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

QUARTERLY MEETING OF THE
STATE OF TENNESSEE
BOARD OF BOILER RULES

Via Zoom Videoconference

December 16, 2020

CASSANDRA M. BEILING, LCR# 371
STONE & GEORGE COURT REPORTING
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1 APPEARANCES:
2 Brian Morelock, Chairman
3 Owner/User Representative
4 David W. Baughman
5 Owner/User Representative
6 Allied Boiler & Supply, Inc.
7 4006 River Lane
8 Milton, Tennessee 37118
9 Harold F. Bowers
10 Insurance Representative
11 Centerville, Tennessee
12 Jeffery Henry, Board Member
13 Boiler Manufacturer Representative
14 ATC-CES, Chattanooga, Tennessee
15 Chris O'Guin, Assistant Chief Boiler Inspector
16 Thomas Herrod
17 Assistant Commissioner, State of Tennessee
18 Daniel Bailey, Esq.
19 Legal Counsel, State of Tennessee
20 Carlene T. Bennett
21 Board Secretary, State of Tennessee
22 Jamie Presson
23 Executive Admin. Assistant, State of Tennessee
24 Michelle Irion
25 Boiler Admin. Staff Supervisor, State of Tennessee

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1 Guest Appearances:
2 ECS CONSULTING and BOISCO TRAINING GROUP
3 Marty Toth
4 UPM PHARMACEUTICALS
5 Chris Johnson, Associate Director of Engineering
6 Maintenance and Facilities
7 Anthony Dean, Maintenance Technician
8 HOLSTON VALLEY MEDICAL CENTER
9 Ben Spivey
10 Lee Godfrey (phonetic), Facility Manager
11 Greg Jones, HVAC Control Group Leader
12 INDUSTRIAL Boiler & MECHANICAL
13 Keith Butler
14 LG ELECTRONICS, USA, INC.
15 Michael Hudson, EHC Manager
16 Lee Insick, Director of EHS
17 MR. CLEANERS - KINGSPORT
18 Mark Reppart

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1 A G E N D A
2 I. Call Meeting to Order
3 II. Introductions and Announcements
4 III. Adoption of Agenda
5 IV. Approval of the September 16, 2020 meeting minutes
6 V. Old Business
7 None
8 VI. New Business
9 20-15 - UPM Pharmaceuticals
10 20-16 - Holston Valley Medical Center
11 20-17 - LG Electronics USA, Inc.
12 VII. Rule Case & Interpretations
13 BI 20-02 - Approved Variance Changes
14 BI 20-03 - Tentative Variance Expirations and changes
15 VIII. Open Discussion Items
16 * Tentative 2021 Meeting Dates
17 > Wednesday, March 10
18 > Wednesday, June 9
19 > Wednesday, September 22
20 > Wednesday, December 15
21 * Variance Guideline & Checklist Revisions
22 * Dave Baughman - Tennessee Code Annotated
23 68-122-110, Inspection of boilers, (a)(2)
24 that states *Low pressure heating boilers shall be inspected both internally and externally biennially where construction will permit.
25 IX. Announcement of Next Meeting
26 Unless the Board decides otherwise, the next regularly scheduled meeting of the Board of Boiler Rules will be held 9:00 a.m. March 10, 2021, at the State of Tennessee
27 Department of Labor and Workforce Development building located at 220 French Landing Drive, Nashville, Tennessee.
28 X. Adjournment

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1 * * * * * * *
2 MS. GEORGE: Good morning. I'm Nan George with Stone and George Court Reporting, and I'm the Zoom host. Cassandra Belling is the court reporter today. She's also with Stone and George. And our job is to ensure that a verbatim transcript is produced at the end of all this. And part of that includes getting the participants correct. So I would ask everybody that's in this meeting to just go to the chat box and give us your name and the company you represent and your position, so we'll have that. And I think most of you-all have been on these Zooms with us before. Just keep yourself muted until you're called on to speak.

There's a phone number, 931-503-7526.

If that is -- if you're using your phone just for the audio and your name is on the screen, could you let us know? I think everybody else's names are up here.

So I'll turn it over to you, now, Mr. Chairman.

CHAIRMAN MORELOCK: Thank you.

Thank you very much.

I want to welcome everybody to the
December 16 Tennessee board meeting. I hope you have a copy of the agenda. That's what we will be working off of in our meeting today. There was a revised agenda sent out which basically just added an item for approval of the September 16 minutes, which we'll discuss here in a minute. But make sure you have a copy and you can follow along with the meeting.

We will have Nan hosting. Carlene Bennett will -- if anybody does want to raise a hand, we'll try to see that, and Carlene can keep me honest on seeing those hands raised if you have a comment. And so really that's the bulk of it.

We will have the board members vote by roll call, so I'll call each board member by name to approve items. And I think -- like Nan said, I think that covers the ground rules. So the first item on our agenda is call meeting to order, so I would like to call this December 16 meeting to order of the Tennessee Board of Boiler Rules.

As far as introductions and announcements, before we do introductions, I do want people to remember Dr. Hargrove. He really wanted to be here today, but we found out, through Carlene reaching out to Dr. Hargrove, he's had knee replacement surgery and he is not well enough to participate today, so just remember Dr. Hargrove and his healing and recovery.

And so as far as introductions, I will go down the participant list and let everybody introduce themselves. Sometimes that list starts moving around a little bit, so if I leave somebody out, it's not intentional. You can correct me at will.

So I'm going to start with Cassandra. The Reporter: Cassandra Beiling with Stone and George Court Reporting.

Chairman Morelock: Thank you. Mr. O'Guin?

Mr. O'Guin: Chris O'Guin, Assistant Chief Boiler Inspector.

Chairman Morelock: Okay. Thank you, sir.

C. Johnson?

Mr. Johnson: Yes. This is Chris Johnson from UPM Pharmaceuticals.

Chairman Morelock: Thank you, Chris. And if you would, just go in and change your name to your full name so that we will have a correct record of your attendance, please.

Mr. Baughman?

Mr. Baughman: I'm Dave Baughman, board member. I'm with Allied Boiler & Supply, Incorporated.

Chairman Morelock: Thank you, sir.

Mr. Bowers?

Mr. Bowers: Harold Bowers, board member with FM Global Insurance Company.

Chairman Morelock: Thank you, sir.

Mr. Bowers?

Mr. Bowers: Harold Bowers, board member with FM Global Insurance Company.

Chairman Morelock: Thank you, sir.

We have Industrial Boiler & Mechanical on the call list. If you would introduce yourselves.

Mr. Butler: Keith Butler with Industrial Boiler & Mechanical. I'm here to represent LG Electronics for their bid for Tennessee Specials.

Chairman Morelock: Thank you.

Jamie?

Chairman Morelock: Thank you.
boiler division, State of Tennessee.

CHAIRMAN MORELOCK: Thank you, Michelle.

Mr. Herrod?

Mr. HERROD: Tom Herrod, Assistant Commissioner, WRC.

CHAIRMAN MORELOCK: Thank you, sir.

And we have Michael Hudson with LG.

(No verbal response.)

CHAIRMAN MORELOCK: I can see you but I can't hear you.

(No verbal response.)

CHAIRMAN MORELOCK: And then we still have the phone number that Nan mentioned.

We don't have a name tied to that number, 1-931-503-7526. So if you can introduce yourself or go in and change your name. You can temporally change that name to add a name or a company name or both to that, please. And I still did not -- Mark, did you ever get your audio to work to introduce yourself?

(No verbal response.)

CHAIRMAN MORELOCK: It shows you're muted. Oh, there we go. Thank you for updating that.

It says Kingsport, so is that Holston Valley?

MR. SPIVEY: This is Ben Spivey with Holston Valley Medical Center.

CHAIRMAN MORELOCK: Yes.

MR. SPIVEY: In the room with me, I have our facility manager, Lee Godfrey (phonetic); our HVAC control group leader, Greg Jones.

CHAIRMAN MORELOCK: Thank you.

Mark, I still can't hear you.

And who have I left out? If I've left you out, I apologize, but introduce yourself.

MS. BENNETT: (Indicating.)

CHAIRMAN MORELOCK: Oh, Carlene. I knew I'd forget somebody.

MS. BENNETT: Yeah. That's fine.

It's Carlene Bennett. I'm Board Secretary.

CHAIRMAN MORELOCK: Sorry about that.

With that said, I'm going to move on to Item 3, adoption of the agenda. And hopefully, you have a copy of that before you. So are there any changes to the agenda before we vote on it?

MR. BAUGHMAN: The only thing I'd look at is, just depending on time, we've got a pretty full agenda today, and the last thing on the agenda is the discussion items. And so just seeing how that comes up, we may table that last item about the low-pressure boilers.

CHAIRMAN MORELOCK: Okay.

MR. BAUGHMAN: But that would just be -- I was just looking at the time of what we've got to work with.

CHAIRMAN MORELOCK: Okay.

MR. BAUGHMAN: But that would just be -- I was just looking at the time of what we've got to work with.

CHAIRMAN MORELOCK: Yes, sir. All right. We'll do the best we can. But thank you for the comment.

So any other additions, deletions, or changes to the agenda? (No verbal response.)

CHAIRMAN MORELOCK: All right.

Hearing none, I'm going to call for approval of the December 16th agenda. And we'll do that by role call.

So Mr. Baughman?

MR. BAUGHMAN: Aye.

CHAIRMAN MORELOCK: Mr. Bowers?
MR. BOWERS: Aye.

CHAIRMAN MORELOCK: Mr. Henry?

MR. HENRY: Aye.

CHAIRMAN MORELOCK: Thank you. We have an agenda. That will take us to Item 4, which is approval of the September 16th, 2020 Tennessee Board meeting minutes. Those are posted out on the website for anyone to review. Are there any changes or comments about the September 16 agenda and the -- the minutes?

MS. BENNETT: Brian?

CHAIRMAN MORELOCK: Yes.

MS. BENNETT: Until they're approved, they're actually not put on the website.

CHAIRMAN MORELOCK: Okay.

MS. BENNETT: I sent a copy to you guys for the meeting, for you to read and approve. But then once it's approved, then I will put it on the website.

CHAIRMAN MORELOCK: Okay. Very good.

MS. BENNETT: Okay.

CHAIRMAN MORELOCK: Very good.

Thanks for that clarification.

Okay. So do I have a motion to approve the September 16, 2020 meeting minutes?

MR. BOWERS: I motion to approve.

CHAIRMAN MORELOCK: Motion by Mr. Bowers. Do I have a second?

MR. HENRY: Second.

CHAIRMAN MORELOCK: Second by Mr. Jeff Henry.

Any other questions or comments?

(No verbal response.)

CHAIRMAN MORELOCK: Hearing none, I'm going to have a roll call for approval.

Mr. Baughman?

MR. BAUGHMAN: Aye.

Mr. Bowers?

MR. BOWERS: Aye.

Mr. Henry?

MR. HENRY: Aye.

We have the September 16th minutes approved, and then they will be put on the website.

So thank you, Carlene, for doing that.

That takes us to Item 5, which is old business, which we have no old business, so we'll move on to Item 6, which is new business. And our first item is 20-15, UPM Pharmaceuticals, in Bristol, Tennessee, is requesting a variance for two high-pressure boilers. So if you would introduce yourselves and present your variance request.

And while you're doing that, is there a conflict of interest on this item from any board member?

MR. BAUGHMAN: Brian, we may. I'll let Dan kind of weigh in on it. We're going to be training their personnel at some point in the near future. So we're training them on the technical aspects of the boiler, not so much within the variance. So I don't know what conflict that may have, but I just wanted to, at least, broach that with you.

CHAIRMAN MORELOCK: Mr. Bailey, you're muted, please.

MR. BAILEY: Sorry. I was saying I really don't think that poses a conflict, just the fact that you're going to be providing some training. I don't think that causes -- rises to a conflict level.

CHAIRMAN MORELOCK: Thank you, Mr. Bailey.

MR. BAUGHMAN: Thank you.

CHAIRMAN MORELOCK: All right.

Mr. Johnson, I spoke over the top of you. I apologize for that. If you're ready to present your item, the floor is yours.

MR. JOHNSON: I have Anthony Dean with me here, too. He's one of my main maintenance technicians, and he knows our boilers very well. But we're requesting a variance for our two gas-fired burners. We have previously had variances in the past, but since the last one, we've done several staffing changes, and we've updated the procedure and the variance. And then we've also changed one of our burners out on one of our boilers, so that was added to the new variance. But we're requesting to get our variance put back in place so that we can go to the electronic monitoring and not doing the 20-minute checks.

CHAIRMAN MORELOCK: Okay. So Appendix O is a summary of revisions to this variance. So is there anything you want to speak to on these summary of revisions in Appendix O?

MR. JOHNSON: Most of the first ones were mainly just due to staffing changes and
organizational structure changes. So we did
update those to what we're currently doing. And
we did change on the Appendix B-1. We went from
using radios to using cell phones for our system
for contacting the boiler operators and our
security guards. So that was one change we had
made. And then it talks about the job
descriptions and everybody. We updated those to
make those current for the maintenance technicians
and the security guards as well. So a lot of it
was just clerical and then we added the boiler
burner to it as well.

CHAIRMAN MORELOCK: Okay. All
right. With that presentation, do I have a motion
to discuss this variance?

MR. BAUGHMAN: So moved.

CHAIRMAN MORELOCK: Thank you,
Mr. Baughman.

Do I have a second?

MR. BOWERS: Second. Harold
Bowers.

CHAIRMAN MORELOCK: Thank you,
Mr. Bowers.

What questions or comments do you
have for UPM Pharmaceuticals?

I will just say in the process of
revising your manual -- it's over here -- well, in
2016, we updated Rule 800-3-03, and now the
20-minute rule is 0800-3-3.08(11), instead of
.04(22). So you'll just need to update that on
your cover page of your manual. And there's
some -- just do it in your manual. You'll just
need to update that to the current rule, for the
20-minute rule.

MR. JOHNSON: Okay. No problem.

CHAIRMAN MORELOCK: Thank you for
that.

Any other questions?

(No verbal response.)

CHAIRMAN MORELOCK: While you're
thinking, when I look on page 3, it references the
microprocessor-based controller, to see
Appendix B, and then the controller will shut down
on any condition listed in Appendix C. And I
don't see a lot of detail in those two appendices,
so can you speak to that?

MR. JOHNSON: Appendix B and
Appendix C?

CHAIRMAN MORELOCK: Appendix B and
Appendix C.

CHAIRMAN MORELOCK: Again,
in your Appendix N, your variance request cover
letter, you need to correct the rule in that area,
too. When you go to page 12, which is listed as
your emergency procedure --

MR. JOHNSON: Yes.

CHAIRMAN MORELOCK: -- the
procedure looks fine, but if you'll look on the
checklist, Item 40, it --

MR. JOHNSON: Needs to be yellow?

CHAIRMAN MORELOCK: Yeah.

Highlighted or tabbed where it's easy to find.

MR. JOHNSON: Yeah. Sam got me on
that one the other day.

CHAIRMAN MORELOCK: Let's see.

MR. JOHNSON: The one on the wall
is yellow. I just didn't put the yellow one in
here.

CHAIRMAN MORELOCK: What other
comments does the board members have? That's all
the comments I have.

MR. BAUGHMAN: This is Dave
Baughman, board member.

Chris, thanks for you and Anthony
being here to discuss this.

MR. JOHNSON: No problem.

MR. BAUGHMAN: I had the same thing
as Mr. Morelock. On Appendix C, page C-1, it just describes the following, taken from product literature, explains the fault messages, but there was no following to that. So I kind of reiterate that.

What is the -- being that the old burner was a Gordon-Piatt, what is the new burner?

MR. DEAN: This is Anthony Dean, maintenance technician up here. It's a Webster.

MR. BAUGHMAN: Webster. Very good.

MR. DEAN: The Gordon-Piatt, it was labeled as obsolete, and we updated it with a Webster burner. It now has a Siemens controller, but it utilizes the safety header as preexisting on the boiler. And the burner is only enabled through the safety on the boiler.

MR. BAUGHMAN: So the new burner has got a Siemens controller on it, whereas the old Gordon-Piatt is still functional and has a FireEye; is that correct?

MR. DEAN: It does have a FireEye. On the original -- on the other boiler, it's still functioning properly and safely and we're keeping it going best we can. There's a --

MR. JOHNSON: It still runs pretty good.

MR. BAUGHMAN: One of the interesting things I was looking at and reading over the fault messages, I notice this has the Siemens LMV37 along with the old E110 FireEye, but it notes the hold fault appears after the hold condition has persisted for the time period indicated. Hold faults are self-clearing if the hold condition disappears within the time allotted. Can you explain that some? Because I'm not --

MR. DEAN: We're still trying to learn it ourselves. We're learning the new Siemens controller. And with the old FireEye, it was very simple. It told you what was missing, what the fault code could be. And with the new Siemens controller, we're still trying to interpret the outputs for the alarms. It doesn't say a lot. We have to go to the manual. We have to physically look them up, compare them, and then figure out whether it went out on low water, missed the flame, something to that effect. So it's very -- it's not as quickly repaired as, say, an old FireEye system.

MR. BAUGHMAN: Yes. The old FireEye used to throw a code out, even over the radio, and it would say 3-P, and that's where your interlock was out, whether that was the air switch or the proof of closure or what have you, so -- but yeah. I was interested and I'll learn more about it myself also. So thank you for that.

The only other question I had was under Appendix D, D-1, maintenance tech/boiler attendant, under Appendix G, the maintenance tech duties, boiler attendant, I didn't see, was listed. And is the maintenance tech actually going to be a boiler attendant, or if that's part
of his duties, and if so, maybe I just missed it in the description in Appendix G. But if he is going to be a boiler attendant also, I just figured it needed to be under his duty listing.

MR. DEAN: It should have been --

Anthony Dean speaking -- I don't see it on here. I think we could update that.

MR. JOHNSON: Yeah. It's -- well, it has -- it's kind of listed a little vaguely --

I'm sorry, this is Chris. It says under essential duties, Number 2, maintain boiler and air compressor equipment. We may need to clarify that as boiler attendant.

MR. BAUGHMAN: I would, just because maintaining is part of the maintenance but not necessarily, specifically, identified as a boiler attendant to this variance.

MR. JOHNSON: Yeah. We can update that.

MR. BAUGHMAN: Just goes to show you we read these in pretty good detail.

MR. JOHNSON: Oh, that's good.

MR. BAUGHMAN: Mr. Morelock and I have talked many times about being up until 1:00 or 2:00 in the morning going over these, and that's kind of why we're charged with this.

MR. DEAN: I'm glad you do.

CHAIRMAN MORELOCK: What helps you with that is in the organizational chart under Appendix D, it does list the maintenance technician as a boiler attendant in Appendix D. But reinforcing that in Appendix G would be great.

MR. JOHNSON: Okay. That's no problem.

CHAIRMAN MORELOCK: And I do have one more question. If you look on page 9, at the bottom of the page, Item 7, it says the remote station operator shall not leave the campus. Does that also apply to the boiler attendant?

MR. JOHNSON: Yes. We have 24-hour security guards that cannot leave the front desk for any reason. They have to be relieved if they do. And the maintenance technician that is assigned to be the boiler attendant for each shift, he stays here all day.

CHAIRMAN MORELOCK: Okay.

MR. JOHNSON: He doesn't run to get anything at Lowe's or nothing like that.

CHAIRMAN MORELOCK: Okay. You may want to strengthen your manual a little bit by just stating that they will be there, you know, during the whole shift and not leave the campus.

MR. JOHNSON: Okay.

CHAIRMAN MORELOCK: Any other questions or comments about this manual?

MR. HENRY: This is Jeff Henry, board member. If I could ask just a quick question.

Mr. Johnson, I assume that you understand the operation, overall design and operation, of the boiler. And in looking at -- following on from Mr. Baughman's question, looking at the maintenance tech duties, the knowledge necessary to perform the job, a basic knowledge of boilers and operation of boilers isn't listed on here. Is there anybody besides you, Mr. Johnson, who has that kind of knowledge?

MR. JOHNSON: Yeah. All of the guys have been -- the maintenance department doesn't turn over very quickly, and they've all been through training in the past for the boiler operations. And they're set for renewal of that training as well.

MR. HENRY: Okay. So --

MR. JOHNSON: We send them all through it.

MR. HENRY: So that's a normal and essential part of their training for the job.

MR. JOHNSON: Yes. Yes.

MR. HENRY: Okay. Thank you.

MR. BAUGHMAN: And I'll just add to that. This is Dave Baughman. We trained six years ago and then three years ago. And so I'll probably see some of the faces. I know some people like Jason has moved on.

MR. JOHNSON: Yes.

MR. BAUGHMAN: But I'm looking forward to getting over there and meeting with everybody. One of the interesting things in this process was working with both the maintenance people. And you noticed on your log sheet that security people were trained separately than what the maintenance was. There was two separate groups of people. And maintenance felt pretty good about the whole training end of it.

Security, it scared the heck out of them. That was good. Everybody had a healthy respect for what it is that they're working with. But I just know, as we were going through the training end of it, security was, like, man, those things have a
lot of power. I was, like, yeah.

But they have kept up with the training on a good basis, at least our end of it going back over the last, well, six to nine years, so...

MR. HENRY: Thank you for the clarification. Wouldn’t that be considered part of the knowledge necessary to perform the job for the maintenance tech duties?

MR. JOHNSON: Yes. I can put more detail about that in the job description.

MR. HENRY: All right. Thank you.

CHAIRMAN MORELOCK: Any other questions or comments?

(No verbal response.)

CHAIRMAN MORELOCK: Hearing none, I’m going to call the question by roll call.

MR. BAUGHMAN: Second.

MR. BOWERS: Aye.

CHAIRMAN MORELOCK: Mr. Baughman?

CHAIRMAN MORELOCK: Mr. Bowers?

CHAIRMAN MORELOCK: Mr. Henry?

MR. HENRY: Aye.

CHAIRMAN MORELOCK: All right.

Gentlemen, you have a tentatively approved boiler variance.

MR. JOHNSON: Thank you.

MR. DEAN: This is Anthony. I have one final question. Do we still stay on our 20-minute rule just like we are now?

CHAIRMAN MORELOCK: Yes. Until you complete the site visit and all that, you will continue on the 20-minute rule.

990,000-square-foot facility.

Our boiler room is located in the back side of our facility and it is not free standing. It is attached to the building. We utilize two 500 horsepower, one 600 horsepower Superior air tube boilers to release our steam. And we use the steam for heating, cooking, and for sterilization.

The details of the boiler operation are described beginning on page 3 of our boiler room attendant variance document. We also included pictures of the boilers, the deaerator and feed pumps in this section as well.

And I guess, in summary, how our boilers function, we utilize one boiler online, one boiler on standby, and then one boiler in storage. Of course, we rotate the boilers to ensure equal run times.

Our boiler room is staffed 24/7. We have designated staffing: Four boiler room techs and one lead boiler room tech. And within our boiler room, existing conditions today, we have what we call a boiler room attendant monitoring station. It's described on page 10 of the variance document.
This station is constructed of storefront glass. It allows the boiler room operator to look out across the boiler room. It also contains our Metasys monitors. We use the Johnson Control Metasys system for monitoring the alarm conditions of the boiler and to alert our boiler attendant in realtime of any alarm conditions. In addition to getting an alarm at the monitors, it also sends an alarm out to our tech, in case he's outside the boiler room or inside the boiler room performing daily tasks.

In addition, this station has an emergency-stop push button for the boilers. And, again, even though this attendant station provides continuous monitoring, our tech is continuously stationed in the boiler room and does physically visit the boiler on the 20 minutes and conducts rounding throughout the boiler itself just to verify that operations are continuing and are safe.

So here is the main reason for our request for the variance. I think we all know with other pressures today, there's a lot of pressure for -- to increase -- or increased demands to ensure that we are cost-effective and we have efficient operations, so we have adjusted our in-house staffing. Now, this is completely separate from our boiler roof staffing. The in-house staff takes care of the hospital, of course, all the departments in the hospital. So we've adjusted our staffing to have the majority of our staff available during peak times for service requests, which just happens to be first shift. In doing so, we've had to cut back staffing for second and third shift to one in-house tech.

So what we're hoping, by gaining the variance, is to be able to utilize the boiler room attendant to assist our second- and third-shift in-house techs just when they need a helping hand. Like, for example, if the in-house tech needs help with a water leak, then, of course, we would want the boiler room tech to leave the boiler room and to help him out. But, again, that time period cannot exceed the four hours.

And to ensure that we continue with monitoring the boilers continuously, we've prepared, but we've not implemented yet, but we've prepared a remote monitoring station, which the description is down on page 14 of the boiler room variance document. And this remote monitoring station, basically, is located at the front of the hospital in the lobby/PBX area. It will be staffed 24/7 by the PBX attendant.

And within that station, we have a boiler alarm panel which consists of a local alarm indicator light and emergency-stop push button for each boiler. And, of course, in addition, the PBX attendants will see annual training which consists of the location of the emergency boiler shut-down panel, location and demonstration of the visual and audible alarms, location and demonstration of the emergency boiler shut-down button and emergency paging process for the boiler room attendant.

Now, we did -- in hopes of gaining the variance, we have initially trained all of the PBX staff back in October. I believe we've trained that staff. But, again, we have not implemented a remote station. We're waiting and hopefully we'll receive approval for the variance attendants, and from that time, we would implement that remote station.

CHAIRMAN MORELOCK: Thank you for that presentation.

Any questions, comments about this variance request?

MR. BOWERS: So we've opened discussion on this, right?

CHAIRMAN MORELOCK: I think so.

MR. BOWERS: Okay. The only question I have, I know this is a really big hospital, and we look at the vast -- you know, when the boiler operator gets away from there -- and four hours is an awful long time to be away -- and they looked at steam droppage, you know, demand and what would that do if the boiler operator -- if the boiler is shut down, how long -- if they had a problem with a boiler and the boiler operator was on the other side of the hospital, how long would it take for the boiler operator to get back to the boiler room?

MR. SPIVEY: This is Ben Spivey. To answer your question, our facility manager, Lee Godfrey (phonetic), has stated that it would take five minutes from the farthest end of the building.

MR. BOWERS: So you're saying, Ben, that -- so he gets an emergency call and he's got his tools all scattered out, and so he's just
supposed to drop everything and within five
minutes he's going to be back in the boiler room?

MR. SPIVEY: Let me clarify what we're wanting to use the boiler room tech for.
The boiler room tech still will be the primary duties of the boiler room. He's coming -- he would come out of the boiler room if he needed to assist one of our in-house techs. In other words, he would be holding a device or something like that, helping them move something. He would not be assigned solo jobs out in the facility.

Now, it may take a little more than five minutes. You're correct. You know if he's holding something, got his hand on a water leak, it may take a little bit more than five minutes, but surely, I believe we could get there within 20 minutes to take care of that boiler. And my understanding is what would happen if we had an alarm condition, at that point in time, our remote monitoring station would get the alarm, and they will be instructed to immediately push the emergency-stop, and that boiler that's an alarm would be taken offline, and the standby boiler would come up.

Does that sort of make sense?

alarm simultaneously.

THE REPORTER: Is that Ben?

MR. SPIVEY: Yes, Ben. Yeah, I'm sorry. This is Ben.

MR. BAUGHMAN: Thank you.

MU. SPIVEY: I am going to let Greg, our HVAC controls guy answer that, but it's my understanding that even if we have a flame failure on the boiler, any alarm will go through the PBX. But I'll let Greg clarify that.

MR. JONES: Can you hear me?

MR. BAUGHMAN: I can hear you, yes.

MR. JONES: Okay. The alarms that are canned in the boiler from the factory, anything on burner control, anything like that that automatically kills the boiler, then we have a high-pressure mechanical limit that's added alongside the boiler from the factory, that also will take it out at low water. Anything in that -- and they're all in a series together -- they'll come through and they'll hit the Johnson Control system, end up at the PBX operator, and they'll kill the switch and kill it. And it will individually kill each boiler as the alarm comes in. They're separated per boiler.

MR. BAUGHMAN: So part of this discussion is because it shows that it captures, in real time, the following alarms. It's a very short alarm detail. And in that, of course, you just mentioned flame safeguard and flame failure. Flame failure was not mentioned in this particular alarm enunciation.

The programmers themselves, I see that we've got this Medisys system, which is a Johnson Controls for your communications, but I don't see what the actual boiler programmers are as part of the hardware within this system. I see they're Superior boilers with low knocks, and I was looking back through the page 3, the description for the system components and operation. But I didn't see anywhere, in particular, what the flame safeguard system was, as far as the hardware.

I would kind of like to have a description of the hardware, not so much just for the remote monitoring, but what the hardware is on the boiler that's communicating with that remote.
system enunciation. So do you know what
programmers are on these burners?

MR. JONES: Are you talking about,
lke, the Honeywell burner control?

MR. BAUGHMAN: If it's Honeywell,
yes, sir.

MR. JONES: If the fuel air
controls Honeywell, it's all Honeywell.

MR. BAUGHMAN: Okay.

MR. JONES: That's all factory.

And all we did was series in that high limit with
this and brought that into a Johnson Control
system. All that stuff was already there and the
Johnson Controller came in as central alarm to the
Johnson Control system. The boiler was shut down.

We used to get a binary input into that control
where that told you that you had a boiler alarm.
Then you would have to go in there and read the
Honeywell controller. But that's the same thing.

It'll page out to these guys. It's going to page
it out to them when they get it.

MR. BAUGHMAN: Going to page 36,
Appendix H, this may be a minor detail, but in the
job description, I couldn't find anywhere in that
job description where it specifically identified

the PBX operators, but we will not implement until
the board gives us approval for the variance.

MR. BAUGHMAN: So without the
approval for the variance, even though they've
been trained and it's in place, it wouldn't be
implemented?

MR. SPIVEY: That's correct, sir.

We'll keep our boiler -- right now we're 24/7 in
the boiler room and we will be 24/7 in the boiler
room continuing. It's just that we would like to
be able to pull that guy out to help whenever we
needed help sometimes.

MR. BAUGHMAN: Very good. That's
all that I've got for now. Both of you, thank you
very much for your input.

One other thing that I just made a
note on, on page 4, we've got a description of the
DA, manufactured by Wheeler Tank, but I've gotten
no information as far as the design criteria on
that DA. I would like that, just for the manual,
to know what it is we're working with: Capacity,
design pressure, relief valve, so forth.

MR. SPIVEY: This is Ben.

Yes, sir. We can add that.

MR. BAUGHMAN: Very good. Well,

boiler attendants. I know it says boiler room
attendant job description, but I didn't see in the
job description itself it identifying boiler
attendants.

MR. SPIVEY: This is Ben.

Yes, sir. The job descriptions that
we have in place all throughout Ballad Health are
Tech 1, Tech 2, and Tech 3, and then it's a lead
tech. And so, basically, we don't have an
official job description through Ballad Health for
a boiler room operator.

We did list the duties of the boiler
room operator, but the physical job description,
we do not have one specific to a boiler room
operator within our system.

MR. BAUGHMAN: Okay. Well, I'll
leave that for further comment on how to address
that under his job description. Because if that's
his job description, it needs to be part of his
actual description, in my mind. But we'll leave
that to further discussion.

So when will this PBX remote
monitoring system actually be implemented?

MR. SPIVEY: This is Ben.

It's ready to go. We have trained
thank you very much.

MR. SPIVEY: Thank you, sir.

CHAIRMAN MORELOCK: Thank you,
Mr. Baughman. I, too, noted the lack of
description for the boiler attendant requirements
and the job description. On page 38, you'll also
see that there's no remote attendant duties as
well. And I understand the reply you've given
back to us concerning that, but whether it's in a
standardized job description, the hospital has
developed, you could also put that verbiage in
this manual in referring to the people who will
fill the roles of the boiler attendant and a
remote monitor.

MR. SPIVEY: This is Ben.

We tried to do that and maybe we need
to expand on it, but the boiler room attendant
monitoring personnel duties and responsibilities
are found on page 13. And the remote monitoring
personnel duties and responsibilities are found on
page 18.

CHAIRMAN MORELOCK: Right.

MR. SPIVEY: But we can expand
those if you feel like they need to be expanded.

CHAIRMAN MORELOCK: Just anything
that will add clarity to your manual would be very, very helpful.

CHAIRMAN MORELOCK: Because you're looking at their duties as well as their training and all of that. And I know you have sections for boiler attendant and remote monitor, so just make sure that those are really clear, as far as the descriptions for that.

MR. SPIVEY: Yes, sir.

CHAIRMAN MORELOCK: Looking on page 5, I appreciate the boiler data. And I think -- yeah, I think that's pretty -- like Mr. Baughman said, typically, we'll see some data on a DA as well. I think -- so you do have placards showing emergency procedures in the remote monitoring station?

MR. SPIVEY: This is Ben.

Have we got those up yet, Greg?

MR. JONES: No, not yet.

MR. SPIVEY: No, we haven't put those up yet, sir.

CHAIRMAN MORELOCK: Okay. So you'll need to get those up as part of your approved variance. When they make the field visit, they'll want to see those.

MR. BAUGHMAN: This is Dave Baughman, board member. I'm back again.

But I was interested to know on the alarm sequence -- I know we've got low-water alarms, but I'm interested to know which one -- the boiler is required to have two -- which alarm, actually, will enunciate back to the station?

Will it be the primary or the secondary which is the manual reset?

MR. SPIVEY: Okay. I am going to let Greg answer that one for us.

MR. JONES: Would you mind repeating that please?

MR. BAUGHMAN: Yes, sir. Being the boiler has two low-water cutoffs, a primary and a secondary, the secondary is a manual reset. The primary is not. It's an automatic reset. But which one of those two would enunciate back to the remote monitoring station?

MR. JONES: Any alarm that was originally from the boiler that will shut it down, we pick that up on their alarm Comtex. Okay? And it would be the one that requires the reset. And then we add the pressure limits into our sequence. I don't know about --

MR. BAUGHMAN: Yeah. I'm sorry to step on you there --

MR. JONES: That alarm right there is the Johnson Controls, and that will shut the boiler down.

MR. BAUGHMAN: Very good. And yes, so I appreciate that. How many personnel would be manning the PBX at any time?

MR. JONES: You'll have from two to four.

MR. BAUGHMAN: Very good. I noticed that the PBX switchboard operators handle all of Washington County's facilities, including all the system-wide hospital facilities, BHMA and Ballad Corporate offices in Tennessee, Kentucky, and Virginia. That's quite a load, isn't it?

MR. SPIVEY: Yes, sir. Our PBX here does not -- are you getting that -- this is Ben -- are you getting that from the generic job description from PBX?

MR. BAUGHMAN: On page 38, yes. I did not know that was a generic description. I thought that was a specific description.

MR. SPIVEY: This is Ben. It's the same deal as the Tech 1.

They have a generic job description for all the PBX operators. Here at Holston Valley, our operators only dispatch for Holston Valley at this point in time.

MR. BAUGHMAN: Okay. My suggestion would be is to make a nongeneric specific job description. When we get into generic job descriptions, as we're reading them, for whatever that position may be, it's somewhat misleading. And so my suggestion would be to make a specific job description. There again, that's just my own particular input and preference.

MR. SPIVEY: This is Ben. I understand. We could do that. We can include it in the manual, basically, based on the duties that we're asking them to do here at Holston Valley.

MR. BAUGHMAN: Thank you for that.
CHAIRMAN MORELOCK: Okay. Mr. Toth has raised his hand so I will give him the floor.

MR. TOOTH: Thank you, Mr. Chairman.

This is Marty Toth with ECS Consulting.

I have a question just concerning precedence moving forward. And I have a question concerning the connection between the boiler, Johnson Controls, and the remote station. And my question is are they going directly from the Honeywell system -- I assume it's maybe an R and 7800 -- going into the Johnson Control system? And is that Johnson Control system a network connection to the remote station?

MR. JONES: Okay. This is Greg.

It's not coming directly from the Honeywell. The Honeywell is an alarm, and we pick it up off the panel. Because we're sending out 24 volts but we can't fix them. So what happens is it energizes a relay and brings it in to the Johnson Controls alarm. And it is networked between the power plant and the switchboard. It's on the Johnson Control network.

MR. TOOTH: Okay. That's what I was concerned with. And I'll let the board handle that question from there. Thank you.

CHAIRMAN MORELOCK: Thank you, Mr. Toth.

What follow-up does the board members have?

MR. BOWERS: This is Harold Bowers, board member.

More of a comment than a question. I know we do a lot of these variances and we do a lot of hospitals, but I wanted to stress to Ben and his staff that, you know, there's a lot more that can go on in a boiler room that would not cause a sensor to go off and be acknowledged. And four hours is the maximum that we look at. Which you're going from full-time operators to people running around the hospital, and so much can go wrong in that boiler room. And the longer you're away, the more that can happen.

An example, we had one hospital that had a blow-out around the nozzle. The flame was coming out three foot. Well, there was no alarm that went off. There was nothing that went off. The operator happened to come by at his four-hour walk-through and see it. And, of course, he was a security guard and didn't know exactly what to do.

MR. SPIVEY: This is Ben.

I appreciate your comments, sir, and I tend to agree with that a hundred percent. That's one reason that we're still going to keep our 24/7 boiler room attendant staffed here on-site. And again, limited use, coming out of that room just to help our in-house tech guys if they get in trouble. I hope we never get to -- I know some facilities have changed where they just have a tech, and he's responsible for the boiler room and, also, taking care of the hospital. And I never want to go there. But I do appreciate your comments.

CHAIRMAN MORELOCK: Other comments or questions?

MR. BAUGHMAN: This is Dave Baughman, board member.

You had some good questions thrown at you, Mr. Spivey, and -- the both of you. I appreciate that. So in going back to Mr. Toth's comments earlier, the alarms, in particular, the alarm that goes back to the PBX or for the e-stop, will this e-stop be generated by the Medisys through the relay? In other words, does the Medisys then have a --

THE REPORTER: You cut out.

MR. BAUGHMAN: I'm sorry.

He took the fire extinguisher out instead of shutting the boiler down, but then he realized.

So that goes to another comment I want to make. I think the boiler operator training is number one. Should be trained boiler operators. Now, if they want to be a trained boiler operator, slash, security guard, trained boiler operator, slash, maintenance mechanic, fine. The boiler operator responsibility should be number one. Then after that, as far as what he does in the hospital is secondary. But these operators, the people who run these boilers, there's so much potential. We have been really lucky in Tennessee for a long time.

But if you'll look at some of these disasters that's happened, you need to really stay on top of those boilers, and you're really definitely going from full-time operators to the variance. If we do approve the variance, you're definitely increasing your risk of something going on in that boiler room that the sensor is not going to always catch. That's the only comment that I have to make.

MR. SPIVEY: This is Ben.

I appreciate your comments, sir, and
THE REPORTER: You cut out on the last few words, "does the Medisys then have a" --
MR. BAUGHMAN: Yeah. I just saw where it popped up "internet connection unstable."
The question being does the e-stop or the alarm that's generated by the Medisys back to the PBX remote station, is that generated back through the internet or ethernet or intranet onto the computer, or is it -- is that e-stop a different mechanism, i.e., hardwired, or what's the mechanism for it?

MR. JONES: Sir, it's hardwired between the network controller, the Johnson Control network controller and the power plant. It receives the alarm and it's hardwired there on the communication trunk over to the hospital. Okay? And it's also -- that controller and the PBX is on the same trunk. That's where it receives that alarm, that controller. Then the e-stop is up at the PBX, and they'll initiate it manually. It has to be reset. Then it will send a signal right back out on the same hardwired trunk.

THE REPORTER: Is that Mr. Jones?
CHAIRMAN MORELOCK: Yes.

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THE REPORTER: It's hard to hear Mr. Jones, also.
MR. BAUGHMAN: Okay. Good. And just so for clarification, that e-stop is actually hardwired from the boiler room back to the PBX.
MR. JONES: Yes. The emergency stop is hardwired at the controller at the PBX. It receives it as a binary input, and then it goes on that hardwire trunk and sends that signal to the power plant, to the boiler, and shuts it off. It will turn the --
MR. BAUGHMAN: Via the --
MR. JONES: It will power the boiler down.
MR. BAUGHMAN: Okay. But that's via the relay; is that correct?
MR. JONES: That relay is in series with the power to the controller room downstairs. When it energizes that relay, it shuts the boiler off.
MR. BAUGHMAN: Very good. So in this variance, part of the procedure is going to be every four hours or whatever the stipulation is, you're going to be checking to make sure that the relay and total system as the manual specifies.
MR. SPIVEY: Yes, sir -- this is Ben -- yes, sir, we do. And what we plan on doing was testing this system every shift. When the boiler tech changes shift, he would work with the PBX, and they would perform a test of the system.
MR. BAUGHMAN: That's very good. Thank you for that input.
CHAIRMAN MORELOCK: Any other questions or comments?
MR. O'GUIN: Chairman, Chris O'Guin, Assistant Chief. I have a question.
CHAIRMAN MORELOCK: Okay.
MR. O'GUIN: Mr. Spivey, I'm looking at the emergency procedure on page 18. What is the next step if the boiler monitor can't get anyone on the two phone lines that you have listed? What's the next step? I don't see a next step.
MR. SPIVEY: Greg is going to answer that for us.
I think to add to that, what we're saying is at the PBX, they get the alarm simultaneously, and the PBX does their phone calls, basically. And, also, the boiler room attendant is getting the beep or the pager at the same time. That was sort of our backup or our redundancy for that.

MR. JONES: And if we switch to cell phones in the future, we can text the cell phone, too. It has the capability of doing either one of them. But right now, we're on the paging system with that. We have a pager.

MR. O'GUIN: Okay. Thank you.

CHAIRMAN MORELOCK: Any other questions or comments?

(NO VERBAL RESPONSE.)

CHAIRMAN MORELOCK: Hearing none, do I have a motion for tentative approval of this variance based upon revisions to the manual to address board member comments and comments during the discussion today, as well as a successful site visit by the Boiler Unit?

MR. BOWERS: This is Harold Bowers, board member. I'll go ahead and do that motion.

MR. HENRY: Second.

CHAIRMAN MORELOCK: I've got a second from Mr. Henry. Any more questions, comments, or further discussion?

(NO VERBAL RESPONSE.)

CHAIRMAN MORELOCK: Okay. Hearing none, I am going to have a roll call vote.

Mr. Baughman?

MR. BAUGHMAN: Aye.

CHAIRMAN MORELOCK: Mr. Bowers?

MR. BOWERS: Aye.

CHAIRMAN MORELOCK: Mr. Henry?

MR. HENRY: Aye.

CHAIRMAN MORELOCK: Thank you, gentlemen. You have a tentatively approved variance based upon a site visit from the Boiler Unit. Make the necessary corrections to your manual and get that to the Boiler Unit as well. And thank you for your time and your presenting this item.

MR. SPIVEY: Thank you, board members.

CHAIRMAN MORELOCK: I'm showing almost 10:15, and I would like to let everybody have a ten-minute break before we take our last business item. So be back by 10:25.

MR. JOHNSON: This is Chris from UPM. Could I ask a quick question?

CHAIRMAN MORELOCK: Yes.

MR. JOHNSON: Can we cut off from the meeting, or do we need to stay until the end of it, or...

CHAIRMAN MORELOCK: It's an open meeting. You're welcome to stay if you'd like or you can -- if you need to leave, you can leave as well.

MR. JOHNSON: Okay. I was just wanting to make sure. Thank you.

CHAIRMAN MORELOCK: You're welcome. These meetings are always open meetings.

MR. JOHNSON: Okay. Thank you very much.

CHAIRMAN MORELOCK: You're very welcome.

(RECESS OBSERVED.)

CHAIRMAN MORELOCK: I'm going to move on to our next business item, which is 20-17, LG Electronics in Clarksville, Tennessee. It has a request that 50 vessels be classified as Tennessee Specials. So before they begin this presentation, does any board member have a conflict of interest on this item?

(NO VERBAL RESPONSE.)

CHAIRMAN MORELOCK: All right. Hearing none, please introduce yourself and present your item, please.

MR. BUTLER: Yes. This is Keith Butler with Industrial Boiler. I'm not sure that Michael and them can talk to us at the moment. The vessels that they have there were fabricated in Korea by a code shop. They did receive an ASME stamp with a new designator. They had sent the entire packaging complete with the data reports, which I had forwarded on to the board members. It's quite a hefty book. I have gone through and checked the calculations, looked them over, looked at the materials. I have been to the plant and also verified the stampings on the vessels and the location of them.

The main problem with these tanks is none of them have a national board number or national board registration, which is in violation of board laws. But they have asked that these...
vessels be given Tennessee Special recognition so
that they can operate them on their presses. I
could not find anything wrong with the
calculations or anything else. It seems to be
more of a clerical error on the fabricator's part.
I've discussed with the plant, the plant manager
and the engineer, as to what a Tennessee
Special means, as far as they are not allowed to
repair these vessels without the board's
permission, and that if you all don't approve
them, then these vessels would have to be
replaced, which as you would understand, would be a very
expensive and costly proposal, as far as their
operations. So we're asking that you approve
these vessels for Tennessee Special status.

CHAIRMAN MORELOCK: Thank you, Mr. Butler.
So to clarify what a Tennessee
Special entails is it a vessel that either
doesn't have an ASME mark or and/or not
registered with the National Board. National
Board publication 264 clearly states that that
registration has to happen within 30 days of
completing the manufacture of that vessel, which
is really unfortunate that they did not do that.

most of the dimensions are metric so five cubic
feet is the equivalent of 0.141584 cubic meters.
And so the good news is I did calculate the
volumes of these 50 vessels, and 23 of these
vessels are exempt. So that will take your
Tennessee Special list and cut it almost in half.
You would end up with 27 vessels that would need
to be Tennessee Specials instead of 50.

So, Mr. Butler, the only thing I
could not find is I could not find one of the
vessels in the package. And I can show you where
that is, but it's GS-1712-11, which is the nameplate
is A-1709. There's not a U-1 or a nameplate in
the package for that particular vessel. So I
don't know -- I don't know where that vessel is.
The U-1s have multiple vessels on each U-1, so as
far as being covered by the U-1, it's there, but I
don't see a nameplate for one in there. So that
takes you to 49 vessels. And so, you know,
these -- I guess, just for the sake of my sake and
the Board's sake, is what will these vessels be
used for?

MR. BUTLER: The use of these
vessels is their own presses which stamp out the
parts for the appliances that they're building,
However, if the Board chooses to make these
vessels Tennessee Specials, what that will mean to
LG is that yes, they can operate the vessels. The
nameplate will be the -- will show a State of
Tennessee outline with the "Special" stamped under
it to show that it is a Tennessee Special.
The only thing that I would clarify
is that all repairs would have to be approved by
the Boiler Unit itself. Only the alterations
would have to come to the Tennessee Board for
board approval.

But still, that's a little bit more
work than just your typical R-stamp repair. So
the only thing I would -- since it is the
Christmas season, the only thing I can share with
you that might be helpful is -- and I'll let
Mr. Bailey back me up on this but if you read
Tennessee law 68-122, and you come to 68-122-105,
which is exemptions for boilers and pressure
vessels, and you go down and read Item 5, Item 5
states, "Unfired pressure vessels having a volume
of five cubic feet or less are exempt.
So if you take those 50 vessels and
you calculate the volumes of those vessels and
granted, if you look through that gigantic book,
it's being provided by the user, that it's -- and it's not in the data report, that it is the proper over-pressure protection for these units.

CHAIRMAN MORELOCK: Mr. Baughman, unlike a boiler, unfired pressure vessels, you'll typically see in the remarks section on the U-1 that it's the owner's responsibility to provide over-pressure protection per UG-125 to UG-140. So that's not uncommon to see that.

I do have -- I do want to show you an example, Mr. Butler. If you will go to Section 4 of this book, and if you'll look at the nameplate for A-17-02, and let me know when everybody is there, when they've found that page.

MR. BUTLER: What was that page number again?

CHAIRMAN MORELOCK: It's in Section 4. And it will be the first nameplate that you come to, which is A-17-02.

MR. BUTLER: All right.

CHAIRMAN MORELOCK: Are you there?

MR. BUTLER: Yes, sir.

CHAIRMAN MORELOCK: Okay. If you'll put your finger in that and then go back to the associated U-1, which is the next page after

they would find it, if they went and did their own inspection, once they looked at the documentation and the nameplate, they would see that it's not correct.

MR. BUTLER: Yes, sir. I see that. I guess I didn't compare that because that wasn't on the official ASME nameplate. So that's kind of a -- the nameplate specifying the actual vessel itself, which they should be able to provide new nameplates for that since it's not a code nameplate. That portion of it is not.

CHAIRMAN MORELOCK: Yeah, that's -- you're correct on that. That's correct. They can. We just need to make sure that the data is correct. But you're right about that.

So I guess, Keith, since you're the engineering arm of this request, are you going to work with LG to get the nameplates corrected, and are you going to go back and verify which vessels are exempt and which vessels need to be Tennessee Specials?

MR. BUTLER: Yes, sir, I can do that. A lot of these vessels, like I said, are on top of presses which were operating while I was there. They will be shut down the week between Christmas and New Years, so I can actually go back up there and visit those vessels and make sure everything is correct on them. And, also, which -- Michael, the engineer, can hear us, so -- he just cannot respond --

CHAIRMAN MORELOCK: Okay.

MR. BUTLER: We will work with the Korean company to get replacement nameplates or at least pull those nameplates off and restamp them with the proper pressure.

CHAIRMAN MORELOCK: Okay. That would be very helpful.

So I'm not going to speak for the Boiler Unit, but I think once those corrections are made, and, like I said, back-check my math, but it should be -- you should have only 27 vessels that would need to be -- 26 or 27 vessels that would need to be Tennessee Specials, not 50.

MR. BUTLER: Okay.

CHAIRMAN MORELOCK: And, like I said, if you go to -- oh, let's see. Let me see if I can tell you what section it's in.

MR. BUTLER: I knew some of them were kind of small, as far as the volume of them.

CHAIRMAN MORELOCK: Yes. I'm
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1 trying to find which one has got the missing
2 nameplate in it.
3 MR. BUTLER: I think you said it
4 was Number 11.
5 CHAIRMAN MORELOCK: Well, it's
6 GS-17-12-11. I'm trying to figure out what
7 section of the book that's in.
8 MR. BUTLER: That should be in
9 Section 8.
10 CHAIRMAN MORELOCK: Maybe so.
11 Yeah. Maybe so. So I can't find the A-1709
12 nameplate. That's what I'm missing. I've got 7,
13 8, and 10. So yeah, you're right; it's in
14 Section 8, and it's the last two pages in the
15 book. You see the nameplate for 7 and 8, and then
16 the back page is 10, and there is no nameplate for
17 9.
18 MR. BUTLER: Okay.
19 CHAIRMAN MORELOCK: And that's all
20 the questions and comments I have.
21 What questions and comments do the
22 board members have?
23 MR. BOWERS: Yeah. This is Harold
24 Bowers, board member.
25 When it comes to Tennessee Specials,

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1 I have to admit I'm kind of ignorant of all the
2 rules. And I know you, Brian, at Eastman,
3 probably run into situations and I know you
4 explained that on the Tennessee Specials. Now,
5 who would actually register these units? Would it
6 be the state inspector? Sam would go out there
7 and check the safety valves to make sure they meet
8 the standards of the vessel? Or how does that --
9 this whole process come about? Could you explain
10 that?
11 CHAIRMAN MORELOCK: I can. Sam and
12 Chris would probably be better versed. But it's
13 either going to have to be their insurance
14 inspector or a state inspector or somebody that
15 they've written a contract to do their inspection
16 work for them to get that work done and then
17 submit it to the State for a certificate of
18 inspection.
19 And, Sam, correct me if I've left
20 anything out.
21 MR. CHAPMAN: It is a state
22 inspector that will be doing that, performing that
23 inspection.
24 CHAIRMAN MORELOCK: So like I said,
25 the good news is, it's going to be about half of

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1 what you thought you were going to have to
2 inspect, so that's good.
3 MR. BOWERS: This is Harold Bowers
4 again.
5 So you were also saying any repairs
6 on these vessels, it's different than doing a just
7 regular Section 8 vessel, correct? You'd have to
8 go back before the Board to do any repairs; is
9 that correct?
10 CHAIRMAN MORELOCK: That's not
11 correct. Any repairs, you would have to receive
12 permission from the State of Tennessee, from the
13 Chief Inspector, for a repair. An alteration
14 would have to be brought to the Tennessee Board
15 for review and approval.
16 MR. BOWERS: This is Harold Bowers
17 again.
18 So any repairs would have to go
19 through the chief.
20 CHAIRMAN MORELOCK: Yes.
21 MR. BOWERS: Yes. And do the
22 tag -- once we have -- these have National Board
23 plates on those but not a National Board, is the
24 Tennessee Special number, is that stamped on that
25 data plate, or how is that number associated with

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1 that vessel?
2 CHAIRMAN MORELOCK: Yeah. You'll
3 have a Tennessee Special stamp applied, and then
4 the Boiler Unit will number it. And they'll keep
5 a record of their -- they've got a list of their
6 Tennessee Special vessels.
7 MR. BOWERS: Well, this is
8 definitely a learning experience for me, because
9 I've never dealt with, really, any Tennessee
10 Specials.
11 CHAIRMAN MORELOCK: Well, it's not
12 frequent. We have instances where we've had
13 vessels that have been brought into the state of
14 Tennessee, and they were built to code that's not
15 ASME, and so those are brought to the Board, as
16 well, for review and approval as a Tennessee
17 Special. And the inquirer has to show that they
18 have done calculations to assure the State of
19 Tennessee that the vessel is safe, that,
20 basically, you take that foreign vessel, run an
21 ASME code calc on it, and if it passes, then you
22 can satisfy yourself that it's not stamped for
23 ASME, but it satisfies ASME, and therefore, it's
24 safe to operate in the state. But it will still
25 be a Tennessee Special.
MR. BOWERS: This is Harold Bowers.

Also, too, as the -- I know all of
the measurements are in metric. The safety
valves, would they all be in metric, too?

Matching those numbers up to make sure everything
is, you know -- I guess there's a way that people
smarter than me can figure it out, going from one
to another, but just that question there.

CHAIRMAN MORELOCK: Yes. And I
didn't do any relief valves. But like I said,
5 cubic feet is 0.41584 cubic meters. So when you
look at these vessels, you can see what's exempt
and what's not. So, like, if you just look at the
vessels in Section 1, they're basically made out
of 8-inch pipe. And the shell length is 13 and
3/4, so you do a simple volume calculation, and it
comes out to be .4 cubic feet, which is far less
than 5 cubic feet. And it would be .0113 cubic
meters if you let Excel -- Excel will do
conversions for you automatically if you'll set up
the cell to do that.

But I want Mr. Butler to verify,
because my numbers were done in haste. But, like
I said, it looks to me like about 23 of those
vessels would be exempt from having to be a

Tennessee Special.

MR. BUTLER: I agree with that. I
mean, I haven't done every one of them, but the
8-inch pipes and -- it seems like some of them may
have been 6.

CHAIRMAN MORELOCK: Yeah. You've
got a mix --

MR. BUTLER: There are eights and
tens. There were several of them there that were
small.

CHAIRMAN MORELOCK: Yeah. You've
got a range of 8 to 18.

MR. BUTLER: All right.

CHAIRMAN MORELOCK: You've got some
that are 18-inch pipe, 10-inch pipe, 16-inch pipe,
and 8-inch pipe. And then depending on the shell
length, they vary a little bit.

So I guess my question is --

MR. TOTH: Mr. Chairman?

CHAIRMAN MORELOCK: -- how do you
want to proceed Mr. Butler?

MR. BUTLER: Well, I guess, I need
to go back and the descriptive nameplates, I need
to get that taken care of so that they match the
actual --

Mr. Chairman?

CHAIRMAN MORELOCK: Yeah, the --
and the test reports as well.

MR. BUTLER: I would check with the
plant. I know sometimes plants are, like, well,
I've got a code vessel, and, you know, I want it
to be correct. As it's exempted under the cubic
foot volume, I would like to just drop those out
and not worry about them, and just submit those
for Tennessee Special status that are -- or have
to be. That way I don't have to keep -- the plant
won't have to keep up with them as close. I know
there are safety relief valves on the system
themselves that have been set for the proper
pressure ratings. Those have been verified on the
systems, so, I mean, they're actually looking at
going through and recertifying all the relief
valves on those.

I didn't know if this was going to be
a stickler, that we have to come back in three
months to revisit this or not, since they're being
designated as Tennessee Specials, if you're going
to have to have us come back in three months.

CHAIRMAN MORELOCK: Well, we
don't --

MR. BUTLER: Or it would be nice if

we can get them designated that today so we can
get this out of the way.

CHAIRMAN MORELOCK: Well, you're
going to have to designate them. That's a
conflict of interest for me to designate them.

MR. BOWERS: This is Harold Bowers,
boiler inspector.

Wouldn't it be that it would fall
back to, actually, the chief looking at each
individual vessel to see if they passed muster
without us wholesaling and saying, hey, these are
all Tennessee Specials? I'm not sure, exactly,
how that works.

CHAIRMAN MORELOCK: Well, it's a
good question, Mr. Bowers. And before I forget,
Mr. Toth had a comment, and I need to let him make
that comment.

MR. TOTH: Thank you, Mr. Chairman.

Just something that Mr. Bowers had alluded to and
just to help out with some education, if you go
look under board cases and interpretations, you
will find a couple that may help shine a little
bit of light. One would be the question about
authorization for repairs or repair for
alterations. That's going to come -- that
The other one that you may want to take a look at is also BC 05-22. And that one covered more of a lost data plate, where if you lost -- illegible or something of that nature -- but it did kind of go into the processes regarding a Tennessee Special. And the reason why we -- the Board went that route back in 2005 was because the definition that you're going to find in .03 of the code, the rules and regulations and the definition of the Tennessee Special all pointed -- and that's going to be paragraph 6 of .03 -- is going to really discuss items that are to come into the state prior to construction. And so that's where the Board did a board case instead of a board interpretation back in 2005. And if you read over those two, I think you'll kind of see a little bit of an understanding of where the history of that came from.

So that is not actually correct.

CHAIRMAN MORELOCK: Not for unfired pressure vessel, no.

MR. BAUGHMAN: Very good. And I know Mr. Bowers alluded to the conversion of metric to our system here in the U.S., predominantly. But making those calculations, in particular, for the relief valves. Which Mr. Butler said the relief valves have already been -- are on the vessels.

My question being are those relief valves in metric settings or are they in standard psi settings?

MR. BUTLER: I would have to check with the plant. I know they're there. I could not get up on top of the press close enough to read those labels myself. I would have to verify -- I mean, as long as they're set for the right pressure, it shouldn't matter if they're in metric or American standards. Most of these are designed for right around 100 psi. But, I mean, as far as the relief valve, its design, whether it's metric or American is not really important.

MR. BAUGHMAN: Well, I agree. It's just for the ease of the inspector. As Harold goes in, I can see him scratching his head doing the math or whether he already did the Excel conversion. What I'm saying is, is that we've got various inspectors that will be at LG over the years coming forward, and so I just wanted to make sure that as they were looking at something, I'm anticipating that everything is correct. But for the ease of the inspectors is why I was asking that question.

So on this Tennessee Special number, where will it get attached or how does it get attached to the unit? It's -- I mean, we've seen numbers attached to units in different ways over the years, anything from writing it on with a permanent marker to attaching it with a label to actually stamping a vessel. What's the protocol for attaching a Tennessee Special number on the vessel?

CHAIRMAN MORELOCK: I will defer to the Boiler Unit since they're the people who actually create those. So Sam or Chris, I'll let you answer that.

MR. CHAPMAN: Okay. And -- very good. I was under the interpretation that the nameplate was a facsimile or a representation of what was actually stamped in the vessel itself.
stickers -- I mean tags. So we have to come up with some of them again, because we're all out of them. Because we normally have SP and then the Tennessee, too. But we don't have any at the moment.

CHAIRMAN MORELOCK: But when you do have those, those would be stamped with a unique Tennessee Special number and it would be attached to the vessel, correct?

MR. CHAPMAN: Yes, it would.

CHAIRMAN MORELOCK: Okay.

MR. BOWERS: This is Harold Bowers, boiler inspector, board member.

The question I have is, okay, as time goes on, like, I believe, Dave had talked about, is the conversion. So we start out on the safety valves, originally, maybe, in metric. Then five years down the road, we're changing them out. Then we get them in the United States, and now they're in psi and capacity of CFM. And so then we say, well, for the inspectors, someone has to do that conversion. The tanks says one thing -- the MAWP of a tank says one thing. It's in metric. Then the other one is -- now the new replacement safety valve is in psi and CFM.

10, 20 years down the line and asks, "Hey, do you-all have the records on these?" we can pull them out and give to them. Right now we're converting them all over into the computer and maintaining them on the computer instead of having to pull paperwork. So I hope that answers your question.

MR. BOWERS: Perfect.

CHAIRMAN MORELOCK: And, Harold, to add to a little bit of that, you know, there's situations in the past where the Board has had companies come to the Board saying we've acquired a site, we've inspected the vessels, but we don't have inspection records on them from previous. They can't verify. Like you said, they don't have maybe a U-1 or anything like that. And so they'll hire, like, a company to come in and do thickness monitoring or -- not monitoring but thickness measurements, ultrasonic thickness measurements through the calculations, prove that the vessel is safe, and then make it a Tennessee Special.

MR. TOTH: Mr. Chairman?

CHAIRMAN MORELOCK: Yes?

MR. TOTH: Yes. This is Marty Toth. If I can make a little bit of a comment concerning the metrification and using the U.S. customary standards. We've got to remember also in regards to what Mr. Bowers said, NBIC is specific, and when they talk about the use of metrification or use in the metric system, it has to follow that vessel. And following that vessel regards to use in the metric system on your relief valves, actually, that's not really an issue, Mr. Bowers. I mean you can order valves in metric or in customary standards. That's not an issue. Where you come up against the issue is when you look at repairs and alterations of those units, we do repairs and alterations. They have to be done in metric. If the vessel is built in metric, you have to stick with metric. That comes straight out of the NBIC.

So, also, if you were to look, as an inspector -- every inspector should have access to the NBIC -- part 1, Section, I think, 7 has actually, has a conversion chart that will help you as an inspector to be able to convert over pretty simply -- so those are the two things I wanted to mention, is just remember that once you
1. start, you build with metric, the vessel has to live in metric. That's all I have. Thank you.

   CHAIRMAN MORELOCK: Thank you,

   Mr. Toth.

   MR. BAUGHMAN: This is Dave Baughman, board member.

   What's the inspection cycle on these Tennessee Special unfired vessels? Will it be once every five years? But what's the inspection cycle of these vessels, if anything? And the second question was is there a corrosion mechanism or a risk-based assessment that's going to be in place for determining the corrosion rates on these units and so forth -- I didn't know if LG had anything in place -- but where we're at, moving forward, to be able to identify any corrosion mechanisms?

   MR. BUTLER: I'm not sure if LG has anything in place. Sam could tell you how often they have to be recertified by state standards. I'll throw that on his lap. I mean, typically, when you go through and you get a vessel recertified, you open it up and look in it just like you do a boiler.

   There is a very small corrosion allowance built onto these vessels. When I see a corrosion allowance of 1 millimeter, I mean, that's miniscule. Typically -- like I said, these are air tanks. Typically, there's a lot of oil in these air lines on these. I know, just working with other customers that have these type, corrosion is very seldom an issue. There's that much oil in the air on them. And usually, welding on them is the issue because of all the oil that's on them. We very seldom see any further corrosion problems for these type of air tanks.

   MR. BAUGHMAN: So I don't know if that quite answers my question, but --

   MR. BUTLER: It was a political answer. I tap danced all around it.

   CHAIRMAN MORELOCK: So,

   Mr. Baughman, to answer your question, the Tennessee law says that an unfired pressure vessel has to be internally inspected every two years.

   MR. CHAPMAN: Yes.

   CHAIRMAN MORELOCK: And so as a Tennessee Special, these vessels would have an internal every two years.

   MR. CHAPMAN: Yes.

   CHAIRMAN MORELOCK: And so, you know, to Mr. Butler's point, yeah, the .01 -- or the corrosion allowance is 40,000 of an inch, so if you have four mils of corrosion per year, you're going to go ten years before you get down to a T-min. Or it's a built-in corrosion allowance. It's not necessarily T-min, but down to the minimum calculated thickness.

   MR. BAUGHMAN: Well, and henceforth my question on it was I didn't -- that's still ten years goes by in the blink of an eye, as we know. So I wanted to make sure that there was a mechanism in place by the customer to keep up with this. Because as we know inspections go, whether or not they get inspected, they pull off production and so forth, things slipping through the cracks, we want to make sure that all these mechanisms are in place to identify -- and like you say, it seldom happens with these units, but seldom is not never. And so we want to make sure that we're as safe as what we can possibly be.

   CHAIRMAN MORELOCK: Right. Well, and to add to that, when these vessels are built, they're using a standard plate size. So, basically, you do your calculation and you pick the next plate size. You put a corrosion allowance onto it. And then, when that vessel goes into service, yes, it's going to corrode. Once you get down to calculated thickness minus corrosion allowance, then you do a true T-min calculation.

   You can do a fitness for service. You can invoke API 579 and go to 90 percent of that thickness with a fitness-for-service evaluation, which you have to submit to the State of Tennessee. So that's all part of that risk-based inspection program that the NBIC allows you to utilize along with API documents and all that. So that's a really brief, in-a-nutshell fitness-for-service conversation.

   MR. BOWERS: This is Harold Bowers, board member.

   The question I have, I guess, for Sam, are these going to be treated, as Tennessee Specials, treated just like any other unfired pressure vessels at the standard two-year intervals just like any other pressure vessel, or are they handled -- are they treated separate -- differently?

   MR. CHAPMAN: They're treated like the two years inspection. The only thing
different on it is you have markings on it for saying that it's a Tennessee Special. That's about it on that.

MR. BOWERS: Thank you, Sam.

MR. CHAPMAN: All right.

CHAIRMAN MORELOCK: So the question we have before us, as a Board, is -- to attempt to answer Mr. Butler's question is this, is if he goes and does all the legwork, verifies what vessels indeed are exempt, what vessels have to be Tennessee Specials, does he have to wait until the next board meeting? And by practice, the answer to that question is yes.

So my question to you, Mr. Butler, is these vessels are in service and are operating right now. Do they have certificates of inspection from the State of Tennessee?

MR. BUTLER: No, sir, I don't believe they do.

CHAIRMAN MORELOCK: Okay. So the only thing I know -- and I'm going to -- this is the Boiler Unit's call. I'm just talking. I don't know if we can do something similar to a variance where if Mr. Butler works with LG, they take these 50 vessels, they do the evaluation, they figure out definitively which vessels are exempt from Tennessee law, what vessels have to be Tennessee Specials, and then the Boiler Unit comes out and looks at them -- I just -- I don't know if the Boiler Unit is going to be comfortable with a tentative approval or they would prefer that you come back to the Board with a revised item showing, definitively, what will be a Tennessee Special. And we vote it in March.

MR. HENRY: Mr. Chairman, this is Jeff Henry, board member.

Could I ask a couple of questions?

CHAIRMAN MORELOCK: Absolutely.

MR. HENRY: Mr. Butler, you've been to the facility and you've seen where these are installed. In the event one of these were to fail, would they present a safety issue to the people of the plant?

MR. BUTLER: No, sir, none that I see. Some of them are located in a basement area underneath the presses. The others are located on top of the presses. There's not people standing next to them, if that's the question you're asking.

MR. HENRY: But, I mean, there are times when people would be in the area that could constitute a hazard if one were to fail.

MR. BUTLER: Well, that would be true of any vessel failure. I mean --

MR. HENRY: But I was actually asking that question of our Chairman.

CHAIRMAN MORELOCK: Well, if they don't have a valid certificate of inspection, they don't have permission to operate them.

MR. HENRY: So they're operating these illegally right now.

CHAIRMAN MORELOCK: I mean, it's no different. We've had board cases come to us several years ago where a company had a vessel in service for three years with no valid certificate of inspection. And there are -- once you satisfy the safety concerns, then it goes back to the State of Tennessee on what the law says, as far as I think it's a Class C misdemeanor for every day, and it's a $50 fine for every day you operate without a valid certificate of inspection.

Mr. Bailey can confirm that for me.

MR. BOWERS: This is Harold Bowers again.

The only thing that I have to say is, you know, they have come to us to say they have a
problem. And a lot of times new plants, when they first get started up, we didn't always, as state inspectors and insurance inspectors, inspect those units at startup. We just usually, a lot of times, inspect it right after startup. And I'm not sure how long these have been in use, but they did come to us because they know they have a problem. Now, I guess it's up to the Board and the Chief to decide where we go from there on these right here.

I've inspected many of these units at different plants. And most of them are, like he said, at the top of the press or underneath the press. I'm not sure what, actually -- if he can tell us what the source is of the air going to these, as far as the psi being fed. You know, in most cases, if they're centrifugal compressors or rotary screws, probably a maximum of 125 psi, and you use the conversion to figure out the safety factor there. But I know we need to do something on this, and we'd hate to shut down this plant saying, well, they can't use these right now. But I guess that's up to the board members to decide or give these people a grace period to come back next board meeting, and hopefully, we'll get this thing settled by then.

CHAIRMAN MORELOCK: Thank you, Mr. Bowers.

So we, as a board, have been asked to determine if a certain number of vessels can be Tennessee Specials. And that's what we're doing. We're looking at the rule and the law. Now, as far as operating a vessel or not, that comes from the Boiler Unit. That doesn't come from the Tennessee Board. We support the Boiler Unit, but the Boiler Unit is the enforcement of the rules and the law. And so we promulgate and review and update the rule and the law. So that's the difference in the responsibility. So it ultimately comes to the Boiler Unit on the decision to operate or not.

But Mr. Bowers' point is, you know, true, is I think we've done some good work today to help LG realize that they don't have 50 Tennessee Specials. You're probably going to have about 27, which I think that's good. But now Mr. Butler is going to have to finish his work to put everything together to get these vessels labeled correctly and have a -- work with the Boiler Unit to get a valid certificate of inspection.

MR. BAUGHMAN: This is Dave Baughman, board member.

Who will the -- and Sam, this is -- Chief, this is more directed to you, but who will the inspector be from the State that will be assigned? Because 27 vessels, if that's what we end up having for Tennessee Specials, that's a pretty good additional load on somebody, especially since we're already pretty well loaded up. I'm just interested to know who the inspector would be.

MR. CHAPMAN: Well, the inspector will be Steven Perry, because he's right there in the Clarksville area. So he should be able to get all that set up in a couple of days and stuff, because he, most likely, is going to have to get a cherry picker or something to get high over the press, and then down in the basement of it. He most likely is going to have the press shut down at that time when he's doing the inspection.

MR. BAUGHMAN: Yes. And that will be quite a logistics -- I'm sure they won't have all of them shut down at the same time, but there will be multiple trips involved. But just logistics, it's going to take a little while.

MR. CHAPMAN: Well, normally -- now, I'm just speaking from the past, because there's one place that's in -- down by us. Normally, when you go in there, you set it up to where, okay, we're going to do all these here in a row, because they're normally in a row. And that way they can shut those presses down as they go up and inspect. So that's normally how they do it.

MR. BAUGHMAN: Yeah. Because there's a lot of lockout/tagout, a lot of mechanisms involved that make all that happen properly.

MR. CHAPMAN: Yes, it is. But that is one time that we will actually set it up to say, okay, this is when we're going to do it. Because they work together on that part so that they can work together and get everything done as much as possible.

MR. BAUGHMAN: That's very good.

Thank you, Chief.

CHAIRMAN MORELOCK: So, I guess, my --

MR. BUTLER: Would --

CHAIRMAN MORELOCK: Go ahead.
MR. BUTLER: Would they be able to go in and do some of these inspections before the next board meeting? I mean, like I said, this entire plant will be shut down, I think it's a week and a half. I mean, we understand, the plant understands, that, you know, they don't have operating certificates on these, like I said. Mr. Bowers said, you know, they came to you and said here is our problem. Could the inspections already be performed if I say, hey, these are the 27 vessels that we need Tennessee Specials on?

MR. CHAPMAN: (Shakes head.)

MR. BUTLER: So Sam is shaking his head no, so he's not going to send an inspector out there until an official vote takes place.

CHAIRMAN MORELOCK: Okay. So I need to make sure Mr. Herrod and Mr. Bailey weigh in on this question. But due to the fact that we are going to be meeting electronically for the foreseeable future, if I have agreement with the Boiler Unit and the State of Tennessee, I am not opposed to letting LG and Mr. Butler to get a revised package put together as quickly as they can and have a special-called electronic Zoom meeting just for this item to get it approved. But I need Mr. Herrod and Mr. Bailey to let me know if that's possible or not.

MR. HERROD: Well, for the Boiler Unit, that would be acceptable. How quickly are they talking about having that package put together? In January?

MR. BUTLER: Yes, sir. I'd need until then so I can go up and verify these vessels. Like I said, the plant will be shut down so we can go up and fix these descriptive nameplate issues, eliminate those that are too small and then resubmit the package which should be about half this size. I'll only kill, like, one tree. So yeah, I would say the second week of January, the latest.

MR. HERROD: I'm not sure if we have time. Do we have to give a 30-day notice of a meeting, Carlene?

MS. BENNETT: It's my understanding we did. Dan could probably speak more to that than I could.

MR. BAILEY: I think the statute specifies 30 days.

MS. BENNETT: Okay.

MR. BAILEY: I believe I have seen some case law where it was held at two weeks and was considered reasonable. So it's one of those things that, you know, I would say at least two weeks. If you can get 30 days, that's great. But I think if you can give at least two weeks' public notice, you'll be okay.

And by the way, Mr. Chairman, that is a Class C misdemeanor for each day. Of course, that would be something that a prosecutor would have -- we would have to bring it to a prosecutor's attention, and I don't think that's the intent here.

CHAIRMAN MORELOCK: It's not. It's not. I do know we have been in this situation before. We had a June meeting. We had to red-tag a vessel that didn't have a valid certificate of operation. It never had one for three years. And they had to -- it basically shut the plant down. They sent people home until they could get the calculations to prove the vessel was safe. We had a special-called meeting in July of that year to just take care of that one item, to get their plant back open and get their employees back to work. So we have done it before.

But I just want to make sure that we get the right -- that we're following the statute of the law, as far as how quickly it can be scheduled. If LG can get everything ready by mid-January, you could almost schedule the meeting next week for the middle of January, and that would be a month's notice. And then let them get all their work done and come back to the Board with a specific list of vessels that they know will need to be Tennessee Specials with corrected nameplates and let the Board vote on that.

MR. BAUGHMAN: Chairman Morelock, this is Dave Baughman, board member.

One of the things I would like, just for my own end of it is to make sure that on these vessels that are going to be exempt, if somebody would be as kind to show us just the simple mathematics just to corroborate the vessels being exempt. The other is understanding that we all understand that these units are operating outside the scope of our rules. And so I don't feel comfortable putting a stamp of approval on that, necessarily, from a liability standpoint, should...
there be an accident and the ramifications of that. So I just want to make sure that we all understand that both Michael Hudson and Keith Butler and the rest of us that are in on this meeting understand what those legalities are in moving forward with this.

I don't want to shut anybody down, in particular, and don't have that capability or desire, but I want to make sure of just bringing that up for the record that we do have a liability involved here in saying, yes, we can continue to operate until this comes about.

CHAIRMAN MORELOCK: Well, and to address your question, Mr. Baughman, the Board doesn't have an item that they can vote on today. And so we're not shutting anybody down. We're not doing anything other than just following the rule and the law on what needs to be done to have a Tennessee Special. It's up to the Boiler Unit, as the enforcement arm of the law and the rule, to allow them to run or to red tag them and make them shut down. So, I mean, that's where we're at.

What we're trying to do is to have a discussion on what's the most efficient way we can get these Tennessee Special vessels clearly designated, the vessels that are exempt to be clearly designated, and then let them process our normal channels to get a Tennessee Special for those vessels that need to be stamped as a Tennessee Special.

MR. BOWERS: This is Harold Bowers.

If we had a meeting in 30 days, this would give Sam, also, time to get his tags. He has to order tags, and, also, he can set up the manpower he needs to get these things done if we so approve 30 days from now.

MR. BAUGHMAN: This is Dave Baughman, board member.

Would these be charged back out as special inspections for each individual vessel?

MR. HERROD: This is Tom Herrod, assistant commissioner.

Yes. Potentially, they would be. We would have to make that decision within the Boiler Unit. But yes, we do have -- that is what we could very well...

MR. BAILEY: I think Tom froze up on us.

MR. BAUGHMAN: We missed the end of that, Mr. Herrod. I'm sorry. You broke up.

MR. HERROD: Okay. Can you hear me now?

CHAIRMAN MORELOCK: Yes.

Okay. We do have --

we will discuss whether or not we would charge individually or as a group, but that would be our decision to make. And we do have the authority to do individual units as a special inspection.

CHAIRMAN MORELOCK: And that was the way it worked with the last time we had this issue. The Tennessee Board, we provided assurance that the vessel was safe. It was a vessel of non-ground. It was a not of circular cross-section, and we provided calculations to show that the vessel was safe. And then that was where the Board stopped and the Boiler Unit and the commissioner took over, or the assistant commissioner took over on the legalities and all of that.

So the boiler board just confirmed that the vessel was safe. It wasn't posing a safety hazard, but it wasn't in compliance with the rule and the law.

MR. O'GUIN: Chairman, Chris O'Guin, assistant chief.
can't.

So do I have a motion from the Board?

MR. BOWERS: This is Harold Bowers. I'll make that motion to table it and have a special meeting within the next 30 days.

CHAIRMAN MORELOCK: All right. Do I have a second?

MR. HENRY: Second.

CHAIRMAN MORELOCK: Thank you, Mr. Henry. I have a second. Any more discussion?

(No verbal response.)

CHAIRMAN MORELOCK: Hearing none, I'm going to have a roll-call vote.

Mr. Baughman?

MR. BAUGHMAN: Aye.

I would look at those dates, too, just because I know there's some things coming up in January. I would definitely like to be on the meeting end of it. But yes, aye.

CHAIRMAN MORELOCK: Certainly.

Mr. Bowers?

MR. BOWERS: Aye.

CHAIRMAN MORELOCK: Mr. Henry?

MR. HENRY: Aye.

CHAIRMAN MORELOCK: All right.

Motion passes.

MS. BENNETT: Mr. Chairman?

CHAIRMAN MORELOCK: Yes.

MS. BENNETT: I'm sorry. I'm just throwing this out there. Would January 13th fit the criteria of within 30 days or so?

CHAIRMAN MORELOCK: Pretty close.

MS. BENNETT: Okay. That's just a tentative date just, you know, if everybody could make it, then I could arrange it.

MR. BAUGHMAN: I could not be there, Carlene. I'm sorry.

MS. BENNETT: Okay. We could shoot for the 20th.

CHAIRMAN MORELOCK: So what about March the 20th?

MS. BENNETT: Oh, no. I was thinking January.

CHAIRMAN MORELOCK: I meant January 20th. Sorry. I'm thinking too far ahead.

MS. BENNETT: Okay.

CHAIRMAN MORELOCK: So is that good with all the board members, January the 20th?

MR. BAUGHMAN: It is with myself.

CHAIRMAN MORELOCK: Okay.

MR. HENRY: I'm good with it, yes.

CHAIRMAN MORELOCK: Okay. It works for me as well.

MS. BENNETT: Okay.

CHAIRMAN MORELOCK: The 20th looks like a good date.

MS. BENNETT: That will give me something to shoot for. If there's an issue, we will email amongst ourselves and figure it out. But I'll get it scheduled and posted.

CHAIRMAN MORELOCK: Mr. Butler, is there anything we need to discuss before we leave this item?

MR. BUTLER: No, sir. I'll get the new packages to Sam as quick as I can --

CHAIRMAN MORELOCK: Okay.

MR. BUTLER: -- and let him email them or whatever he did to get them to you-all.

CHAIRMAN MORELOCK: All right.

Thank you for the presentation. Thank you for all the conversation.

MR. BUTLER: Thank you-all for hearing us.

CHAIRMAN MORELOCK: Thank you. Okay. So that takes us to Item 7, which is rule cases and interpretation. And our first one is board interpretations 20-02 for approved variance changes.

MR. BAUGHMAN: Mr. Chairman, you said that was Item 7? I've got that as Item 6.

CHAIRMAN MORELOCK: Well, the agenda was revised to add approval of the September 16th minutes.

MR. BAUGHMAN: I did not print that off. Thank you, Mr. Chairman.

CHAIRMAN MORELOCK: You are quite welcome.

So who is presenting this item?

MR. TOTH: I would say that would be me, Mr. Chairman, if we're referring to 20-02.

CHAIRMAN MORELOCK: Yes.

MR. TOTH: That was what I submitted.

CHAIRMAN MORELOCK: Okay.
MR. TOTH: I'm glad I tuned in.

Was this added to the agenda? I didn't see it the first time I looked, but okay.

I'll go ahead and do this. If I can share my screen, I can pull it up. Okay. So if we look, this is the submission that was sent in October. Statements, ECS Consulting -- okay -- requests the Board to provide an interpretation on re-presentation requirements for changes to board-approved remote attendants variances.

A little bit of background on that.

Owners-users of approved remote attendants variances are looking for an understanding of when they are required to re-present to the Tennessee Board of Boiler -- and that should be rules -- when changes have occurred to the program.

Inquiry Number 1, is it required for approved variances to be re-represented to the Tennessee Board of Boiler Rules if there have been equipment changes, replacement and/or additions to said variance. My submitted reply is yes.

Inquiry Number 2, is it required for approved variances to be re-represented to the Tennessee Board of Boiler Rules if there have been common changes to said variance that do not affect that needs to be addressed if the checklist guidelines are to be revised. But I'm fine with tabling this if they can be addressed inside of the guidelines.

CHAIRMAN MORELOCK: Very good. So as long as the Board agrees that we will take both of these board cases and -- board interpretations, actually, 20-02 and 20-03, if both of these items are handled with the revisions to the checklist and the guide, Mr. Toth is agreeable to that, and he supports Assistant Chief O'Guin's request, then we have a motion to table this item with that explanation. Do I have a motion to accept tabling this item?

MR. BAUGHMAN: So moved.

CHAIRMAN MORELOCK: Do I have a second?

MR. BOWERS: Second by Harold Bowers.

CHAIRMAN MORELOCK: Okay. Thank you.

Any further discussion?

(No verbal response.)

CHAIRMAN MORELOCK: All right. So hearing none, I'm going to call for the vote on that, that being that we are going to table these two board interpretations, contingent on the fact that these interpretations will be included in the revisions to the checklist and guide for the boiler attendant variance.

MR. TOTH: Mr. Chairman, before you go to that vote, I just want to be clear in the understanding that on the second interpretation request, it had to do with tentative variance expires; that no current applicants or tentatively approved variance will be held to an expiration until such time. There are some that are out there that have gone or are getting close to going over the presumed 12-month authorization time, which is not written anywhere.

I just want to make sure that we are clear that if somebody comes up to be inspected by the Boiler Unit, they will not be turned down because they have exceeded some date that's been established.

CHAIRMAN MORELOCK: Well, that's a fair statement because of two things. One, there's no published board interpretation to go to, and the checklist doesn't discuss it.

MR. TOTH: Right. I just wanted to make sure.
CHAIRMAN MORELOCK: Thank you.

All right. So any more questions or comments before I call the vote?

(NO verbal response.)

CHAIRMAN MORELOCK: We're voting to table these two items contingent on review and revision of the checklist.

(NO verbal response.)

CHAIRMAN MORELOCK: So hearing no comments, I'm going to have a roll-call vote.

Mr. Baughman?

MR. BAUGHMAN: Aye.

Mr. Bowers?

MR. BOWERS: Aye.

Mr. Henry?

MR. HENRY: Aye.

CHAIRMAN MORELOCK: All right. So we have tabled these two board interpretations.

MR. TOTH: Thank you, sir.

CHAIRMAN MORELOCK: Thank you.

So that takes care of rule cases and interpretations in Item 7.

Moving on to Item 8, which is open discussion items. And our first discussion item is the tentative 2021 meeting dates, which would be -- the first quarter would be March the 10th; second quarter would be June the 9th; third quarter would be September 22nd; and fourth quarter would be December the 15th. So we just want to make sure that those dates are good for the board members because it's important that we have a good, clear quorum when we meet. So does anybody have any conflicts with those dates?

(NO verbal response.)

CHAIRMAN MORELOCK: All right. Hearing none, then those dates will stand.

So moving on to our next open discussion item is the variance guideline and checklist revisions. So let me get my notes out on that. And I hope everybody has the notes on that.

MR. BOWERS: Chairman, could we take, probably, a five-minute break?

CHAIRMAN MORELOCK: Absolutely. Absolutely. We'll take a five- or ten-minute break. Let's just resume at 11:55. That will give you ten minutes.

(Recess observed.)

CHAIRMAN MORELOCK: In the essence of time here, we'll go ahead and start working on this discussion item of looking at the guide and the checklist for the boiler variance. So I hope everybody has got a copy of it. Carlene sent those to the board members. So what we want to do here is we know there's some revisions we need to make to the variance guide, as well as the checklist. And Carlene sent out a note for comments. And so if you got the handout, what you have is the Revision 10, May 2017, of the guide and the checklist, and you also have comments from board members. And so, to me, I guess, the most expedient thing to do is let's look at the comments first, and then we'll take your comments as well.

So Mr. Baughman, do you want to discuss your comments first?

MR. BAUGHMAN: Yes, I'll be glad to. Do we need to have a motion to discuss, or are we good with just going into it?

CHAIRMAN MORELOCK: This is a discussion item so we're not taking any action.

MR. BAUGHMAN: Super. Yeah. And even after this was submitted, there's, of course, other ideas that come about, so I take it this is going to be a bit of a work in progress. But I'm glad they got addressed.

So on my comments that were sent out on October 26 and are part of the paperwork here, the first was just having the manual dated in some form or fashion that coincides with the inspection. In other words, when the inspector goes in, he can look at a manual, and the date of the manual coincides with the approval. So, in other words, he knows that that manual is three years out or is within a particular period of time. That's just one of the comments that I had heard, and I wanted to make it as part of our discussion.

So in looking at these revisions, these are not only my own personal thoughts, but just getting input in from others out in the industry with it, we know the old flow chart of 2009 needs to be updated. The flow chart is not quite in the manner of what it needs to be. And so however we decide to revise a flow chart or if we even decide to revise it, but that was one of the things that I had looked at, was I didn't think the flow chart reflected the actual communication chain of how we take care of our events.
Do you want to just read through those, or do you want to address them one at a time?

CHAIRMAN MORELOCK: I guess, as far as -- do the board members agree that we need to update the flowchart? Yes? No? Maybe so?

I agree with Mr. Baughman. We need to take a look at it, and especially work with the Boiler Unit and make sure this flow chart is -- you know, let's make it what you want it to be that supports the checklist.

So I'm in agreement with your comment. I don't have a solution yet, but I do agree with your comment.

MR. BAUGHMAN: So get advice from the Boiler Unit and revise it accordingly with their input?

CHAIRMAN MORELOCK: With their input, as well as the board members', yes.

MR. BAUGHMAN: Harold or Jeff or Chris or Sam, have you guys got anything on that?

MR. HENRY: I would agree with that. I would agree with that, Dave.

MR. BOWERS: I'm the same way. I agree with you-all, that we need to definitely look at it and work with the Boiler Unit and see if we need to make any changes on this.

CHAIRMAN MORELOCK: So let me ask a question of Mr. Bailey. Since this is a discussion item and we are going to revise the variance checklist and the guidelines, could the Boiler Unit and the board members develop a draft, take these comments and develop a draft, outside of a meeting and then bring it to the meeting either as a discussion item and eventually an action item? Is that okay if we work on it? Or do we have to work on it in an open meeting?

MR. BAILEY: I think very much like when we redid the rules, you know, we circulated drafts of proposed rule changes, language, and that kind of thing and then brought the final product to the Board for a discussion and public vote. So I don't think there would be any problem with doing that same thing here.

CHAIRMAN MORELOCK: Okay. I just wanted to clarify that. So what we can do is we'll talk about it and we'll take your comments. We can circulate a red-line draft and kind of work on it until we get it to a stage where we think it's ready for a vote, a presentation and a vote.

So yeah, that's good.

Thank you, Mr. Bailey.

All right. Proceed, Mr. Baughman.

MR. BAUGHMAN: So under Section 1 of the introduction, Number 2, where it states a computerized remote monitoring system is a minimum requirement necessary to satisfy the degree of safety desired, I was looking at changing to a remote monitoring system is a minimum requirement.

And I guess it got down to the definition of what's computerized. Why do we have to necessarily specify a computerized system? Some systems don't necessarily compute; they enunciate.

And by calling it "computerized," I just -- I thought that was just part of the nomenclature that we could change. Not that we even look at that to any huge degree when we're going through our hardware and analyzing it on, you know, does this actually compute?

But I just thought that from the standpoint of clarification that we put a remote monitoring system is a minimum requirement necessary to satisfy the degree of safety desired. Again, point for discussion and so forth on it.

Next item? Or do you want to discuss that?
getting a better description of changes. How to word that, I hadn't come up with, but I just thought that there would be a -- that's a question when it comes up, "any changes." And people say, well, what -- and we get that before the Board even. People will ask what, you know, technical or editorial, does that have to come up for review.

CHAIRMAN MORELOCK: So what comments does the Board have?

MR. HENRY: I guess I think it's a fair comment. I guess my only question would be who would be the ultimate arbiter on what's technical and what's editorial. If we were to say only technical issues had to come before the Board, somebody's got to make that decision as to whether a particular item is editorial or technical. And who would that be?

CHAIRMAN MORELOCK: Well, the only thing you could do would be to add a section, like Mr. Toth has done for the variance manuals, to define what that is. You could put some definitions in it.

MR. HENRY: Okay.

MR. BAUGHMAN: And I guess my intent on that, too, Mr. Henry, as I'm sure you understand, was when they've had, maybe, personnel changes, security guards change and so forth and what have you, isn't a big thing. The training is, but the technical being the hardware, the controllers, the burners, and so forth.

And one of the things that we talked about in a previous meeting was these lateral changes that happen within the industry, as one programmer gets obsoleted out and new programmers get put in place, does that change the technical review?

And so those are things that I wanted to just clarify. And I always like to look at technical stuff, even if it's a lateral change technically, I look at, typically, when there's a hardware change, there's differences in that piece of equipment that are enhanced. In other words, it may be enhanced password protection; it may be enhanced whatever capabilities. And I always like to review those.

Whether that's actually necessary for the intent of our variance, I don't know, but I always like to look at technical changes personally.

CHAIRMAN MORELOCK: Well, technical changes are required to be reviewed by the Board. We just need to define -- maybe have a definition of what an editorial change would be versus a technical change.

MR. BAUGHMAN: The next was under the Section 2, system operating manual Number 2, parenthesis, B, again, changing "computerized" from the description. I put along with that dynamic self-checking. Dynamic self-checking is something some manufacturers use. I know we've talked about this in a previous meeting before, also. But it's a fancy term, but it's not necessarily a term that applies to every product that's out there. They don't always describe their products in that form.

I think self-checking is good. In other words, it's got a means of being able to check the system to see if its electronics are operating properly and so forth. But I would delete the word "computerized" from the description. And changing the wording of "dynamic self-checking," I would probably suggest that we put in there that it's a self-checking system and not so much the word "dynamic," which I don't exactly know what that brings to the table.

What do you guys think?

MR. BOWERS: Dave, I totally agree with you on that, both of those.

MR. HENRY: I agree as well.

CHAIRMAN MORELOCK: Yeah. I think a lot of that has come from the literature that -- from the systems that people have purchased.

That's where that term came from.

MR. TOTH: Mr. Chairman, this is Marty Toth. Can I make a comment about that?

CHAIRMAN MORELOCK: Yes.

MR. TOTH: So we talked about this probably a couple of years ago where the term -- you know, the term "dynamic" really comes from constant change. I mean, that's really the definition of dynamic. And as Mr. Chairman had mentioned, there are some manufacturers that utilize "dynamic" as a fancy word, I would say.

But the self-checking -- and the reason why is because if it's self-checking, some could misinterpret that to say that it's -- that it can do it once every 15 minutes, something along that lines; where the term "dynamic" was always put in to monitor constant change. Okay?
I don't think it's necessary, myself.

I agree that it is something that was pulled from -- you can look right at Honeywell. Honeywell likes using the word "dynamic." FireEye does not. Siemens does not. But they do use the term "self-checking." And the understanding is that these units have to be monitored constantly. I don't think you need to put the word "dynamic" in there. That's just my opinion.

MR. BAUGHMAN: And thank you for that input, Mr. Toth. One of the things we look at is some of these systems may not even -- we talk about a FireEye E110; we talk about the Honeywell 7800 series. But they may have a FireEye Mec120 that doesn't -- it's all solid state -- it's a solid state controller and not a mechanical relay controller, but it doesn't necessarily go through all the self-checks. It goes through some, but not to the degree that a CB780, 7800 series, so forth, would do. So, again, I just thought that -- and I appreciate your input in on that, because that word "dynamic" was something that we never held anybody's feet to the fire on. And I definitely think it should be delineated. So --

MR. TOTH: And if I can add to that. Really, the main concern for safety that we need to have, in essence, with self-checking has everything to do with flame scanning, ensuring that we're monitoring the flame scanner of the unit itself. And that's where, in some cases, you have units that don't have self-checking capability, but they may have a flame scanner that is self-checking. So that's really where the attention needs to be laid, is towards that flame scanning and self-checking, and -- which it does.

MR. BAUGHMAN: Thank you. So are we good with changing that, removing the "computerized" and "dynamic self-checking" to "self-checking"?

(Affirmative response.)

MR. BAUGHMAN: Moving on to the next, which is under Item 36 of the checklist for the attendants variance request. I just made a note that I would clarify or change the wording of Item B, the boiler water column to state "positive check of the low-water cutoff." In addition, adding an addition to the manual to include a check of the water level in the boiler site glass along with a check of the boiler flame and stack temperature if the unit is fuel fired. So some multiple things in there. Changing the wording of the boiler water column to state "positive check of the low water," I think that that's the intent of what we had put in that checklist. We were saying check the boiler water column, but it didn't necessarily define what that check was. And as Mr. Toth and probably the rest of us know, that two leading causes of accidents each and every year are low-water and operator error, slash, boiler maintenance. So I wanted to make sure that at some point in time that we were specifying a positive check of the low-water cutoff. And then additionally, just adding that check of the water level, the boiler water, and the boiler sight glass level. And the purpose of that is because boiler sight glass valves get plugged up, as the inspectors see, as any of us are involved in this industry. And so if that's part of our checks in the manual, then it gets attended to or should get attended to.

And then just checking of the boiler flame. As we know, too, and we deal with this a lot in the service industry, we'll have a linkage that slips on gas valve, air, or what have you, and one of the easiest things to notice is the flame pattern is different than what it was before. And then as the flame changes, stack temperature changes. As heat transfer decreases, stack temperature increases. So being able to have a check of the flame itself, if it's fuel fired, and then possibly having a check of the stack temperature itself, the flue gas temperature, and being able to correlate those in as part of the safety checks that's being looked at as this process goes. Just points for discussion, but I wanted to put those out there.

MR. BOWERS: This is Harold Bowers. Yes, I agree with you, perfect on the water column. Yeah, it definitely needs to be a low-water cutoff because it's -- people will look at the water column and not see a whole lot, you know, unless they actually checked the low-water cutoff. Surprisingly, I've gone to new accounts and people have never done a low-water cutoff check. And so I think this, in the variance, is definitely -- you know, we definitely need to narrow it down to the low-water cutoff.
MR. TOTH: Mr. Chairman, Marty Toth. Can I make a comment, please?
CHAIRMAN MORELOCK: Certainly.
MR. TOTH: I agree with Mr. Baughman on this. A lot of the clients that I do visit, they tend to ask, well, what do we need in regards to our boiler log? And I always advise that the more information the better, especially for management purposes. For safety purposes, I always call it the trinity, which is your pressure, your temperature, and your water level, is really the three that I make sure, at a minimum, that they have on a boiler log to include areas for testing, such as your low-water cutoff. So I would agree that if you put it in the guideline of those, especially those three along with -- because you've got to have that info, as an operator, and you need to be able to record that and review it.
CHAIRMAN MORELOCK: Any other comments?
No verbal response.
CHAIRMAN MORELOCK: Okay. I'm making notes. So I guess my thoughts are, what we'll do, we'll take this and develop a revision document and send it out to let people review and comment on it.
MR. BAUGHMAN: All right. I'll move on to the next, which is just a note. We've had questions about the wood-fired boilers, biomass boilers, and whether or not they fall under the requirements for the 20-minute rule for the application of a variance and so forth. They operate somewhat differently, as far as their fuel input goes. But to follow that up, the same question, then, applies to Section 1 boilers that are electric and that are above the 5 horsepower criteria.
And so I just made a statement or put something in there to have a statement that states, in some form or fashion, any boilers that meet the criteria of Section 1 power boilers that are about 5 horse or 50 square foot of heat absorbing surface.
And the next note to that was we've had companies that have a Section 1 boiler that it's stamped Section 1, but the criteria of the boiler design, the relief valve openings and such can accommodate 15 psi relief valves. And so making sure that we address if that boiler itself has a 15 psi relief valve and it's got sufficient capacity to relieve what the boiler produces and all the controls are 15 psi controls, can that boiler, then, operate as a low-pressure boiler and fall under the variance requirements or fall outside of the variance requirements.
So we've had some that I've talked to that said no, if that boiler is stamped Section 1, no matter what the relief valves are, no matter what the controls are, it's got to fall within the variance. And I didn't see, necessarily, where that had to be if it can't operate above 15 psi.
So that's up for discussion.
CHAIRMAN MORELOCK: Any questions or comments?
MR. BOWERS: Yeah. I think that's beyond the variance discussion. It goes back to the chief on the -- or the rules on -- a lot of times you'll go to the chief on something that's been downgraded to a different boiler. But I don't think that has really anything to do with the variance part of this discussion. Am I right or wrong, Sam?
MR. CHAPMAN: You're correct on that. Normally, what we do is even though it has an S-stamp on it and as long as they have the relief valve and controls on it, they cannot change the S-stamp. But it's operating as a low-pressure boiler. The S-stamp, they cannot change.
MR. BAUGHMAN: And so that's the information that I wanted to get out to the industry, to the inspectors, to anybody that's consulting in the industry, to be able to be on the same page, because there has been some that had different views on it. And so I'm glad that you, Chief, has that to be able to put forth out in the industry that if the relief valve is set at 15 psi, if the boilers are -- the controls are 15 psi boilers, that boiler operates as a low-pressure steam boiler even though it's S-stamped. So I just wanted to make sure that we had clarification on that within our guidelines or however we're putting forth that information.
MR. TOTH: Mr. Chairman, I've got some extra information for you on that BI. That BI 05-22 specifically states Section 1 boilers being used as heating boilers. And that kind of gives -- that gives a lot of direction for what...
you're asking about, which is that they are treated as heating boilers. They are inspected as heating boilers, and so on and so forth.

MR. BAUGHMAN: That was 05-22?
MR. TOTH: Yes, sir. BI 05-22.
MR. O'GUIN: Dave, this is Chris.
I just emailed that to you.
MR. BAUGHMAN: Thank you. That's great.
Well, and that's why I wanted to make sure that in our rules it says boilers that are above 5 horsepower or 50 square foot of heat-absorbing surface. The surface, I wanted to make sure that that clarification was there, that even though it's a Section 1 boiler and it's above 5 horse and above 50 square foot of heating surface, that if it's operating within the criteria of a low-pressure boiler, that was attended to. And that's under this BI 05-22, from what you're stating.
MR. TOTH: Yes.
MR. BAUGHMAN: Great. Thank you so much for that. I appreciate that.
All right. That's what I've got on there, guys.

and approve the renewal. If there are technical changes to the manual, the Board will review and approve revisions to the manual. And we also need to update the flow chart for this process to show the Boiler Unit can approve a variance renewal without having a technical change.
So that's one thing I'm proposing, is that we update the flow chart but based on conversations, do we want that manual to be dated to coincide with the successful site visit by the Boiler Unit? That way the variance holder has a full three years for that renewal. Is that correct, or not?
MR. BOWERS: This is Harold Bowers. I kind of agree with that because, I mean, the Boiler Unit is doing a great job, but there is a lot of variances out there, and these guys are understaffed somewhat. So sometimes it might take -- after the Board approves it, it might take several months, up to six months, before maybe they get out there and do that first inspection. And maybe the date of the variance should be from the time that Sam or one of his inspectors does that first inspection, gets that first inspection done. And that's when they issue that -- I guess they finalize -- they put their variance tag on there or whatever it is. So maybe it should be from the time that Sam actually approves -- because he does the final approval on the variance anyhow with that inspection.
Am I looking at it wrong, or what do y'all think?
CHAIRMAN MORELOCK: I think it makes sense.
MR. O'GUIN: This is Chris. We can do the inspection and, you know, request an updated cover letter for the manual as far as the date, to match the inspection date once it is approved.
MR. BAUGHMAN: I think that that's a great idea. For one, I think that getting your input, Harold and Sam and Chris, as you guys go out and look at these, does it not make it easier for you? And it would make it easier for the customer to know when their manual expires. I mean that makes sense to me.
MR. CHAPMAN: This is Sam Chapman, Chief Inspector.
Yes, it does. Yes, it does, to a point, you know. But also, that -- I'm going to
say customer is required -- you know, they can
renew it up to 180 days out. So take, for
instance, on this, they comment and they tell
them, hey, we've got a boiler variance. You say,
let me see your manual. Right there on the front
of the cover of it, it says November 2020. Do you
know in November of 2023, it's going to expire,
without a doubt. Well, it's best to get that
cover page changed to the same date that it got
inspected.

MR. BAUGHMAN: You know, it may
also help to put the expiration date on it. They
might -- you've got the approved date, but then
adding the expiration date. So there might be --
it might be helpful to put some kind of statement
on that cover letter, "Approved November 2020;
Expires November 2023. Resubmittable due by" --
and I don't know if that is just a little bit more
information and typing, but it sure puts out some
good information.

MR. CHAPMAN: Sam Chapman, Chief
Inspector again.
When we sent out our letter, it's got
all that information on it. So we tell them
that -- you know, because we sent an email and we
sent it through the mail. That way they've got
two chances to get it. And so we tell them to
make a copy and stick it in the manual. That way
they know that, okay, it's going to expire at this
time unless they take that manual and throw it in
the corner somewhere and then they forget all
about it. But if they look at it every now and
then, it will show that it expires this date.

Now, we're trying to make it to where
the only thing they have to do is look at it and
they can see exactly when it expires.

MR. BOWERS: Now, as far as that
goes, you know, once they set a date, I don't
think that they should -- on the renewals, I think
they should keep their regular anniversary date as
before. That way -- that's how we do on these --
most vessels and boilers. Unless we ask for a
definite change of the expiration date, once Sam
puts the original tag on that boiler or approve --
do the final approval of that variance, it should
always keep that date from then on out. Just
whenever they do a renewal, still keep -- if they
do it six months early or six months late,
whenever Sam and them renew it, it should still
keep the original date that they originally
approved it. That way it will keep the State from
having to change those dates all the time.

CHAIRMAN MORELOCK: Very good. Any
other comments?
(No verbal response.)
CHAIRMAN MORELOCK: All right. So
we'll move on to Section 2, system operating
manual. The first comment I had was paragraph
notation needs to be consistent. Currently, the
guide has a capital A, comma, a capital B, comma,
but then changes to C with no parentheses D and E.
So it's just more of an editorial
update there, just to be consistent. And then I
also propose, to add to that, paragraphs F and G.
We have a lot of detail on the
checklist for the remote monitor, but we don't
have a whole lot of checklist guidelines for the
boiler attendant personnel. And I don't have that
fleshed out. I'm just saying I'm proposing that
we add that to the checklist with similar
statements, like, you know, are they trained, who
does the training, do they have training records?
You know, do they have other duties other than the
boiler attendant, you know. And mirror the
questions that we ask of the remote monitor. Not
exactly, but similar categories. And that also
coincides with my proposed paragraph G, boiler
attendant, personnel duties and responsibilities.
So I don't have it fleshed out. It's
just a general comment. If the Board thinks we
don't need it, that's fine. But if you like it,
we could start developing those paragraphs and
blocks on the checklist.

MR. BAUGHMAN: I agree. I think
that's a -- I think it's something that's needed,
personally. Because we address it all the time,
don't we?
CHAIRMAN MORELOCK: We do. We do.
And it, also, is doing the user a favor as they
develop their variance request and their variance
manual. It will give them a better road map so
that when they do get to the Boiler Unit and the
boiler board meeting, they may not have -- they
have fewer gaps in their manual if it's the first
time they've ever asked for a variance.

So if you're okay with that, I'll
flesh that out a little bit.
MR. HENRY: I agree as well.
CHAIRMAN MORELOCK: Okay. So
moving on, some proposed revisions to the
attendant variance request, we've already talked
about the computerized monitoring system, but I
would like to add an item on the checklist that
states are the emergency stops, e-stops, hardwired
from the remote station to the boiler. So we can
just add clarity to that. What do you think?
Yes? No?

MR. BOWERS: Yes. That's a good
idea. We've had questions before. I think we had
a -- we've had a person come before the Board a
while back, and we found out they weren't
hardwired; they were done through a computer
system. So I think that's definitely a good thing
to put in the checklist.

CHAIRMAN MORELOCK: Okay.

MR. BAUGHMAN: One of the things
that we ran into -- I don't know. This has been
some time back in one of our variance requests.
And it was over in West Tennessee at one of the
campuses. One boiler was so far away from the
remote monitoring station, and hardwiring the
e-stop back was going to cross roads, creeks, I
don't know. But there was quite a bit that was
involved. And he said it's not feasible. We
really can't do it. And what we said was, well,

that was technology is there that we mandate it to be
hardwired, but is there ever an instance where we
will bring up and discuss a case where it may be
not feasible, and then to be able to act upon it?
So I think our protocol is make it hardwired, but
I wanted to bring this up because I remembered
that in a case back, and I never knew what the
resolution was on it.

MR. BOWERS: I think the resolution

one is they had to go by the 20-minute
rule. I remember that one. And that's what I was
discussing, that I don't know if there would ever
be a point in time that we really feel confident
of just having a boiler setting out there by its
lonely, and, you know, it could be a long way
away, four hours away, and life could happen. So
I don't know we'd ever -- I mean, there's very
good systems out there and we've got computer
systems, but I don't know if any of us feel
comfortable with it just sitting out there without
some, actually, hardwires going to it to measure.

MR. BAUGHMAN: Well, and I always
thought that there would be a different way if
they couldn't put another remote station in
specifically for that boiler where there was other
personnel, besides wiring all the way back to
their main occupied setup. But there again, it
wasn't my place to go in and get involved, and
they weren't one of our customers, so I didn't
expand upon it. But at any rate, the statement
kind of got off, but the statement about being
hardwired in needs to be there.

CHAIRMAN MORELOCK: Any other
comments?

CHAIRMAN MORELOCK: Any other

one to. You know, you've got to have it
hardwired in.

I was interested to know what the
outcome of that ever was. But there are systems,
too, that do both. In other words, you can
have -- and that's why we ask the question, is it
on your computer and is it hardwired. And it's
got to be hardwired.

But there may be a time somewhere
along the way that that has to come up, that there
may be an instance where this thing is so far away
that it can't be hardwired. And we've looked at
the systems that are out there. They've got
systems now that can transmit two to three miles
and shut something off.

So at any rate, what I was getting at
was technology is there that we mandate it to be
hardwired, but is there ever an instance that we
will bring up and discuss a case where it may be
not feasible, and then to be able to act upon it?
So I think our protocol is make it hardwired, but
I wanted to bring this up because I remembered
that in a case back, and I never knew what the
resolution was on it.

MR. BOWERS: I think the resolution

Chairman, I did want
to add one of the e-stops. I know you were kind
of hitting that topic.

CHAIRMAN MORELOCK: Okay.

MR. O'GUIN: Does the emergency
stop shut down all the boilers in the boiler room?

That would kind of give us the answer, you know,
for the interpretation, last meeting, as far as
how many e-stops is in the boiler room, however we
want to word that in the --

CHAIRMAN MORELOCK: So do any of
the e-stops shut down all the boilers?

MR. O'GUIN: Let me go back to my
notes here. I put: Does the emergency stop shut
down all boilers in the boiler room? So that
would indicate one emergency stop.

MR. CHAPMAN: At the egress door.

MR. TOTH: Mr. Chairman, this is
Marty.

Would it be helpful if you define
e-stops as remote versus local? That's usually
how I communicate. Remote e-stop is the one
that's going to be obviously in the remote
attendant station or the remote station. The
local e-stop is there at the boiler room. And
they -- obviously, they are handled differently.

CHAIRMAN MORELOCK: Yeah, I think it's possible. Of course, we've had that conversation and, like, with our position at Eastman, we don't want to shut all of our boilers down at the same time. We've got three power houses. And so we're not opposed --

MR. TOTH: But you handle --

CHAIRMAN MORELOCK: We're not opposed --

MR. TOTH: You handled that through interpretation, though. You handle local e-stops through the interpretation from --

CHAIRMAN MORELOCK: Yes. Yes.

MR. TOTH: This is concerning remote stations and remote e-stops.

CHAIRMAN MORELOCK: Right.

MR. TOTH: Can you put in there guidelines indicating local e-stops if you wanted to, like I usually do in our site maps? I will show where local e-stops are. But it's really a different -- a bird of a different color.

CHAIRMAN MORELOCK: Yeah.

MR. BAUGHMAN: That local e-stop may not necessarily be at the boiler room either.

well, I'll wait until you're done with your comments to add something else I've been wanting to address on, too, that I didn't address in writing.

CHAIRMAN MORELOCK: Okay. Do you want to do it now while it's fresh on your mind and we'll get back to my comments?

MR. BAUGHMAN: Yeah. Thank you. Well, so you know how my mind works. Thanks.

CHAIRMAN MORELOCK: I do. Mine works the same way.

MR. BAUGHMAN: It had to do with the addition of carbon monoxide. And since we've been talking about it and since it's a requirement now for the boiler room to have a CO alarm, and being that carbon monoxide is such an important aspect of what it is that we're working with, if that boiler room should happen to have CO in it, that's a bad thing for the operators. And we've dealt with that in different installations over the years. But I wanted to discuss the addition of carbon monoxide alarms being tied in as one of the alarm mechanisms to the remote variance.

CHAIRMAN MORELOCK: Okay.

MR. BAUGHMAN: Anybody else want to add their input in on that?

MR. TOTH: Mr. Chairman, Dave, I think that's -- monitoring, that's great. I think it's going to be very difficult on some of the controls to be able to tie all of that in on just the way that they're set up. If it is a separate line, a separate alarm, maybe, but I just don't really see -- unless they have a total integrated control system that has that ability or -- I just don't see that being a possibly or realistic, to be honest with you.

MR. BAUGHMAN: Well --

MR. TOTH: And I think it's a good idea to have a monitor. I think it's a good idea to have that. But is your expectation that if a CO2 alarm goes off, that they're to trip the boiler? And how do they know which boiler is in effect? Is it kind of a situation --

MR. BAUGHMAN: Sure. So as you may or may not know, the State of Texas implemented into their rules, that went into effect September of this year, that the CO alarm be tied into the boiler itself, that it shut the boiler off. And so they've taken that level of safety up to a higher degree. And tying it into an alarm --
tying into an alarm circuit in just about any kind of system isn’t a difficult proposition where it’s alarming back to the remote monitoring station or what have you. But to know that there are states that are understanding the significance of what carbon monoxide, CO, poisoning brings to the equation. And so that’s where I don’t want to be -- I don’t want to be reactive. I want to be proactive, and I want our state to be on the leading side of what we’re doing as far as our monitoring and our safety and so forth. So we wouldn’t actually be the first out there by any means, but that's why I wanted to bring this up for discussion so that we could be able to revise as we felt was in the best interest of public safety.

MR. TOTH: Well, now that you mention it, I guess there could be a way if the carbon monoxide monitor was hardwired such as you would with a low-gas pressure switch or even a low-water control. You could, in essence, tie that into your limits and even into your alarm circuit. That could work. It’s just the concern would be what would be the identification at the boiler for that alarm once they find it.

But, you know, hey, I'm comfortable with whatever the Board decides to do. It's just moving toward, I would just ask that you be aware of -- are existing variances going to be grandfathered? Are you going to require for them to update and tie those in? I think there’s a lot to it.

Rob Trout and I, we're really good friends, the Chief in Texas. And I know that his heart is in the right place with all that. And I do see the ability to cause the boiler to go into alarm. I know Texas doesn't do variances like we do, in the case of remote attendants. So I think that's a little bit of a wrench that you have to deal with it, but it might be a really good idea.

MR. BAUGHMAN: And we've looked at the wiring of it. And as you know, not all alarms enunciate as to what they are. Industrial Combustion wires their air flow switch in through the gas pressure switches. And so it enunciates as a -- if a gas switch trips, it enunciates as an air flow problem, when it's not. So not necessarily -- and the CO alarm is twofold with Texas. It's got an audible alarm and it's also hardwired, so the problem that I've got with that particular code is, is that in a boiler room, you've got other devices that may be producing the CO. In other words, you might have a ceiling heater. You might have a gas-fired water heater that actually is producing the carbon monoxide, trips the alarm and shuts the boiler off, which is not producing the carbon monoxide.

So there's variables to this, but I think that you look at what's the -- good for the majority. And I know that carbon monoxide is one of the major issues that we deal with in our industry. We deal with them on almost a weekly basis. And so I wanted to make sure that we brought that up. We’re on the forefront of adding this in to enhance the safety. And that's what we're here for. So that's my input in on it.

MR. O’GUIN: This is Chris. If we look at that, we would have to look at hardwiring the CO alarms, which the interpretation, if I’m not mistaken, was battery-operated would suffice that -- that code in Tennessee. So we would have to revise that interpretation, I would believe.

MR. BAUGHMAN: And I agree. I looked at that and tried to figure out how to mold it because the -- also, they've got requirements on how often that CO alarm has to be checked and calibrated. You can't just put one up and just leave it. It's got to have its own checks along the way.

So there’s a lot that goes in it with this carbon monoxide issue, but it's getting more traction because of the amount of deaths and injuries that are happening because of it, so -- but there again, it's worth discussion.

MR. BOWERS: This is Harold Bowers. Well, the only problem I have with it is, you know, we just now had made an interpretation on that. Should we make this stricter, you know, people who are just going on the 20-minute rule don't have to have it hardwired into anything. So you're going to say, well, if you get a variance, yeah, you've got to have it hardwired in, where if you have a 20-minute rule, it don't have to be hardwired in. Do we have to go back and change the whole rules just because another state changed its rules?

I think we don't want to make -- we want to make this where everybody can comply without going in there and costing a lot of our...
state citizens a bunch of money. And we don't look at -- we don't look at home hot water heaters, gas hot water heaters. You know, it can be a never-ending thing on how to comply. I think we went through the interpretations. I think we should stick with that for now and see how that works. Down the road, we can address it again.

MR. BAUGHMAN: I agree. And I think that sometimes we're a little ahead of ourselves in interpretations. When we've got a new code that comes out with NBIC putting in place the carbon monoxide monitoring and alarms, and understanding that that was going to be revamped -- it was a somewhat vague putting out of this information on the CO alarms. It didn't necessarily specify where they get installed, how far up off the ground, the PPMs, the calibrations and so forth. So it was just this mandate on you've got to have these alarms. And then we put that into place as far as interpretation. That's just the way the industry happens, too.

But I think you're right in regards to we at least look at it to start being proactive on how we move forward. Because at some point, it will. And it's such a safety concern that it's got to be addressed. We don't want to get in the pocketbooks of folks, but, you know e-stops got in the pocketbooks. So, you know, what we're doing is we're working in the interest of public safety, and we want to make it easy on the customers. And so there's these mechanisms of saying, okay, you've got a year or two years or three years to bring this under compliance so that you can at least put it into the budget and know it's coming up. But at any rate, it's worth good discussion on -- thanks, Harold, very much.

CHAIRMAN MORELOCK: Very good. Any other comments on that?

(No verbal response.)

CHAIRMAN MORELOCK: All right.

We'll go back to -- the last comment I had on my list was, again, I want to expand the boiler attendant personnel checklist items. I don't have a number to put with it yet, but just to, basically, mirror what we do for the remote attendant is to add some checklist items concerning what are the minimum qualifications for a boiler attendant personnel, what training do the boiler attendant personnel receive; who administers that training; what procedures are in place for annual training for both experienced and new personnel; do the boiler attendant personnel have other duties; does the manual contain a training log that contains a name, date, instructor's signature and remarks; does the manual include boiler attendants' other responsibilities; and does the manual include boiler attendant duties for each shift on a day-to-day basis.

So again, just to balance out the responsibilities for remote and boiler attendants, I think it would be helpful to add those to the checklist.

And that's all I had as far as comments.

MR. BAUGHMAN: I agree with those comments, Brian.

CHAIRMAN MORELOCK: Thank you.

MR. HENRY: I agree as well.

CHAIRMAN MORELOCK: Okay. So are there any other comments for now?

(No verbal response.)

CHAIRMAN MORELOCK: What I'll do is work with Carlene and get an editable copy of these documents, and I'll take the comments from today and I'll start building a revision of that. And then based on what Mr. Bailey has given to us as guidance, I'll send a draft copy to the board members and the Boiler Unit where we can get some comments and revisions going, and then try to have a working draft at the March 2021 meeting as a discussion item.

MR. O'GUIN: This is Chris. And, Chairman, you do have ECS's interpretations, so we can be sure we get those answers in the checklist, correct?

CHAIRMAN MORELOCK: Okay. Great.

So are there any other comments for now?

(No verbal response.)

CHAIRMAN MORELOCK: What I'll do is touched on all of them, Chairman.
MR. O'GUIN: There was another page that was with it.

CHAIRMAN MORELOCK: Yeah, I've got those. I thought you thought -- were there other --

MR. O'GUIN: No, sir. I just wanted to be sure everybody was -- I'll just try to capture those in the checklist while we're revising it.

CHAIRMAN MORELOCK: Yeah, I've got those from today. Yes, I do have those.

MR. O'GUIN: Okay.

CHAIRMAN MORELOCK: I thought you meant some from previous meetings.

MR. O'GUIN: No, sir. Sorry for the confusion.

CHAIRMAN MORELOCK: Okay. No problem.

MR. TOTH: Thanks, Chris.

Mr. Chairman, I have to leave the meeting.

Great job, everybody. But if anybody --

Chris, if you need anything more from me, or Mr. Chairman, if you need anything, just like to have a bit of time to be able to present.

CHAIRMAN MORELOCK: Okay. We'll make sure that we put this at the top of the discussion item list at the March meeting. How is that?

MR. BAUGHMAN: That works real well if that -- unless something else preempts it. But I'm good with that. Thanks. Thank you.

CHAIRMAN MORELOCK: Thank you.

Okay I'm making a quick note here.

All right. That takes us to Item 9, announcement of the next meeting. And so the -- unless the Board decides otherwise, which we have, we're going to have a meeting tentatively scheduled for January 20th to handle the LG item. But our next regularly scheduled Board of Boiler Rules meeting will be at 9:00 a.m. on March the 10th, 2021. And I'm an optimist, so I would love to travel to Nashville to meet you-all face to face. But we'll just have to see how vaccines go and all that good stuff, and we'll go from there. But if it's not face to face, we'll certainly do it electronically on that same day. And so, just -- that's what we'll do.

Again, I want to thank everybody. I know it takes a big chunk out of your workweek to have these meetings but I think they're extremely productive and we get a lot done, certainly, to protect public safety. And it's enjoyable. I enjoy the conversations. I enjoy the debates. It's a Proverbs 27:17, as iron sharpens iron, one person sharpens another. So I enjoy the conversations.

Does anyone want to say anything before I move to adjourn?

MR. BAUGHMAN: I want to make a comment. I see Cassandra over there wearing it out. You guys do such a great job of being able to put down into the minutes what all we were discussing. And to be able to decipher what we're saying, to be able to look and figure out who all is doing -- what they're doing and saying, I'm just -- I've always been in amazement, but I just want to let you know how much you're appreciated in the job that you do to bring this information out so that we can review it when we need to. So I just wanted to say thank you.

THE REPORTER: You're more than welcome. Thank you. I enjoy being here.

CHAIRMAN MORELOCK: Anybody else
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1 have any words before I adjourn?
2
3 MR. CHAPMAN: Well, I just wish for
4 everybody to have a Merry Christmas and Happy New
5 Year.
6
7 MR. BOWERS: Same to you, Sam.
8 MR. HENRY: I second that.
9
10 MR. BAUGHMAN: I miss everybody. I
11 miss the physical presence of everybody. But
12 know, too, that I actually have everybody in a
13 daily prayer list, and I think that that's
14 important for me, personally, is to specifically
15 and passionately pray for each other. And I know
16 that might not be the protocol in a state meeting
17 to put out, but I wanted to let you guys know that
18 this is a great group of human beings, and it goes
19 beyond the work. This is what we do for a living
20 but it's not what's most important in our lives.
21 And this is a great group of people to fellowship
22 with.
23
24 CHAIRMAN MORELOCK: I agree. Well,
25 I also wish everyone a Merry Christmas and a Happy
26 New Year, and I do thank you for the great year
27 we've had with the meetings, especially with all
28 the new technology that we've learned and been
29 successful with.

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1 And a shout out to Cassandra for
2 being able to understand East Tennessee English.
3 She should get an honorary Ph.D. for that in
4 linguistics and all that stuff.
5
6 MS. GEORGE: For sure. I've been
7 in her position and it's not an easy one.
8
9 CHAIRMAN MORELOCK: It's not. But,
10 you know, working with Sam and the Boiler Unit and
11 everybody there, it's just a privilege.
12
13 And Tom, we're excited to have you
14 come on board with us.
15
16 And so in that vein, you know, one
17 thing that the Board does need is please put your
18 thinking hats on and be much in thought of some
19 possible candidates to replace Mr. Fox's position
20 on the Board. We do need to provide some names to
21 the State and get that process going. It's a very
22 important role, and we need somebody in that role
23 to balance the Board out and bring great
24 information to the table for us.
25
26 MR. BAUGHMAN: I have been working
27 on that, personally.
28
29 CHAIRMAN MORELOCK: Good.
30
31 MS. BENNETT: And with that said,
32 Mr. Chairman, if one of the board members are not

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1 able to make the meeting, if you could let us
2 know, because, you know, with us being down a
3 person, a quorum is iffy. It's difficult to get.
4 So if you know you're not going to make a meeting,
5 if you don't mind letting me know, then we can do
6 something or make sure we do have a quorum.
7
8 CHAIRMAN MORELOCK: Yes.
9
10 MS. BENNETT: Thank you.
11
12 CHAIRMAN MORELOCK: Thank you.
13 Well, with that said, Item 10 is
14 adjournment. I hope you-all have a great week,
15 and again, Merry Christmas, Happy New Year. If
16 you need anything, don't hesitate to call me.
17 Maybe we'll figure out some way to use Zoom to do
18 some fun things and just have a conversation.
19
20 MS. GEORGE: Thanks, everyone.
21
22 Merry Christmas.
23
24 CHAIRMAN MORELOCK: Thank you-all.
25
26 END OF THE PROCEEDINGS.

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1 CERTIFICATE
2 STATE OF TENNESSEE )
3 COUNTY OF WILLIAMSON )
4
5 I, Cassandra M. Beiling, a Notary Public
6 in the State of Tennessee, do hereby certify:
7 That the within is a true and accurate
8 transcript of the proceedings taken via Zoom
9 videoconference before the Board and the Chief
10 Inspector or the Chief Inspector's Designee,
11 Tennessee Department of Labor & Workforce
12 Development, Division of Workplace Regulations and
13 Compliance, Boiler Unit, on the 16th day of
15
16 I further certify that I am not related to
17 any of the parties to this action, by blood or
18 marriage, and that I am in no way interested in
19 the outcome of this matter.
20
21 IN WITNESS WHEREOF, I have hereunto set my
22 hand this 6th day of February, 2021.
23
24 Cassandra M. Beiling, LCR# 371
25 Notary Public State at Large
My commission expires: 3/10/2024

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