MR. HICKERSON: It doesn't specify. It just says application process.

MR. BAUGHMAN: So by TCA, that's required, that it goes through the Chief's hands or his designee. Okay.

MR. HICKERSON: Which, in my opinion, you know, with the QC manual, you know, commissions from National Board, it would have to be a commissioned inspector, from my opinion. Now, that may be subject to everybody else's.

MR. BAUGHMAN: Okay.

CHAIRMAN MORELOCK: I don't have an issue with that.

MR. BAUGHMAN: And I understand that that's a lot of paperwork going through, but

the protocol is the protocol, especially where it's technical-oriented within our industry. I think that that's a valid protocol for it to be going down.

MS. IRION: Could we send that information as we receive it, in an email to you guys so it's not a board -- I mean, it's not a meeting situation? Like, let's say next week we got two in. We email it over to you guys, and you can approve that without, technically, the meeting? Is that something that can happen or no?

MR. LASHLEY: That's a Mr. Bailey question.

MR. HICKERSON: Are you talking about renewals or brand new ones?

MS. IRION: I'm talking about any of them.

MR. HICKERSON: Well, renewals will go through the Chief, not the Board.

MS. IRION: Right. But like the new ones, does it have to be in a meeting situation? Can it be just an email to our board members, and then they can just approve that at any point, not technically in this setting?

MR. HENRY: Just for my benefit,

do our rules require board approval right now for him, repair licenses?

CHAIRMAN MORELOCK: Well, it was then, and then -- it was handled by the Boiler Unit, and now it's back to me initialing, initializing an approved repair license.

So like the one we voted today, I'm going to initial that before I leave here today.

MR. HENRY: I guess, just for --

CHAIRMAN MORELOCK: Yes.

MR. TOTH: I'm sorry. So as part of the issue that you're running into is the statute, and the statute, 68-122-102, specifically states that the license will be issued by the Board of Boiler Rules. And I think that's why it's always been one that's been presented to the Board.

Now, you can write Board Cases and Board Interpretation -- Mr. Bailey can back me up on this or tell me I'm off. You can write cases and interpretations based on a rule. You cannot write cases and interpretations based on the law.

CHAIRMAN MORELOCK: That's correct.

MR. TOTH: So I'm -- that's just

straight from the law. So take it as you may.

CHAIRMAN MORELOCK: And I don't -- like I said, we would have to dig through the old minutes to see what was voted to -- where the Board Chair did not have to initial those, initialize those. I don't know what was done to -- where it just was the Boiler Unit only. I'm sure it's in the minutes somewhere where we can find it.

MR. BAUGHMAN: So the comment was made that maybe it could be if there's an emergency. And, really, it comes down to emergency. Otherwise, it may be standard protocol to come to the quarterly meeting and review and accept these or deny them, as it may be. And if there's something that comes up, an emergency situation, deal with it in an email or, you know --

CHAIRMAN MORELOCK: Teams meeting.

MR. BAUGHMAN: Teams meeting. Exactly. Thank you.

But yeah. Ultimately, I think the protocol is already set in place for how those get reviewed, looked at, disseminated, signed off on.

If there's minutes to validate what was voted on previously, we can investigate that, find out.

But without that being in place right now, or at least without us having that knowledge, then we go with the standard protocol of what you've got, I think.

MR. HERROD: Mr. Chairman, I think we'll dig through the minutes. We'll find it.

CHAIRMAN MORELOCK: Okay.

MR. HERROD: We'll clean this up, because this is so simple to fix. It's just -- I don't know why we can't fix it and keep it fixed. But we'll find the minutes. We'll find it and interpret what was said, either you or the previous chairman, and get this thing nailed down. Okay?

CHAIRMAN MORELOCK: Yeah. Okay.

MR. HERROD: All right.

MR. BAUGHMAN: Sounds good.

CHAIRMAN MORELOCK: But since we're in the expiration, I will initial this one today before I leave.

All right. Anything else?

(No verbal response.)

CHAIRMAN MORELOCK: Hearing none, I'm going to go to Upcoming 2023 Scheduled Quarterly Meetings.

MR. BAUGHMAN: We've got the Board Case.

CHAIRMAN MORELOCK: Oh, a Board Case. All right.

MR. TOTH: Or you can just agree with everything I put in it and we can go.

MR. BAUGHMAN: We make a motion to deny that request by Mr. Toth.

CHAIRMAN MORELOCK: Board cases. Okay. Yeah. Sorry. I'm looking right at it. You're right.

MR. TOTH: I tried.

CHAIRMAN MORELOCK: So yeah. We're getting ready to look at BC23-01. ECS Consulting, LLC requests a Board Case addressing stop valves to be used in the pressure relief systems of thermal fluid heaters.

So Mr. Toth, take it away.

MR. TOTH: Thank you, Mr. Chairman and Members of the Board. Again, my name is Marty Toth. I'm with ECS Consulting and the Boisco Training Group. I appreciate -- I'll

try to make this as brief as possible.

What we have going on is BC23-01 that was tabled from the last meeting, it was initially assigned to Ultium Cell. I have since worked -- continued my work with Ultium Cell, and I have inherited this BC number.

What we are doing in this case here is instead of Ultium Cell putting in for a variance, which would just apply to Ultium Cell, a BC is going to hold precedence over anyone that would like to fall underneath this Board Case.

What we have is a situation where the ASME code, throughout the ASME code, more specifically -- ASME, American Society of Mechanical Engineers -- for those that are not familiar, Section 1, specifically identifies the -- how should I put it? They do not allow -- do not allow for stop valves to be in the relief path. So in essence, we cannot put a valve on either the inlet or the discharge side of a pressure relief device on a Section 1 boiler.

The issue that we have is, there are some situations, more specifically, in regards to -- of fluid thermal heaters that are not steam units. They are not vapor units. They are units

that are in a liquid phase that an individual would not want to drain the entire system for various reasons.

One of those reasons being the degradation of the medium, the oil in this case, that's inside of it. When it is exposed to the atmosphere, oxygen will degradate the material.

Other situations is the heat that is involved in these systems. For those that are not aware, when we're looking at a steam boiler, a steam boiler is a vapor service. However, you have some occurrences where we will have thermal fluid heaters that allow for the temperatures to be in excess of a flashpoint of water.

So there -- in some cases, such as with Ultium Cell, who is in attendance today just to see how this goes, that would not flash. They are in high temperatures, over 400 degrees, 400-, 500-degree temperatures. By removing the safety valves in current systems, there is potential there for bodily harm.

The one thing that you do see in Section 1, which the 2023 edition of Section 1 does go into allowances where they call it changeover valves. And what that means is, you

would have two relief valves. Okay? Each relief valve on its own would be able to relieve the capacity of the boiler unit.

To allow for that unit to continually operate, you install what's called a changeover valve that allows for the direction to be changed from one relief valve, or safety valve in this case, to the other and allowing for continual operation, okay, without bringing the boiler down.

Now, that is not going to cover in liquid fluid heaters, okay, because there is a new section in Section 1 that refers to PTFHs, which is thermal fluid heaters. And it is new to the code, or was new in 2021 edition that specifically addresses these type of heaters. In the past, they've been built to Section 1 but did not have their own section within the code.

And so Section 1 has chose to create this changeover valve. More specifically, it's going to be in -- I believe it's PG-71, for those code guys that want to look that up. That specifically calls for changeovers, but they exclude liquid fluid heaters.

Now, where am I going with all this is that there have been code allowances put into

ASME in the past that have allowed for stop valves. More specifically, for stop valves that include Section 8, Division 1 vessels, which are your unfired pressure vessels.

Liquid fluid heaters, such as what we're referring to here, can actually be built. They're called direct-fired pressure vessels. They could be built. The vessels at Ultium Cell could have technically been built to Section 8, Division 1 of the ASME code and we wouldn't even be having this discussion. Okay?

But we are, and it needs to be something that I feel that can be addressed, that we can handle this on a broad stroke, that individuals, especially when they go to register or to apply for permit, can be indicated in their permit and we don't have to bring it to the Board every time. And that's what we're trying to do here.

Another thing that makes this different is, as with PG-71 where they refer back to the changeover valves, what they are doing is now saying, hey, we have two valves; each individual one can operate. Well, that's the same thing that we're talking about here. Because at

no time would a steam boiler -- under PG-71, at no time would it not be protected by a safety relief valve.

The same thing would occur under this Board Case because they would, in fact, have to have two relief valves. Each of those -- or more, depending on the size of the unit. Two relief valves or more that can independently relieve the capacity of that thermal fluid heater. All we're doing is setting the boundaries that are identified in Section 13 of the ASME code for pressure relief devices in Appendix B that sets the guidelines for the allowance of this.

And what I have done in the handout that you received -- you received my recommended Board Case submittal, and you also received a copy of Appendix B. Don't tell the ASME or they're going to get me for copyright. The copy of Appendix B that spells out verbatim what we have in this Board Case request.

And some of those things, if I may -- and I'll be more than happy, Mr. Chairman, to read this in its entirety or just kind of, to save time, let you read that and then I just hit on some of the high points.

Some of the high points is, you have to have an owner/user, okay, whoever owns it or use it -- doesn't matter. They're all the same in this case. Okay? They put it in for a permit. They have to have a written procedure. And that written procedure has to specifically identify, equated back to Appendix B, of how this will be handled.

It will supply the Manufacturer's Data Reports. Manufacturer's Data Reports are critical in regards to the thermal fluid heaters because those have to identify what the material is, okay, and other pertinent information that is required from PTFH in Section 1 of the ASME code. Those would be provided, that identify what the medium is that we're putting in, using in those units, have that written procedure, how they administrate the controls of it.

I also mention in here some additionals that are mentioned in Appendix B that we are required to have, is that, yes, the valves have to be able to relieve the total capacity of the units. That the -- everything else that's required in the code, such as cross-sectional area of the piping, the inlet and outlet, is per the

ASME code.

That the valves that are used are going to be of gate-type construction. Why is that? It's because the gate-type construction will allow almost no restriction of the flow. If you were to use something like a gate valve or even a ball valve in some cases, that could restrict the flow of the fluid, which will -- can cause an issue with the valve being able to relieve the total capacity of the unit.

So they have to -- the applicant has to prove, show proof, that the valves they are using will not cause any restriction of flow. They also are going to be designed for thermal fluid or thermal hot oils. There are valves that manufacturer's specifications specifically state, be used for hot oils.

We need to be able to identify from distance, okay, the open and close. So now those gate valves also have to have a rising stem. For those that are familiar, the rising stem, I can see it from here to the nice young lady sitting at the front of the room over there. You know who I was talking to. At the front of the room over there. I could tell from that distance if the

valve is open or closed just by the visualization of the valve stem, or not.

Again, I mention the flow resistance in its open position. Also, we would have to have a locking mechanism. The locking mechanism is not for locking it closed; it's for locking it open. The procedures will identify how we go about the unlocking and locking and the possession of the keys for that lock.

And with that, Members, I am open to any questions that you may have.

MR. BAILEY: I've got a quick question, just for clarification.

Where you have your inquiry, shouldn't the word "being" be "be"; the i-n-g should be taken out? I'm just asking. You wrote it.

MR. TOTH: No. I appreciate that, Mr. Bailey.

MR. BAILEY: Because I had to read it two or three times and, like, what is he asking?

MR. TOTH: Okay. "May stop valves be installed within" -- okay.

MR. BAILEY: Does --

MR. TOTH: Sure. No, that's perfectly fine if everybody else is fine.

MR. BAILEY: It didn't make sense.

MR. TOTH: I guess my Grammarly didn't catch that one.

MR. BAILEY: Right.

MR. TOTH: For those that don't use Grammarly, use it, so...

MR. BAILEY: That's all I have.

MR. TOTH: Thank you, sir.

CHAIRMAN MORELOCK: What questions does the Board have?

MR. HENRY: Mr. Toth?

MR. TOTH: Yes, sir.

MR. HENRY: I'll ask you a couple of questions.

So the problem right now is the rules of Section 1; is that correct?

MR. TOTH: Yes.

MR. HENRY: Okay. Wasn't it the intent -- and maybe it doesn't extend this far. Wasn't it the intent that, ultimately, Section 13 would take responsibility for all of these questions?

MR. TOTH: Section 13 -- yes, sir. Section 13 is taking responsibility for the relief valves and the implementation of them. With that being said, the individual co-construction sections can implement, can adopt those requirements, or they can put them within their own. Section 1 is the grandfather, if you would. And so with that said, they tend to like to keep things in-house.

MR. HENRY: Yes.

MR. TOTH: A situation that I would like to identify -- and for those that have served on the ASME codes and the NBIC codes, it's very difficult to cover all aspects. And a situation that you run into with something like this is to say, yes, we're going to allow this, right, without any supervisory procedures being put into place.

And so when codes -- when we do that in codes, the codes, we understand -- and I speak because I serve on them, as "we." We understand that the individual jurisdictions have the opportunity to adopt those codes.

They also have the opportunity to put interpretations on those codes, to expand upon

those codes, so on, so forth. So when those codes are written, that is taken into consideration, because you can't -- it's hard to put that blanket statement -- no different than what we had with the previous discussion concerning CO2s, is that it's very hard to put those blanket statements in there when there's different things that can be handled on the jurisdictional level.

MR. HENRY: Okay. And I appreciate that. I guess my next question, then, would it be appropriate -- or has there already been discussion with Section 1 on the need for an action like this?

MR. TOTH: In speaking with my colleagues that serve on Section 1, as I alluded to before, the adding of PTFH, the section -- the part PTFH in Section 1 is relatively new. So when they also included PG-71 requirements that called for those changeover valves, they purposefully excluded PTFH because it's so new. And so what they're looking at is they're looking for it to mature, if you would, and to see more examples of it being implemented before they allow that into PG-71.

MR. HENRY: Well, that's a great

lead-in to my next question, then. Why not --

MR. TOTH: Did you just sucker me into a topic on that? Jeez.

MR. HENRY: Why not go to Section 1 for a code case on this?

MR. TOTH: Well, simply enough, it's -- we don't know where that's going to go and how far down the line that's going to go.

MR. HENRY: How long it will take, yeah.

MR. TOTH: Yeah. And that's the realistic viewpoint of it.

And also, it's looking at -- and before you had the inclusion of PG-71 into the code, there was really no consideration for duplicate safety valves.

MR. HENRY: Right.

MR. TOTH: It really wasn't brought into the mindset. Because if you could not have any type of outing whatsoever, nobody would ever have that. We were never looking at -- and that's one of the reasons why Section 1 did not adopt Section 13. Because Section 13, by adopting it, you so too adopt Appendix B, which allows for the stop valves.

MR. HENRY: Right.

MR. TOTH: And so it's kind of one of those things that, okay, if we look at it, PTFH, it's going to be a while before they're going to even look at that. But we already have Section 13 in place with Appendix B, with the allowances of these valves.

And on top of that, Appendix B didn't even take into -- is not even taking into consideration duplicate valves. They're talking about single installation valves with the ability to have stop valves.

This Board Case looks at duplicate valves with the stop valves incorporated within. So it's actually above and beyond what we even looked at inside Appendix B of Section 13.

MR. HENRY: I guess my last question would only be -- and I think what you've done here is excellent, and I certainly support it. But would a corresponding action be to go -- basically, use the same wording and go back and at least recognize that it may take a couple years to do it --

MR. TOTH: Sure.

MR. HENRY: -- apply for a

Section 1 code case?

MR. TOTH: I think that's a great thought, and I will definitely look into that. At the current time, I don't personally attend the ASME meetings anymore, just because of time constraints and the other volunteer stuff I do. But I definitely have counterparts that I work with that attend those meetings, and I will be in communication with them. And I think that's a good idea, and I'll take that into consideration.

MR. BAUGHMAN: So Mr. Toth, in particular, one of the things I -- I like the idea of a variance, specifically for that particular installation more so than drawing a broad stroke for everything else that's out there. Especially in light of we're talking about putting valves in place on relief devices, which us in the boiler industry, that just gets the hair up on our neck when you're talking about putting valving in on any safety device, let alone the main pressure devices.

So in looking at crossover valves, that all makes sense. Having a three-way valve arrangement, per se, makes sense in these

applications. But I just know that as these things are getting installed as inspectors are going to be looking at them, the amount of education and lack of education knowledge as they're going through these systems, you've got to make sure that there's a high level of education as they're inspecting them, to make sure that they're safe.

And by drawing this broad Board Case for these things is putting a lot of weight on the inspector's shoulders to go in now and say, okay, this valve arrangement is correct.

And we know how much educating there is to do within our inspection industry. There's a lot. And this is adding one more extremely critical area for thermal fluid heaters.

So again, we're getting into -- what we're doing is, we're making a jurisdictional vote on this. The code is specific. Section 1 presently says, no valves allowed.

Our colleague that you and I both speak to, or speak with, from Fulton Thermal, one of the big manufacturers and sits on National Board, has wrote different papers and specific for NBIC Part 1, Supplement 5. And in those, a

specific saying, it's not allowed. But jurisdictions can make exceptions. And that's really what we're looking at here.

In particular, back with this one particular installation -- and it goes outside of the Board Case, I guess. But one of the things in evaluating the facility that you're working with is we'd asked for the Manufacturer's Data Reports multiple times, which is a requirement by Section 1, Section 8, and so forth. And we've not received those. And so we know that they're stamped, but it's not a hard thing to produce, especially asking multiple times.

And you've put in your Board Case that that is a requirement, and I agree that it needs to be. And again, if these were stamped DF Section 8, this is all off the table.

But what I've got is that there's certain areas that, if we're not crossing t's, dotting i's, and not dotting that lowercase j, we're going to have some problems within adopting this broadly.

So I'm more inclined to look at it on a case-by-case installation than I am as a broad Board Case. That's my input on it.

MR. TOTH: If I may, you're absolutely correct. The individual situation that you're referring to with the data reports, we have those. I have those.

Again, that is an ongoing individual installation that I'm working with Ultium Cell on. There were some things that the manufacturer has to do to rectify. I don't feel that this is appropriate for me to go through because it's not finalized yet. Those units are still in the process of being installed.

I do agree with you, and one of the suggestions that I came here today in my pocket was to maybe extend this Board Case to not only state that the information will be provided at permit, but then these particular vessels be brought to this body and allow for you to take a look at it and put your expertise to it, to have a double-check to ensure that all the t's and i's and lowercase j's are all dotted per the requirements of the code. And we could add that. We could add that directly into the Reply 1.

MR. BAUGHMAN: Well, again, it's worthy of, I think, more discussion because at this point, I feel that where we're at, even now

when we've got our permits for boilers, and it requires a Manufacturer's Data Report, and there's a lot of times that's not been forthcoming.

MR. TOTH: If I may, we say that it's not. There is an allowance that, at the time of installation, the Manufacturer's Data Report should be presented. If that's not being done, then that's on the inspector's side, to enforce that or not.

MR. BAUGHMAN: And if I may, we know that that's an issue. We've seen it. We're all open, and this is the group that we're in. But we know in the industry, when the boilers go in, that rarely, when the inspector is there, do they ask for the Manufacturer's Data Report if it's not supplied at the time the permit is put in.

We've been on many installations over my 46 years at Allied Boiler. And I've tried to educate as best we can to make sure that what we've got set up in place gets adhered to out in the field.

And so what my concern is here, is the education and training that's going to be needed to put in place with the inspector to make

sure that they're looking at the company's training, their protocol for locking out or not locking out, opening these valves, closing these valves, making sure the containment pan is in place, doing all these things within these PTFH vessels. And it's a lot of training that needs to be put in place.

And I don't feel comfortable at the point of moving this forward as a, again, broad stroke. I think where we're at presently, if taking it on an individual basis is worthy. But I'm concerned with moving forward where we're allowing shut-off valves to be put not only on the inlet path but the outlet path also on these vessels.

MR. TOTH: But didn't I just -- I just made that recommendation, though, is that the permit comes in, but the permit needs to pass through the Chief Inspector to the Board for the Board to look at it on an individual basis.

MR. BAUGHMAN: As long as we're clear. And if that is, in fact, what has happened for -- everything gets approved -- that's on the installation side.

MR. TOTH: Okay.

MR. BAUGHMAN: So we're -- what I'm looking at is after installation, if something goes in, when you put a -- when you do a -- we're doing the variances and we're putting in -- we're approving the manual that goes in, it doesn't get finally approved until there's an inspection at the end of it.

MR. TOTH: Okay.

MR. BAUGHMAN: And what I'm looking at is that if we look at an installation and go, okay, what does that installation permit look like? Are we reviewing their training manuals? Are we reviewing their protocols, so forth? What is involved in that for the permitting side of it that we can review? More so than just saying, we're putting this in. In other words, it's just a little open-ended and vague to me at this point.

MR. TOTH: And that's where I -- I see where you're coming from, and I would like for you to consider that a lot of things we do in this industry gets an initial approval. Okay? And then gets a reinspection.

So if I were to use an example of an installation that goes in, and then in between the

initial inspection and the follow-up inspection the following year, somebody changes something up that goes against code. The inspector is going to find it at inspection. If they don't, they don't. Okay? It's not a 100 percent. We're not going to find every single thing out there. We're not preventing accidents. We're trying to limit them.

And in this situation here, what I'm hearing is, we're not trusting the inspector to be an inspector. We're saying, we're going to look at a drip pan -- all of that stuff is in the code. The codes are voluminous. We know this. And to expect an inspector -- and I never wanted my inspectors to think they knew everything about the code.

I've been in the boiler industry for 35 years, more actually, and I learn something new every day, and you do too. And what we're trying to do is put something in place with these people included in the variances.

My clients that have variances, I visit them on a regular basis. And I'll just pop in. Why? Because it's not a hey, we put this in place and I'm going to forget you until three years down the road and I'm going to come look at

you.

But there's nothing that says that I can't do that. There's nothing that says the inspector can't do that. It's how they take pride in what they're doing.

And you have a company that if they want to go through and have this type of an installation, they're going to jump through the proverbial hoops to get it done.

And I agree that bringing it back before this board as a permit for you to put eyes on it as a body of experts that can say, they've done everything we've asked them to do, and for the Chief Inspector and his staff to provide them with this documentation to perform, you know, continuing education on your rules or regulations like they just did a couple weeks ago, that's all we can do.

And that's where I'm looking at with this, is to put something like this in place that at least from jump, we're being as safe as humanly possible and then ensuring the fact that our inspectors are given this type of information to look at when they go to do those inspections.

Thank you.

MR. BAUGHMAN: Thank you.

Again, my concern is we're talking about something as critical as putting shut-off valves on relief valves. We don't take this lightly. You don't take it lightly. Your customer doesn't take it lightly. None of us are here in that regard. And that's why we're having this discussion and the questioning and the thought that goes in behind this instead of just taking it carte blanche, going, yeah, it all sounds good.

But there's enough red flags that come up. And the last thing I want to do is make a vote on something that somewhere down the road has ramifications that come back to bite you. And that's something that, you know, you're always -- because you care. And so that's why, looking at this in a hard fashion.

Again, we're looking at a Section 1 device. We're taking a jurisdictional interpretation or a jurisdictional direction on what Section 1 says and making some adaptation to that.

MR. TOTH: And that adaptation, that I may add, again, if this same vessel was

built under Section 8, Division 1, it would not be an issue.

MR. BAUGHMAN: Yes. Uh-huh. Well, and again, that's true from that standpoint. I still get back to Manufacturer's Data Reports, the whole, you know --

MR. TOTH: They will be provided.

MR. BAUGHMAN: And I'm curious why, after so many times of me asking for them through Chief, that they were not provided.

MR. TOTH: South Korea.

MR. BAUGHMAN: Okay.

MR. TOTH: That's all I can say, is that they came from South Korea. And I think that there was -- there was a lot of that. And that's what I pushed for this particular case here, and that was one of the things that I said, if you're wanting me to work on this, I've got to have this, and I've got to have this now.

And that brought up some questions. And there's a couple of other things I'm working with Ultium Cell on to rectify that go above and beyond this.

And it just happens -- and I see

where you are at, Mr. Baughman, because this started off as a request from an individual company. Okay? And I see where -- you're kind of a little -- you're a little upset because they didn't provide the MDR. I agree with you. They should have provided the Manufacturer's Data Reports. Absolutely.

MR. BAUGHMAN: As a requirement.

MR. TOTH: As a requirement. Absolutely. I agree 100 percent.

But let's not let that stall this. Because now we're putting this in the forefront and we're saying, you will have this at the time of permit. It gets to the chief's desk, and they don't have this information? It doesn't see you. Why doesn't it see you? Because the chief is saying you're missing documentation here.

MR. BAUGHMAN: Sure. So what I see is in the industry, we get companies that install equipment. They don't go through all the protocols that they're supposed to. Equipment gets in place, and then it may not meet all the requirements. And they put millions of dollars in these installations and say, we've got to run; we've got product to make; we've got employees;

we've got all this; and we need to get running.
We understand that.
MR. TOTH: Uh-huh.
MR. BAUGHMAN: We want to make sure that everything is done according to the code, and that's what we're here to do, and the inspectors are to enforce that code. And so that's one of the things, is that there's pressure that's put on sometimes, as we know in the industry, got it. Got to get running.
MR. TOTH: Broad shoulders. I can handle it.
MR. BAUGHMAN: Yeah. Well, what I'm saying is, is that decisions need to be made and stuck to, no different than what we were talking about earlier on the CO2 tanks, is that we've got a set of codes to go by and adhere to, have confident discussion on any variables that we want to put into that, i.e., the valves here.
MR. TOTH: In essence, no waiver. No waiver. A variance comes from the Board. A waiver comes from the Chief.
MR. BAUGHMAN: Okay.
MR. TOTH: Okay? I get what you're saying. It's like we've got to have this

stuff. And I see what you're saying because I've sat in that chair for a long time, and I've had people come up and say, hey, we need to get this done. Lack of planning on your part does not constitute an emergency on mine has been said many times. Probably in a little nicer way, diplomatic way, but it has been said.

And so I agree with that, is that this is a situation where we don't get a waiver. We don't get a hey, yeah, go ahead and start using this. Go ahead, and yeah, you can install it.

They can install anything they want, right? You agree with that. You can put a boiler in any company you want. You're not going to use it until it gets signed off. Are we in agreement with that?

And so they go through the portion of wanting to do that, but they don't have their lowercase "j" dotted. They're not moving forward. And they're not going to get a waiver from the Chief because it has to come through the Board.

Would that not satisfy your concerns?

MR. BAUGHMAN: I believe so. And as this progresses, there's still -- because this is in a state of flux with -- in talking with

Ms. Watkinson, what's going on with ASME, some of the things that are fixing to maybe come up down the road, within -- some near time. What is it? Always, sometimes, maybe --

CHAIRMAN MORELOCK: Except.

MR. BAUGHMAN: Except? So there's things that may actually clarify this.

MR. TOTH: And that will be perfect.

MR. BAUGHMAN: Yes.

MR. TOTH: But until then.

MR. BAUGHMAN: Yes. So I think that moving forward, not to keep beating this, that right now, we don't have an application in place to bring to us, to be able to look at. If that is something that we can do so that we can look at these things on an individual basis instead of just giving this broad stroke again to it, I think that's a good direction to be looking at running.

MR. TOTH: And that's great. So you're saying that you don't approve of a Board Case.

MR. BAUGHMAN: Well, not as a broad stroke as it is, sitting, for each

individual installation without additional scrutiny.

MR. TOTH: By whom?

MR. BAUGHMAN: I think by the inspector department, through the Boiler Unit.

MR. TOTH: And they will get that.

MR. BAUGHMAN: And the Board of Boiler Rules.

MR. TOTH: And the Board of Boiler Rules.

So if we take this away from being a simple Board Case that talks about inspections -- how often do we have to inspect -- that you pick whatever Board Case that we put into place since we started tracking Board Cases or even the interpretations. Okay?

If we'd not think about those and think about this more as a guideline, okay, then would that not satisfy what you're looking for? Because if we put in here that it is going to be scrutinized -- it's already in there it's going to be scrutinized by the Boiler Unit. And we add in here that it's going to be supplied for approval by the Tennessee Board of Boiler Rules, are we not

looking at these on an individual basis?

MR. BAUGHMAN: Sounds to me like it is.

MR. TOTH: It is.

MR. BAUGHMAN: Yeah.

MR. TOTH: Because we're treating this like a guideline. We're not thinking about other Board Cases and other board interpretations that are on simpler things, that somebody may just go ahead and apply because it's a simple Board Case. This has more teeth to it. This has more checks and balances to it, especially when we add the Tennessee Boiler Board in here, final approval.

MR. BAUGHMAN: I agree. And one of my big concerns, Mr. Toth, is just putting so much responsibility on the shoulder of the inspectors to look at this. I don't know about Mr. Lashley or Mr. Matue's input on those. But again, it's that much more added to them in a supercritical area.

So henceforth, I would love some input from that end of it, just to kind of...

MR. LASHLEY: I mean, I'm just seeing it as an individual application. I don't

see the whole broad aspect of it. You know, whether it's through a variance request or -- or however it's addressed, I'm seeing it more as a -- yeah, once we're on site, that's where it needs to be inspected and interpreted.

MR. TOTH: But again, going back to the same thing, this is not a broad brush Board Case. This is a Board Case that has individual checkpoints that make it an individual application. So it's a permit. It goes to the Chief Inspector. We revise this to include a part, Sub iii, down here that says that it has to be finally approved by the Board. That makes it an individual application.

But what we're doing is, we're providing the public with a guide of what you are expecting. They came in the last meeting without a guide. They came in with a bunch of information that I looked at, and I said, thank you for this, and I put it off to the side because it was not relevant. It was missing -- they asked me why. Because they had no guidance. There was no guidance. Why? Because this is something that had never been put out.

This Board Case will tell them, yeah,

you can do this; however, you're going to have to provide all this information. It's going to have to be in this format. It's going to have to pertain to the valves that are being installed, so on, so forth. And, oh, by the way, it's going to come back through you-all, and you're going to have to approve it.

What is the difference? All we're doing is giving a guideline. Don't get stuck on this broad stroke, because that's not what this is.

MR. BAUGHMAN: So presently in this Board Case, does it say anywhere that it comes before the Board of Boiler Rules, or do we need to add that into it?

MR. TOTH: We need to add that, Mr. Baughman. And that's where I indicated, said, "Before installation and/or implementation, the owner/user" -- because again, doesn't matter -- "must apply by permit application request and acceptance to the Boiler Inspection Unit."

And then it goes down into the Manufacturer's Data Reports, the information that tells us what the medium is, and then we can add to there "and final approval by the Tennessee

Board of Boiler Rules."

MR. BAUGHMAN: Are we looking at doing a -- so if the unit has two valves that have to be installed on the unit to be able to relieve the capacity, are we looking at putting on individual valves on each inlet and each outlet? If that's the case, if one valve --

MR. TOTH: It all depends. I mean, the code allows for you to manifold out.

MR. BAUGHMAN: Well, and that's what I'm getting at, is that, again, we want to look at the specific installation information when it comes in.

MR. TOTH: Perfect.

MR. BAUGHMAN: Yeah, because that's a -- as you know, if they're sized for the two valves, you can't operate on just one valve. So I want to --

MR. TOTH: Perfect.

MR. BAUGHMAN: As long as we've got that ability to look at those things and have some analysis of them, then I'd feel much more comfortable. I'm uncomfortable with putting valves in anyway.

MR. TOTH: No. I know you are.

MR. BAUGHMAN: But if there's a means to be able to do this without dropping down the whole vessel, and they've got these relief valves installed at a low point --

MR. TOTH: Don't get me started on that design flaw.

MR. BAUGHMAN: Okay. Well, same here. So, and we even talked about how to extend piping up, in looking at the friction and the back pressure and all of that, and it didn't work out. So we looked at -- to the extent of coming up with some other means besides putting valves in.

I think if we put these mechanisms in place, have the wording as such, have that to where we can review that, then I think we can move forward on it.

MR. TOTH: So again, when you talked about that, and it was great that you said that, about the inlet, it's down there in four. It's no different, Mr. Baughman, than if this was a steam boiler or a simple thermal -- regular thermal fluid heater. It still has the same code requirements for a cross-sectional area, and we put that in here.

MR. BAUGHMAN: Sure. Thanks so

much.

MR. TOTH: Your eyes are crossing on you there, Mr. Baughman.

MR. BAUGHMAN: Well, they are. It's a lot of information, and it's something that maybe those that don't know the extent of the technical stuff we're looking at, it's just so critical. So imagine having your water heater and putting a shut-off valve in front of it and on the discharge side of it. You're talking about your overpressure device, and we want to make sure that we have good discussion on this. So, and I've beat it pretty good, and you've done well, Mr. Toth. And Mr. Henry, everybody here.

MR. ANDERSON: Jim Anderson, Ultium. I just have a question. I'm not an expert.

So who inspects or looks at this Appendix B? A lot of the things that we're asking for are in here. So if you're worried about the technical aspect on the inspector, a lot of it comes in here. So who -- is this taken into account at all currently by an inspector? It's just a general question. Because the things that we will be inspecting are no more complicated than

what's listed out currently. I'm just asking, how -- I guess, how much weight does this document hold at the moment?

MR. TOTH: You're talking about the code?

MR. ANDERSON: Yeah, this Appendix B.

MR. TOTH: ASME code holds all the weight when it comes to isolation valves.

MR. HENRY: It's a mandatory appendix, isn't it?

MR. ANDERSON: Yeah. So, I mean, is this inspected, too, by an inspector? I'm just trying to figure out if we're asking for something in addition to what's currently -- what an inspector may currently ask for. Get back to your original concern about the complexity of it.

MR. BAUGHMAN: So just from my interpretation on that is that what we're dealing with is a Section 1 vessel, which means that if they went out and inspected it as a Section 1 constructed vessel and you had valves installed in the relief valve inlet and outlet path, it would get shut down.

MR. MATUE: Red tagged.

MR. BAUGHMAN: Yes.

So again, we're making a -- they're inspecting to what's in the codes. We're making a change -- change? We're making a variation to that --

MR. LASHLEY: To a change.

MR. BAUGHMAN: Pardon?

MR. LASHLEY: A pathway to a change.

MR. BAUGHMAN: A pathway to a change. To accept the installation of these valves in these particular vessels. If your vessel was not constructed to Section 1 but constructed to Section 8 and stamped DF, direct fired, then it's covered under that section already.

MR. TOTH: Just to finalize that, so you understand.

MR. ANDERSON: Because I don't. I apologize.

MR. TOTH: And that's why you hired me. Is -- just joking, Jim.

MR. ANDERSON: That's true.

MR. TOTH: Is because if there were two, Section 8, Division 1. Okay?

Section 8, Division 1 adopted Section 13, which in turn has Appendix B. And so what we're trying to do is say a vessel that can be either Section 1 or Section 8, in regards to what we have here, is that if Section 8 allows for it, we're asking that this vessel is built to Section 1, allow for it. Because precedence was set from Section 8 initially.

MR. ANDERSON: And our vessels were built under Section 1.

MR. TOTH: Section 1.

MR. ANDERSON: Okay.

MR. BAUGHMAN: So you mentioned the word "precedent." I want to make sure this doesn't set a precedent for anything else that may come up. And it may. Who knows.

MR. TOTH: Everything we do can set a precedent.

MR. BAUGHMAN: That's exactly right.

MR. TOTH: If somebody wants to, you know, turn their head a certain way and, you know, open their mouth a certain way, they can set a precedent. But the reality is, is that's what I like about -- and you

talking about stop valves, that's what I like about PG-71 through 73, which talks about what they're doing now with safety valves in Section 1.

MR. BAUGHMAN: So what this is going to get into is not only PTFH units, but we've got high-temperature hot water units that get into Section 1.

MR. TOTH: That's right.

MR. BAUGHMAN: And we're going to have this same discussion moving forward, in other realms.

MR. TOTH: That's right. We are all good.

MR. BAUGHMAN: So that's kind of why I was thinking the precedent, thinking of other installations that we've been involved in over the years, and there's definitely some more stuff that will come up. But we'll address that as it comes up.

MR. TOTH: Yeah. And the biggest thing -- what causes this biggest problem is the design of this unit. Let's get back to it. The design of this unit, of putting the relief valves at the bottom

instead of at the top, yeah, you put yourself in a bad position. That's a manufacturer thing. So on most of those high-temp boilers, are we going to find them on the bottom? No. We're probably going to find them on the top and we're going to be fine.

MR. BAUGHMAN: Yeah. Until the discussion comes that they don't have isolation valves above and below. They've got to drain the whole system.

MR. TOTH: We'll cover that when we cross that bridge.

MR. BAUGHMAN: And, you know, we've heard discussions on taking hot water boilers down anyway before. So it's, you know -- again, that's why you've got technical people on the board.

MR. TOTH: That's right.

MR. BAUGHMAN: Be able to have these discussions. Thanks a bunch.

Thanks for everybody's patience in this, too.

CHAIRMAN MORELOCK: All right. So do I have a motion for this Board Case?

MR. BAUGHMAN: I'll make the

motion.

CHAIRMAN MORELOCK: Okay.

MR. BAUGHMAN: That we approve contingent upon review of the documents.

MR. LASHLEY: Additional language, you know, where it's brought forth as a variance.

MR. BAUGHMAN: And so --

MR. TOTH: Recommendation on that.

MR. BAUGHMAN: Yes.

MR. TOTH: I do have a recommendation on that verbiage under Subsection iii is, "With final approval of the Board of Boiler Rules after scheduled quarterly meeting," or something like that. I don't know if we've used those words before. Somebody can Wordsmith me on that and help me with that.

What do you think, Mr. Henry? You're good at that.

MR. HENRY: Let me think about it for a minute.

MR. TOTH: Perfect. And we can -- but we're all in agreement that that's the one thing that needs to change, is that it comes

through the Board. However we verbalize that, you're comfortable with, as long as a board member writes that.

MR. BAUGHMAN: And if the Board disapproves of it at the time.

MR. TOTH: Absolutely.

MR. BAUGHMAN: Then it can get reapplied for, make changes, and so forth?

MR. TOTH: Absolutely.

MR. BAUGHMAN: Okay.

MR. HENRY: Mr. Toth, the only thing I would like to add, just in principle, only because it's going to make our life easier long term, is the issue of going to Section 1 and applying for a code case.

MR. TOTH: Yes. I will get on that. I will speak to Ms. Watkinson and see what we can do to get that, because she served on Section 1.

MR. HENRY: And I can help, and everybody too, I'm certain, deal with Section 1.

MR. TOTH: Wonderful. Great.

MR. BAUGHMAN: It was great talking with Ms. Watkinson because, as Mr. Toth and I both had conversations, she never would

commit to one way or the other. She said, "It's jurisdictional. It's up to you guys. I'm not going to say one way or the other. I can tell you what the code says."

MR. TOTH: Yeah.

MR. BAUGHMAN: "But it's jurisdictional."

And I appreciated that. She left it up to us, within the way our codes are set up, to have these great discussions and to vote accordingly. So even though she is a super expert in the field on this, I like the way that she communicated to us on it.

MR. HENRY: I think she also got tired of beating her head against the wall, in some cases.

MR. BAUGHMAN: I think she said that in her presentation too, you know. But at any rate...

CHAIRMAN MORELOCK: So what does our motion look like now?

MR. TOTH: It was the same.

MR. HENRY: If I understand the motion correctly, it's to approve this case with the understanding that it will be on a

case-by-case evaluation basis.

CHAIRMAN MORELOCK: Okay. Any more discussion or questions?

(No verbal response.)

CHAIRMAN MORELOCK: Hearing none, then all in favor say "aye."

(Affirmative response.)

CHAIRMAN MORELOCK: Opposed?

(No verbal response.)

CHAIRMAN MORELOCK: Abstentions?

(No verbal response.)

CHAIRMAN MORELOCK: Not voting?

(No verbal response.)

CHAIRMAN MORELOCK: Motion passes.

MR. TOTH: Thank you, gentlemen.

CHAIRMAN MORELOCK: Thank you.

MR. BAUGHMAN: Thank you, Mr. Toth.

MR. ANDERSON: Thank you, sir.

MR. BAUGHMAN: Yourself, too. Thank you for being here.

CHAIRMAN MORELOCK: All right. So I'm not kidding this time. This is the upcoming 2023 scheduled quarterly meeting.

The next one will be December the 13th, 2023, here.

And so I'm going to call this meeting adjourned. Thank you, all.

END OF THE PROCEEDINGS.

C E R T I F I C A T E

STATE OF TENNESSEE)

COUNTY OF WILLIAMSON)

I, Cassandra M. Beiling, a Notary Public in the State of Tennessee, do hereby certify:

That the within is a true and accurate transcript of the proceedings taken before the Board and the Chief Inspector or the Chief Inspector's Designee, Tennessee Department of Labor & Workforce Development, Division of Workplace Regulations and Compliance, Boiler Unit, on the 13th day of September, 2023.

I further certify that I am not related to any of the parties to this action, by blood or marriage, and that I am in no way interested in the outcome of this matter.

IN WITNESS WHEREOF, I have hereunto set my hand this 12th day of October, 2023.

Cassandra M. Beiling, LCR# 371
Notary Public State at Large
My commission expires: 3/10/2024