FOR THE CASE OF

Dol Board of Boilers Quarterly Meeting

TRANSCRIPT OF

1st Quarter Meeting

March 15, 2017

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

QUARTERLY MEETING OF THE
STATE OF TENNESSEE
BOARD OF BOILER RULES
March 15, 2017

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APPEARANCES:

Brian R. Morelock, Chairman
Owner-User Representative

David W. Baughman, Board Member
Owner/User Representative

Michael Jay Pischke, Board Member
Boiler Manufacturer

Dr. S. Keith Hargrove, Board Member
Mechanical Engineer Representative

Sam Chapman, Chief Boiler Inspector

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

Dan Bailey, Esq.
Legal Counsel, State of Tennessee

Carlene Bennett
Board Secretary, State of Tennessee

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AGENDA

I. Call Meeting to Order

II. Introductions and Announcements

III. Adoption of the Agenda

IV. Approval of the December 14, 2016 Minutes

V. Chief Boiler Inspector's Report

VI. Old Business
None

VII. New Business
17-01, 17-02, 17-03, 17-04, 17-05

VIII. Open Discussion Items
* Job description for Boiler Inspector 4 (Chief) position.

* Recommendations for two Board of Boiler Rules vacant positions: International Boilermaker Representative and the Insurance Representative. The Department and the Governor's Office requests that the board provide at least three candidates to fill vacant board positions.

* Rennai - 3 foot clearance and the BC107 existing Board interpretation (1-1/2 foot for devices with 400,000 BTUs or less)

Open Discussion Items continued:
* Update on editorial revision to the recently revised TN Rule 0800-03-03. 0800-03-030.12 Existing Pressure Vessels (2) The maximum allowable working pressure of a nonstandard pressure vessel shall be determined in accordance with ASME Code, Section VIII, Division 1, UG-27

* Chairman Morelock to provide update on Revision to TCA 68-122-109(a) due to changes in how the National Board Commissioning Exam is given. This exam is no longer only provided by the jurisdiction, but is also provided on-demand at AMP locations and also administered by the National Board on the last day of the National Board Inservice Commission (IS) two-week course.
68-122-109. Examinations for chief, deputy and special inspectors -- Suspension or revocation of commission -- Replacement when lost. (a) Examinations for chief, deputy or special inspectors shall be administered by the National Board member jurisdiction, or provided at any On-Demand provider locations, or administered by the National Board on the last day of the National Board Inservice Commission (IS) two-week course. Such examinations shall meet the requirements of the latest edition of NB-263, RCI-1 Rules for Commissioned Inspectors, PART 2 COMMISSION AND ENDORSEMENT EXAMINATIONS. In case an applicant for an inspector's appointment or commission fails to pass the examination, the applicant shall follow the re-examination requirements in 2-5 RE-EXAMINATION in NB-263, RCI-1 Rules for Commissioned Inspectors, PART 2 COMMISSION AND ENDORSEMENT EXAMINATIONS. The record of an applicant's examination shall be accessible to the applicant and the applicant's employer.
* Dave Baughman, Board Member, will give status regarding formation of committee to make recommendation on boiler training.

IX. RULE CASES & INTERPRETATIONS
Update on formatting and posting past rule cases and interpretations for inclusion on the State Boiler Unit website

X. The next Board of Boiler Rules Meeting is scheduled for 9:00 a.m. (CT), Wednesday, June 14, 2017, at the Department of Labor & Workforce Development office building located at 220 French Landing Drive, Nashville, TN.

XI. Adjournment

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

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CHAIRMAN MORELOCK: Good morning, everybody. I have 9:02, so I would like to call this March meeting of the Tennessee Board of Boiler Rules to order. And just some announcements, first being a safety item, if there's an event where we had an emergency or a natural disaster, we do have security personnel in the building that would escort us either to a safe place within the building or they would take us to the Rosa Parks side of the building, to a meeting point there. So just keep that in mind.

Another item that I want to present is, in case you do not know, our President Trump is visiting Nashville today, and so all the downtown government buildings will be closed at noon. So we need to be very expedient in our actions today so we can get everybody's item discussed and voted, our discussion items, at least, on the table. So we will be watching our time on that. And so if you're not from the Nashville area, as I am, you will also want to be careful on your exit route out because there will be rolling roadblocks today, there will be streets blocked off. Certainly, when Air Force One lands

and the motorcade begins, it's going to be a lot different with traffic, so just giving you fair warning of that.

I would also ask if you have cell phones, would you please silence them out of respect for the presenters and for the discussion so that we can respect that time of presentation and discussion.

And the person who typically does the audio portion of our meeting with the microphones, they are not here today, so we do not have microphones. So Cassandra has asked me that when you present an item or you have something you want to discuss, would you please come forward to the table and speak so that we can hear you. And then any comments from our visitors, you're free to make comments, but please make them so that we can hear you. So that's that.

And then the last announcement that I have is Eugene Robinson, our insurance representative on the Tennessee Board, has resigned, and so there's some good news coming about that but I'm not going to give that away. I'll let others who've helped make that happen share that with you at a later time. But we are

going to miss having Eugene on the board. We're going to do something for him in upcoming meetings. But he's got some good things coming his way, too, so we're very thankful of that.

Are there any other announcements before we move on down our agenda?

(No verbal response.)

CHAIRMAN MORELOCK: Okay. Hearing none, let's begin with introductions. And just so you know, when we get to the visitors, Cassandra is going to hand you her microphone. You will pass that as you introduce yourself so that she'll have a good, clear record of who you are, and she can put that into the minutes.

So, Carlene, we'll start with you.

MS. BENNETT: Carlene Bennett, board secretary.

MR. CHAPMAN: Sam Chapman, Chief Inspector.

MR. PISCHKE: Michael Pischke, board member.

CHAIRMAN MORELOCK: Brian Morelock, board member.

MR. HARGROVE: Keith Hargrove, board member.

MR. BAUGHMAN: I'm Dave Baughman. Board member.
MS. RHONE: Deborah Rhone, Boiler Office Supervisor.
MS. JEFFERSON: Kim Jefferson, Administrator.
MR. BAILEY: Dan Bailey, legal counsel.
MR. ENG: Richard Eng, Wacker Chemical.
MR. JOSHI: Prasao Joshi, Wacker Chemical.
MR. GROSS: Jeremy Gross, Valero Memphis Refinery.
MR. TOTH: Marty Toth, Boiler Supply of the Boisco Training Group.
MR. NEVILLE: James Neville, Neville Engineering.
MR. BENNETT: Dave Bennett, Dave Bennett Consultant.
MR. SNEED: Brandon Sneed, Domtar Paper.
MR. SANDERS: John Sanders, Domtar Paper.
MR. WHITE: Marshall White, Domtar

Paper.
MR. ALTEPETER: John Altepeter, A6 Sales.
MR. JANZ: Jason Janz, AO Smith.
MR. MUMMERT: Hi. I'm Derrick Mummert. I'm here representing Milan General Hospital today.
MR. VJIHARA: Yuki Vjihara, MC Ionic Solutions.
MR. YAMAHARA: Katsuhito Yamahara, MC Ionic Solutions US.
MR. WOODFIN: Randall Woodfin, CNA Insurance.
MR. MADDOCK: David Maddock, MC Ionic Solutions US.
MR. BOWERS: Harold Bowers, FM Global Insurance.
THE REPORTER: Cassandra Beiling, Stone & George Court Reporting.
CHAIRMAN MORELOCK: All right. Thank you. On the back table, there are agendas for this meeting, if you would like one.
And so our next item on the agenda, Item 3, is Adoption of the Agenda. So do I have a motion to accept the agenda?

MR. BAUGHMAN: Motion to accept the agenda.
CHAIRMAN MORELOCK: Okay. I've got a motion.
MR. HARGROVE: Second.
CHAIRMAN MORELOCK: I've got a second. Are there any additions, corrections to the agenda?
(No verbal response.)
CHAIRMAN MORELOCK: All right. Hearing none, all in favor say "aye."
(Affirmative response.)
CHAIRMAN MORELOCK: Opposed?
(No verbal response.)
CHAIRMAN MORELOCK: Abstentions?
(No verbal response.)
CHAIRMAN MORELOCK: Not voting?
(No verbal response.)
CHAIRMAN MORELOCK: Okay. We have an agenda.
Moving on to Item 4 is approval of the December 14, 2016 meeting minutes. Those are electronically on the Tennessee website under Boiler Unit, and Tennessee Board, so you can

certainly go out and look at those. And so do I have a motion to accept these minutes?
MR. BAUGHMAN: Motion to accept the minutes.
CHAIRMAN MORELOCK: I've got a motion.
MR. PISCHKE: Second.
CHAIRMAN MORELOCK: I've got a second. Are there typically corrections to the minutes?
(No verbal response.)
CHAIRMAN MORELOCK: Okay. I will in -- I do want to make a correction. It's not what was recorded. It's from the chairman. I did go back -- we had a discussion item in December about the formation of a board or a committee that was approved by the board. And Mr. Chris Hartford brought that item up. And we did -- the Tennessee Board did vote that item in September 2016, just for the formation of that committee.
We still do not have a scope or a charter. Mr. Baughman has got a discussion item to discuss that further, but I did want to clarify that out of respect for Mr. Hartford because he did bring it up. And I've reviewed the minutes,

and he is correct. That was Item 16-14, and we did vote that in September 2016.

Anything else?

(No verbal response.)

CHAIRMAN MORELOCK: Okay. All in favor?

(Affirmative response.)

CHAIRMAN MORELOCK: Opposed?

(No verbal response.)

CHAIRMAN MORELOCK: Abstentions?

(No verbal response.)

CHAIRMAN MORELOCK: Not voting?

(No verbal response.)

CHAIRMAN MORELOCK: Okay. We have the minutes approved.

That will take us to Item 5, the Chief Boiler Inspector's report. So Mr. Chapman, I'll let you present that.

MR. CHAPMAN: Thank you. Number of inspections performed was 1,904 from the state inspector; 4,876 from the insurance inspector; giving us a total of 6,780 inspections. Out of that, total delinquent inspections, 758 from the State and 316 from the insurance company, giving us a total of 1,074.

Violations found was 23, and we have 3 uncorrected. We had two boiler variances performed. And this is the reporting date from December of 2016. I want to inform the board that we have four new inspectors for Shelby County -- well, a total of four. One from Shelby County, Davidson County, and Knox County and Sutherland County. So once we get those qualified, we will be fully staffed.

And that's the chief's report.

CHAIRMAN MORELOCK: Any questions or comments on the chief's report?

(No verbal response.)

CHAIRMAN MORELOCK: Okay. Hearing none, we'll move on down the agenda. Item 6 is Old Business, and we have no old business. So that will take us to Item 7.

MR. BAILEY: Mr. Chairman, something that is not on the agenda but we had discussed it at that last meeting, about how to handle a conflict of interest.

CHAIRMAN MORELOCK: Yes.

MR. BAILEY: And we discussed it with our general counsel, and we feel like the best way to do it is if a board member has a

conflict, just state they have a conflict, what the conflict is, and then they can discuss the item, as long as their discussion questions don't relate to the conflict.

CHAIRMAN MORELOCK: Okay. That's very good.

MR. BAILEY: And, of course, they can't vote.

CHAIRMAN MORELOCK: Absolutely. Right. And it's a nonvote; it's not an abstention. You're not voting?

MR. BAILEY: Not voting.

CHAIRMAN MORELOCK: Okay. All right. Any comments about that?

(No verbal response.)

CHAIRMAN MORELOCK: I think that's really important, so thank you for that clarification, Mr. Bailey.

MR. BAILEY: Sure.

CHAIRMAN MORELOCK: Okay. Moving on to Item 7, which is New Business. Our first item is 17-01, Valero Refining Company-Tennessee, LLC. They'll present their Risk Based Inspection Program.

So come up, introduce yourself, and

you can present your item.

MR. GROSS: Good morning, Board and guests. I'm Jeremy Gross. I'm the chief inspector at the Valero Memphis Refinery. I'm here today and coming to present our 2016 risk based inspection program status review.

In summary, "The Risk Based Inspection program continues to be active at the Valero Memphis Refinery. Our data management system Plant Condition Monitoring Software, PCMS, was upgraded from 8.1 to 8.2. The 8.2 upgrade added program enhancement features along with RBI calculator modifications. The refinery continues to maintain scheduled damage mechanism specific inspections planned and executed on-stream during routine maintenance or major maintenance outages.

The key activities related to our 2016 program are as follows, with a safe and successful major maintenance outage effort completed in our Hydrocracker and Sulfur Recovery units. Inspection results were documented and graded, per our inspection effectiveness tables, and rescheduled within our RBI software. The refinery underwent a third-party Process Safety Management Insurance Audit in July of 2016. An

internal readiness assessment was also conducted by Corporate PSM Team for preparation for our voluntary protection program application submission. Maintenance and inspection activities executed during 2016 are listed below, in Table A.

We also submitted and received approval for extension of our boiler internal inspection frequency in 2016. The boiler operating, inspection, and maintenance program procedure will be put into place following our site visit from Mr. Chapman, which is scheduled for March 21st, next Tuesday.

The refinery also submitted an application to the Tennessee Occupational Safety and Health Administration office on January 3rd, 2017, for the review and approval of our VPP program to be implemented, and set up a site audit, that will be soon scheduled.

Currently, right now, our status of that is we are waiting for TOSHA to give us an audit date, as there are several audits going on this year.

In Table A you can see, established from our internal inspections that were performed in 2016, we conducted 149 in the calendar here,

and then for 2017 we have 38 scheduled. We completed 277 external inspections in '16, and then we have 280 scheduled for 2017.

Our on-stream inspection efforts, we'll complete 53 inspections since 2016 and we have 5 planned for 2017. I had quite a bit of activity in the 2016 year of our on-stream corrosion mapping on the defect -- damage mechanism for specific inspections.

We conducted 14 CUI inspections in '16, and we have 10 scheduled for '17. And then in 2016 we completed 509 jurisdictional inspections. We have 189 scheduled for 2017.

Our Evergreen activities for the RBI program include reviewing the assigned damage mechanism and executing our proper inspection techniques, recording our inspection results and grading them per the respective effectiveness tables, and then scheduling our next inspection per that that RBI methodology. Nonintrusive inspection techniques are executed and captured during our external inspections. Routine corrosion monitoring and specialty non-destructive testing is performed when required. And then we also do a revalidation of our fluid properties and

operating conditions on a five-year interval, which is part of our HAZ-op procedure at our site.

Our jurisdictional inspection activities on registered equipment are maintained with zero delinquencies. And then our process equipment is circuitized and risk ranked in our RBI program.

As you can see on the Risk Data and Distribution table below, based off of our risk level, our circuits that were inspected in 2015 and in our current table there for 2016. And there are changes out to the right-hand side.

Overall we had 149 internal inspections completed, 277 externals, and the 14 CUI inspections that were performed in accordance with our RBI program. The jurisdictional inspections are scheduled and current and are being handled separately, outside of our RBI program.

During our major maintenance efforts, there were no significant discovery items requiring repair. We did execute some insulation and fireproofing and repairs based on our CUI and external visual inspections.

And then there's our table below that lists our equipment status and our circuits.

CHAIRMAN MORELOCK: Do I have a motion to accept Valero's status report for their 2016 RBI program?

MR. BAUGHMAN: Motion to accept.

CHAIRMAN MORELOCK: Okay. I have a motion. Do I have a second?

MR. PISCHKE: Second.

CHAIRMAN MORELOCK: I have a second.

Any discussion or questions?

MR. PISCHKE: I have a question on the methodology of the RBI --

MR. BAILEY: Mr. Chairman, you need to ask if there's a conflict.

CHAIRMAN MORELOCK: Oh, thank you.

Is there a conflict of interest on this item?

(No verbal response.)

CHAIRMAN MORELOCK: Okay. Hearing none, proceed.

MR. PISCHKE: Thank you.

The RBI program, what kind of methodology is used? Is it, like, the standard --

MR. GROSS: So we use API methodology. It's inside our data management

software calculation.
MR. HARGROVE: (Indicating.)
CHAIRMAN MORELOCK: Yes?
MR. HARGROVE: Keith Hargrove. Let me ask this question.
MR. GROSS: Yes, sir.
MR. HARGROVE: On average, what is the duration or average time that any one of these inspections are done? And is there any major variance in the time period to conduct those inspections, and who's involved?
MR. GROSS: So I want to ask the question back. So as far as timing, as far as to complete the inspection and preparation?
MR. HARGROVE: Yes, sir.
MR. GROSS: So from an on-stream standpoint, or are you talking about during an outage?
MR. HARGROVE: On-stream.
MR. GROSS: On-stream?
MR. HARGROVE: Yes.
MR. GROSS: On-stream, we utilize SAP. We have an operational system that we utilize a schedule. So from a major inspection effort, it may take insulation removal, it may

take surface prep via either grip blasting, maybe wire wheeling to execute an angle beam inspection in the welding or for corrosion mapping prepping. So it depends on the scope of the work. If it's a significant job, the preparation could take as much as two to three days. And then as far as the inspection execution, it depends on, again, the area of interest.

If we're doing a hundred percent of the vessel, it could take several days from a corrosion mapping exercise, compared to an angle beam inspection where we're just checking welds.

The system, then, is closed out once the inspection is complete, and then the data that's found in that inspection exercise goes into our system. And then we are grading that and increasing the approval status further for Evergreen to reschedule that next inspection based on what our findings were.

MR. HARGROVE: And you maintain documentation of that period of inspection from beginning to end?
MR. GROSS: Yes, sir. Yes, sir, that is correct. So our system will link the actual SAP work order number to our data base so

that you can track when that system exercise was closed out. And we call it "T-co'd" (phonetic).
MR. PISCHKE: Thank you, sir.
MR. GROSS: Yes, sir.
CHAIRMAN MORELOCK: Just to follow up on Mr. Pischke's question, the API-based software is based off of API risk-based inspection methodologies and API 580 and 581. And that's what is used to calculate your likelihood of failure and consequences of failure to develop your risk matrix, so --
MR. GROSS: That's correct.
CHAIRMAN MORELOCK: -- that's what the software is doing as it does those calculations based on your monitoring inputs from UT thickness and on-stream, on-line monitoring.
MR. GROSS: Yes, sir.
CHAIRMAN MORELOCK: Okay. Any other questions?
(No verbal response.)
CHAIRMAN MORELOCK: All right. Hearing none, all in favor to accept and approve this RBI report from Valero, say "aye."
(Affirmative response.)
CHAIRMAN MORELOCK: Opposed?

(No verbal response.)
CHAIRMAN MORELOCK: Abstentions?
(No verbal response.)
CHAIRMAN MORELOCK: Not voting?
(No verbal response.)
CHAIRMAN MORELOCK: Thank you for your report.
MR. GROSS: Thank you.
CHAIRMAN MORELOCK: Our next item is 17-02 from Wacker Polysilicon, North America. And they, too, will present their RBI program.
MR. ENG: Good morning. Richard Eng from Wacker. First, I just want to apologize for December. We were trying to get here on time, but unfortunately we didn't make it due to the roads closure. However, we're back and happy to be here to give you an update on the status of our facility.

Overall, the plant has been operational at nameplate capacity for quite a few months already. The nameplate capacity is 20,000 metric tons per year making quality specification material sellable to the market.

We had introduced our RBI program to the board two years ago, and a year later we

updated the board on the program status. And now this is part 2 of our current RBI program.

In 2015, we registered over 350 pressure vessels, and in 2016 we also registered approximately 350 pressure vessels. And those pressure vessels, as of 2017, are up for renewal. And that's what we're doing today.

On the inspection side, we, too, use an RBI methodology similarly to Valero. I think Jeremy Gross has down the heavy lifting already on describing what it is. We use the Meridium software, and we are also, similar to Valero, linked to an SAP system.

In 2017 we started our inspection program, and we have inspected 96 vessels as of March 12th, and the program is ongoing. And this is our first year of inspection.

Also, in our earlier presentation to the board, we were committed to take baseline readings and select equipment so that we can demonstrate to the board that we are a facility operating in a noncorrosive environment. And we have completed round 1 as of 2016. We are about to start round 2 in 2017. It has started just last week, and we will continue into that program

for the duration of the year.

On this package that we presented, we provided an example of our inspection of pressure vessels on getting baseline readings. And if you take a few minutes, you can see a typical layout on how we determine the vessel, the number of points we have taken, the way we identify all the points, and the findings on the very last page.

We had approximately 20 to 25 points per pressure vessel, and it's based on the size of the vessel, the service, the application and API 510 recommendations. And that's how we make that determination to location and the number of different points.

On the last page -- I think it's the last page on your printout -- you will see a typical profile. On the third column, Minimum Thickness, that's a calculated value for us. It is the thickness that's calculated between a design thickness minus the 12-1/2 percent manufacturer's tolerance thickness, and then minus any corrosion allowance in the manufacturing of the vessel.

And in the very last column on Readings, those are the actual readings that we

have from the field. So we compare those readings to the minimum-thickness readings. They are to be equal or higher. If they are not, we have a problem.

This is what I want to update the board on, where we are today in terms of how we conduct our first round of readings and are ongoing for the second round. And we will provide an update to the board, on the next December meeting, with the calculations, annualized corrosion rates for our process within our facility.

CHAIRMAN MORELOCK: Thank you, Richard.

Do I have a motion to accept Wacker's RBI report?

MR. BAILEY: Conflicts?

CHAIRMAN MORELOCK: Yes, thank you. Is there a conflict of interest?

(No verbal response.)

CHAIRMAN MORELOCK: Hearing none, do I have a motion to accept Wacker's report?

MR. BAUGHMAN: Motion made to accept the report.

MR. PISCHKE: Second.

CHAIRMAN MORELOCK: So I have a second. Any questions or comments?

MR. PISCHKE: I have a question about the failure modes that you would be looking for. I assume, and maybe this is wrong, that these vessels contain the polysilicon and some erosion concerns.

MR. ENG: That's correct. There are many applications where we have solids of different sizes flowing at fairly high velocities. So erosion, actually, is more of an issue than corrosion.

MR. PISCHKE: Than corrosion, correct.

MR. ENG: Okay. So we do monitor thickness for many of these processes, knowing that, already -- from our previous operations in our sister facilities, mainly in Germany, with 30, 40, 50 years of operating history, we know that, one, at a certain, specific date or so many kilos of production we will take the vessel down, provide a visual inspection, take a measurement of thickness, and in many times do a repair. That's a normal routine for many of our equipment out in the field.

MR. PISCHKE: Is that part of this RBI, then?

MR. ENG: RBI for us is predominantly corrosion, damage-mechanism related. The erosion side, we have a separate program, though, we don't call it RBI. We have the operating in-service inspections. And it's a -- how should I say -- it's based on the number of hours of operation and the application of that vessel. An example I can provide is in our CS reaction to area. Approximately every six to ten months a reactor comes out, because we know that it's due time for inspection and repair, possibly, and then put it back in service.

To answer Dr. Hargrove's question on who does it, when do we do it, how is it notified, if I can just say ditto Valero, it would be easy for me. Okay?

CHAIRMAN MORELOCK: Well, and just for our benefit, where Wacker is right now is they've got a brand new facility in the state of Tennessee. They're creating a lot of jobs, by the way. But what they're having to do is this baseline is -- everything is new, so they're taking all these readings to see what the

thickness of all these components, pressure components, are right now. And right now they're bound by the two-year internal inspection requirement in the law and rule to maintain a certificate of inspection for their equipment. Once they operate this two years and then do this inspection again and take these readings again, then they can establish potential corrosion rates or erosion rates or your damage mechanisms, confirm that they are actual damage mechanisms, and then they can come back to the board with another report to see if they have cause to extend those internal inspection frequencies beyond two years based on their date. But they're gathering data right now. So that's where they're at. So it's a good process and it's a good report.

MR. ENG: I think, for me, as an engineer, typically, when you go into a facility, you don't get the luxury of starting up a brand new facility and being able to get baseline readings. I think this is the first time I can do it.

MR. BAUGHMAN: I'd like to comment. I just wanted to make a comment that I noticed our charts were a little bit off. And mine is not

legible; whereas, my brother's, next to me, is. So I looked over it, but just as a proofreading for in the future so that I can analyze the chart, I would ask that to be noted.

MR. ENG: Maybe if I don't put color schemes, it will be easier. My apologies.

CHAIRMAN MORELOCK: Okay. Any other questions or comments?

MR. HARGROVE: Just one quick question. On your Table, you made the statement that the readings should exceed the thickness.

MR. ENG: Yes.

MR. HARGROVE: And I would certainly agree with that. Is there any concern for, I think, Number 17 -- any concern there in particular about that reading? Or should the reading be done again?

MR. ENG: 17, okay. Let's take a look -- .398, is that the one you're looking at, Dr. Hargrove?

MR. HARGROVE: At the end, .5 and then .496. Am I reading that correctly?

CHAIRMAN MORELOCK: You are.

MR. PISCHKE: Yeah. And the minimum is .398.

CHAIRMAN MORELOCK: Yes. So the first column is the minimum-required thickness. This is the minimum-required thickness. This is the way it was delivered, and that's what their current reading is. Nominal thicknesses, what it was -- the product form was purchased as.

MR. ENG: Does your chart look like mine, Dr. Hargrove?

MR. HARGROVE: Yes. Yes.

CHAIRMAN MORELOCK: So as Mr. Pischke was pointing out, the readings were .496, but the minimum is .398, so you're above the .398.

MR. ENG: Correct.

CHAIRMAN MORELOCK: Any other questions or comments?

(No verbal response.)

CHAIRMAN MORELOCK: Okay. Hearing none, I'm going to call the question. All in favor, say "aye."

(Affirmative response.)

CHAIRMAN MORELOCK: Opposed?

(No verbal response.)

CHAIRMAN MORELOCK: Abstentions?

(No verbal response.)

CHAIRMAN MORELOCK: Not voting?
(No verbal response.)
CHAIRMAN MORELOCK: Thank you, Richard.
MR. ENG: Thank you.
CHAIRMAN MORELOCK: Okay. That takes us to Item 17-03. This is MC Ionic Solutions requesting to designate nine pressure vessels as Tennessee Specials.
So, gentlemen, if you'll introduce yourselves.
MR. WOODFIN: Randall Woodfin with CNA Insurance.
MR. VJIHARA: Yuki Vjihara with MC Ionic Solutions US.
MR. YAMAHARA: My name is Katsuhito Yamahara. I'm the plant manager at MC Ionic Solutions US.
THE REPORTER: If he's going to be speaking, I can't hear him.
Can you please speak up?
CHAIRMAN MORELOCK: You-all may proceed.
MR. WOODFIN: Thank you. These vessels were installed without national board

numbers. They were purchased in China, and inadvertently, through their procurement process, national board numbers were either not requested or not installed by the manufacturer.
When they were installed six years ago, the insurance inspector at the time originally registered those vessels with the State, and the State issued operating certificates for the vessels. Subsequently, during the next inspection cycle, the lack of national board numbers was noted and flagged.
Through subsequent guidance through Mr. Chapman and Ms. Rhone, they requested that we make application or requested that the manufacturer make application to the national board to apply national board numbers on those. The national board denied their request. So subsequent to that, Mr. Chapman made guidance to apply for State Specials for those vessels.
CHAIRMAN MORELOCK: Do I have a motion to discuss this item?
MR. PISCHKE: So moved.
MR. BAUGHMAN: Second.
CHAIRMAN MORELOCK: Okay. I've got a motion and a second.

MR. BAILEY: Any conflicts?
CHAIRMAN MORELOCK: Thank you.
Any conflicts of interest?
(No verbal response.)
CHAIRMAN MORELOCK: Okay.
Gentlemen, just to give some information, this was on our September 2016 agenda. And the packet that had been provided to us, these vessels have been designed, fabricated, tested, inspected, and stamped for ASME code. The only thing that's wrong with these vessels is they don't have a national board number on them.
And so, used to, you were given a period of time by the national board, 30 to 60 days, to get those registered and stamped; however, they have since published NB264 which allows you to go through the process of registering vessels that may have already even been put into service. However, these gentlemen have done the due diligence. They've contacted the national board and the national board has denied that option to get those numbers. So this is where we're at. And --
MR. PISCHKE: Do we know the reason why the national board denied --

MR. WOODFIN: The email John Hogue sent only said that the period of time between the construction of the vessels and the application was too much, in his opinion.
CHAIRMAN MORELOCK: Okay. And what time frame is that, just for the record?
MR. WOODFIN: About six years.
CHAIRMAN MORELOCK: Okay. So that's a pretty long time.
Are the vessels unsafe? No, they're not unsafe. I mean, they just don't have the national board number on them. And so it is an option to make State Specials out of these. That's why you have all the calculations and the documentation proving that these vessels are ASME code-stamped vessels, as long as you, being the owner/user of these vessels, accept the requirements of the State Special in that all repairs done to those vessels have to be approved by the chief inspector of the State of Tennessee, and all alterations potentially done to these vessels in the future would have to come before the Tennessee Board, and we meet quarterly. So that's the ramifications with that.
We don't have any other provision.

There's no board case, no board interpretation. There's nothing that would allow the board leniency, because they're not national board stamped. And so that's where we're at today.

MR. BAUGHMAN: I've got a question.

CHAIRMAN MORELOCK: Yes?

MR. BAUGHMAN: Has there been any repairs, to date, on any of the vessels?

MR. WOODFIN: You haven't done any welding or repairs?

MR. VJIHARA: No.

MR. YAMAHARA: No. Nothing.

MR. BAUGHMAN: Any issues with any of the vessels, operational-wise, that have had to have any attention?

MR. YAMAHARA: We have never had such a problem or issues. No. Not any.

CHAIRMAN MORELOCK: Any other questions or comments?

MR. BAUGHMAN: When is the last time these have been inspected?

CHAIRMAN MORELOCK: I think the inspection reports -- I think they're in the package.

MR. VJIHARA: April 2016.

MR. WOODFIN: April of 2016. That's when the lack of national board numbers was noted on the vessels -- or noted not on the vessels.

MR. BAUGHMAN: Okay. So these were installed six years ago, and they were noted last year.

MR. WOODFIN: Yes.

MR. BAUGHMAN: Okay. Thank you.

CHAIRMAN MORELOCK: Any other questions or comments?

MR. HARGROVE: I have a question.

CHAIRMAN MORELOCK: Yes?

MR. HARGROVE: Only one request was made? I assume that there was only one request for those national stamps, correct?

MR. WOODFIN: We did not push back to Mr. Hogue. We did not respond and disagree or ask for further guidance on it. His answer was fairly emphatic.

CHAIRMAN MORELOCK: Any other questions or comments?

(No verbal response.)

CHAIRMAN MORELOCK: All right. Hearing none, do I have a motion to approve these

nine ASME code pressure vessels as Tennessee Specials?

MR. BAUGHMAN: So moved, to accept.

MR. PISCHKE: Second.

CHAIRMAN MORELOCK: Okay. So I have a motion and a second. Any further discussion?

(No verbal response.)

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

(Affirmative response.)

CHAIRMAN MORELOCK: Opposed?

(No verbal response.)

CHAIRMAN MORELOCK: Abstentions?

(No verbal response.)

CHAIRMAN MORELOCK: Not voting?

(No verbal response.)

CHAIRMAN MORELOCK: So, gentlemen, you can work with the boiler unit and the chief inspector to get those Tennessee Special tags on those vessels, and you'll be okay to operate those vessels.

MR. WOODFIN: Good. Two quick notes, if I may. The first one is subsequently,

during this process -- we've been going through for a year -- we've identified three other vessels on site that were not previously known and have not been registered yet with the State. Those also are U-stamped but do not have national board numbers.

CHAIRMAN MORELOCK: Okay.

MR. WOODFIN: For those three, do we have to come back and make a --

CHAIRMAN MORELOCK: Yes.

MR. WOODFIN: Okay.

CHAIRMAN MORELOCK: Now, how old are they?

MR. WOODFIN: The same. They were installed exactly the same time.

CHAIRMAN MORELOCK: Okay. Well, then, yes, you'll just have to bring those back to us.

MR. BAUGHMAN: Do they have any others on order, coming in?

MR. WOODFIN: I don't think there ever will be, to be honest about it. It's been a good -- it's been a very good process. And my last note is related to that, Dave. Thank you. The owners would really like to thank

Mr. Chapman and Ms. Rhone for all the guidance they provided during this. It was a process that was as smooth as possible under the circumstances and within the confines of the law and the boiler rules. So they would really like to appreciate y'all for everything that you've done to help guide them through this process.

CHAIRMAN MORELOCK: Okay. Thank you for the kind words.

MR. WOODFIN: Thank you.

CHAIRMAN MORELOCK: So work with Sam to get those on the next agenda.

MR. WOODFIN: Great.

CHAIRMAN MORELOCK: Okay. Our next item is 17-04. Milan General Hospital requests a new variance for two boilers located in Milan, Tennessee.

MR. MUMMERT: Good morning. I'm Derrick Mummert. I'm the maintenance manager for that hospital, and I appreciate your time this morning.

The variance we're requesting -- Milan General Hospital is actually owned by West Tennessee Healthcare out in Jackson, Tennessee. We're an affiliate of them. They have their own

engineering department, so I oversee four hospitals. Milan is one of them. The big reason we need this, this is the four-story hospital. It's all for patient care, patient health. The boilers are used for heating the building, used for sterilizing for surgery. It's used for helping in the kitchen for food preparation.

These are brand new. We put them in last year to replace ones that were 52 years old. They're the same brand and everything. It worked out that they're the same horsepower, same pressures. They're 150-horsepower boilers. They run -- 150 PSI is what they're rated at. We normally run them at 100 or less. Between 90 and 100 is our average pressure that we run them at.

These are CBEX-P200s. They're made -- they were installed by Morgan & Thornburg out of Memphis, and they're the ones that's doing the maintenance for it. They keep up -- we've got a contract with them for the next five years. They do all the maintenance work on it.

The hospital itself, I've got two guys there full time. That's it. That's my entire engineering department. At four hospitals I've got four guys, so I really need a variance to

operate this.

One thing I did notice in this package I sent you, I had not put in the Tennessee number on page A-1. That's the -- the reason I did that was because I had the package in the process of being put together before we got the certificate back from the State. Both of these boilers are inspected, and I do have that state number, if you would like it. It's Tennessee 106752, and that's for Boiler Number 1.

CHAIRMAN MORELOCK: Okay.

MR. MUMMERT: That was the only information I could see that I had left out of this manual, and that was because I had already started this before I got that certificate back.

So that's basically where I stand. I'm in need of a variance really bad because I have no help.

CHAIRMAN MORELOCK: Okay. Do I have a motion to approve this variance contingent on Tennessee Board comments and -- wait a minute. Is there a conflict of interest?

(No verbal response.)

CHAIRMAN MORELOCK: All right. I'm hearing no conflict of interest. So do I have a

motion to accept this variance request contingent on Tennessee board comments given today and a site visit by the chief inspector?

MR. PISCHKE: So moved.

MR. BAUGHMAN: Second.

CHAIRMAN MORELOCK: I have a motion and I have a second. Okay. Any questions?

MR. BAUGHMAN: Yes, Brian. I'll start.

CHAIRMAN MORELOCK: Okay.

MR. BAUGHMAN: You noted the Tennessee number, but I've got to note the national board numbers ...

MR. MUMMERT: For the boilers themselves?

MR. BAUGHMAN: Yes, sir. Boiler Number 1, 19506; Boiler Number 2, 19506.

MR. MUMMERT: Oh, that's a typo on my part. I wrote it down -- I duplicated it. That was a mistake on my part. I'll have to get that for you.

MR. BAUGHMAN: Okay.

MR. MUMMERT: I can provide that back to you. That was just my ignorance there.

MR. BAUGHMAN: So you've got two

guys at the hospital --
MR. MUMMERT: Correct.
MR. BAUGHMAN: -- who are operating 24/7.
MR. MUMMERT: Yes, sir.
MR. BAUGHMAN: So during one of the shifts we're short a person, or if somebody is sick, holidays, what have you, we're really --
MR. MUMMERT: When I said I've got two people there, I also have -- I've got three healthcare facilities in one county. I've got a third maintenance guy at another facility, which is 16 miles away, that also takes calls on these boilers, and he's been trained. And he's documented in here. And I've got a fourth guy I just hired, just this past week. So I don't have him in here because he's not up and -- he gets lost now in the building, so I can't train him yet until he gets comfortable.
In between that, I've got -- respiratory therapy is there 24/7, because of the nature of their job, and we have trained them to go down and do a physical, on-site -- look things over to make sure there's nothing squirting out the side and no fires. So they're doing a visual

inspection, and it's set up that they will automatically contact whoever is on call, or myself, if they cannot get the person on call. And they also have the capability, remotely, in the emergency room, to kill that boiler or whichever boiler is online. And once they hit that switch, they can't reset it. It has to be physically done by a maintenance worker. They have to go down to the boiler itself to do it.
MR. BAUGHMAN: Under the Appendix E, Remote Alarm Attendant Duties on page E-1, duties and responsibilities. So this person answers the calls on PBX during evening hours. What are those evening hours?
MR. MUMMERT: Usually from 3:00 in the afternoon until 6:00 in the morning.
MR. BAUGHMAN: Registering incoming patients?
MR. MUMMERT: Yes. This is at nighttime. The registration department is not there because it's such a small hospital. The respiratory therapy department and some of the registration people are trained for this visual inspection, so they cross-train each other. So if it's just a respiratory therapy there, they would

also have that responsibility.
MR. BAUGHMAN: Okay. Scenario being if there's a trauma incident and we've got multiple patients coming in, is there a possibility that the remote alarm attendant would not be available?
MR. MUMMERT: It's right at the nurses station, so there's usually two nurses, a respiratory therapist, and a registration person there. Even after hours, there's generally four in that general area, including a doctor roving around. But if there is an issue with the boiler, it automatically shuts itself down. When that alarm sounds, the boiler shuts down. So that's more of them to see why the alarm sounded.
MR. BAUGHMAN: But the -- and I appreciate that, but the question being, is there the possibility that this remote alarm station could possibly not be attended, and --
MR. MUMMERT: It's -- the alarm is so loud that because of the size of -- the ER is so small, that no matter where you are at in the ER, you can hear it.
MR. BAUGHMAN: Can you silence the alarm itself?

MR. MUMMERT: If you do, you kill the boiler.
MR. BAUGHMAN: Okay. So the alarm, itself, by silencing it, also --
MR. MUMMERT: Shuts down --
MR. BAUGHMAN: -- shuts down the boiler.
MR. MUMMERT: Yes.
MR. BAUGHMAN: Okay. So if there's an incident -- I guess what I'm getting at, Derrick, is -- what I'm concerned with is that even if an alarm is going off, if there's trauma, what we've got in the remote station that's being served by staff personnel -- nurses, respiratory therapist-type people -- but if there's an incident, what I'm concerned with is, even if this alarm is going off, that life is being attended to and that we've got the possibility of this station not being attended. And that's just what I'm getting at.
MR. MUMMERT: Right. And I understand what you're saying. Yeah, there's a possibility, you know, God forbid, that there's something going on that everybody is pulled away at one time. But yeah, there's a good possibility

that there's somebody not right there face-to-face with the alarm. But no matter -- like I said, no matter where they are in that ER, it's such a small ER, that they can hear it.

MR. BAUGHMAN: Okay. This alarm, it's hardwired in?

MR. MUMMERT: Yes.

MR. BAUGHMAN: I pass the questions off for now.

MR. HARGROVE: Quite frankly, I'm a little concerned on the availability of personnel for the incidents and oversight of the boilers. Considering your staff, it stated that the alarm panel is tested daily.

MR. MUMMERT: That's correct.

MR. HARGROVE: Okay. So walk me through who's doing that.

MR. MUMMERT: Every day it's done by maintenance.

MR. HARGROVE: And what time? Is this the beginning of --

MR. MUMMERT: We usually do it about -- when they first come in, it's usually around 6:00 in the morning. We go through the -- we've got a daily check-off sheet that we use. We

inspect everything.

MR. HARGROVE: Describe the "we."

MR. MUMMERT: "We" as in the maintenance people. I've got a senior maintenance technician -- two senior maintenance technicians and a general maintenance technician and myself. So during the week it's usually the senior maintenance technicians that will go down there and inspect the boiler, check the readings, check and make sure there's no leaks anywhere. You know, just an overall visual inspection.

And then we do blow-downs, and then we will check the alarms. And we call the ER to say, "Hey, we're going to set the alarm off," so that they can watch the alarm panel to make sure it's functioning. And on the weekends, I still have people go in -- maintenance still goes in on weekends, every weekend, and does this. Seven days a week maintenance goes in and tests the alarms themselves.

CHAIRMAN MORELOCK: Any other questions?

MR. PISCHKE: (Indicating.)

CHAIRMAN MORELOCK: Yes ...

MR. PISCHKE: I had a question

about the training of the remote attendants. Are all of these people full-time employees?

MR. MUMMERT: Yes.

MR. PISCHKE: No temps or --

MR. MUMMERT: No. They're all full-time.

MR. PISCHKE: -- subcontracted?

MR. MUMMERT: Full-time.

MR. PISCHKE: Okay. And there's not a high turnover rate or --

MR. MUMMERT: No.

MR. PISCHKE: Because I notice it's only once a year that the training occurs, and so ...

MR. MUMMERT: Yeah. That's just because I started this in October. I mean, that's -- but, I mean, I can do it earlier or sooner. When I get new people, of course we do it as part of the initial orientation. Once we get them trained, you know -- and I'll update this and send it in to let the boiler board know that if there's any new personnel, we would train them once they got their normal job done, too, before we put them on that. Just like my new guy. I'm not going to train him until he's comfortable with

his functioning. And then once we start letting him go through hands-on, by himself with the boilers with the testing and inspections, then we'll do the training.

CHAIRMAN MORELOCK: I've got several comments. Let me go back to the check list and kind of cover those. Figure 1, site plan, it would be good if we knew the distance from the boiler room to the nurses station. Typically, if we just have a little dimension there, whether it be a hundred feet, a hundred yards. Whatever that is, we need to know. That gives us a proximity so we know how quickly those can be responded to.

On page 1 of your manual it states that you, Derrick Mummert, are a Maintenance Manager II. But then on page 3 the manual states that you're the one who maintains the manual and the variance, but then it says on page 3 that the manual is maintained by the engineering department.

MR. MUMMERT: I am the engineering department.

CHAIRMAN MORELOCK: Okay. So what's important for us is we're not familiar with

your facility, and so when we look at your organizational chart in Appendix D, you know, we need to see -- we need to make sure what we see in the organizational chart and the verbiage in the manual, it all connects the dots. Because I was kind of getting lost, because I didn't know. So if you're the maintenance manager/engineering department/Justice of the Peace and all of that, we just need to show that so that the board members know what your responsibilities are and we don't get lost in who's maintaining the program.

MR. MUMMERT: Okay.

CHAIRMAN MORELOCK: And then as far as a remote monitor, you know, it states that the emergency department nurses station is on page 2. Then on page 4 it doesn't list -- it says emergency department on page 4, and then Appendix E, which we just looked at, it doesn't list who the remote monitors are. So if it's the respiratory therapists, they need to be in there. If it's the nurses, they need to be in there. If it's a doctor, it needs to be in there. And it also needs to be shown on the organizational chart so that we have a clear picture of who the remote monitors are so we can follow that. And that's

going to be also important when you have a site visit so that when they take this manual and say, "Well, where are these people and what are their duties?" you'll be able to answer that question.

MR. MUMMERT: Okay.

CHAIRMAN MORELOCK: So make sure that the job titles are consistent through the manual, and make sure your organizational chart lists everybody. Same thing for Appendix F. You list boiler operators, but boiler operators are actually maintenance people, right?

MR. MUMMERT: Yes.

CHAIRMAN MORELOCK: So you need to list all the different maintenance people that serve as boiler operators, whether it's a supervisor, senior tech -- whoever that is, list all those people consistently in the manual and show them on the organizational chart so we can follow that so that we'll know who those folks are.

MR. MUMMERT: Okay.

CHAIRMAN MORELOCK: Appendix F, you need to list that the boiler operator will attend a boiler using the 20-minute rule if there is an alarm and the remote monitoring station can't be

put back into operation. And the old rule was 800-3-3.422, but with our 2016 revision of the manual, the 20-minute rule now falls under 0800-03-03-.08(11). So that's the new 20-minute rule. It's the same verbiage. It just was reorganized.

MR. MUMMERT: Okay.

CHAIRMAN MORELOCK: And, again, if there's any issue with the boiler that you can't use the variance, you'll go back to the 20-minute rule. And you may want to include that verbiage on page 6 and 7.

In Appendix F, again, Boiler Operator Duties, all these duties are operating the boiler, but these are maintenance people. They have other duties, and we need to know what those other duties are, again, because we want to make sure that just their day-in/day-out work life isn't going to take them away from maintaining the boiler and keeping it safe.

The checklist does request that you send a cover letter to the boiler unit and the chief inspector for the State of Tennessee. And I know you allude to requesting a variance on page 1, but there's really not a formal request

for a variance. You're just stating the benefits of having a variance.

MR. MUMMERT: I included that when I sent the packages, though.

CHAIRMAN MORELOCK: Okay. How do you prevent unauthorized access to your boiler monitoring?

MR. MUMMERT: You can't get in the ER without a badge. You have to be an employee.

CHAIRMAN MORELOCK: Okay. But what if it's an employee? How do you prevent an unauthorized employee from gaining access to that? Is everybody going to be a boiler operator or a boiler attendant or a monitor?

MR. MUMMERT: Well, there is no -- I mean, other than they can't get through there unless they go through the ER, but, I mean, I don't have no physical security there that --

CHAIRMAN MORELOCK: Well, I mean, it's just usually the software is password protected.

MR. MUMMERT: Oh, well, yeah. I can't even tell you how to get into that part of it, so --

CHAIRMAN MORELOCK: Okay. So just

put that in your manual that it's password protected and we'll be fine. Okay?

MR. MUMMERT: Okay.

CHAIRMAN MORELOCK: Do you have a log of the manual holders? I know they're in the ER and the boiler room.

MR. MUMMERT: That's the only two places.

CHAIRMAN MORELOCK: Just put you a little two-line log in there that you are tracking where those manuals are, you're controlling those documents.

And the boiler checks that you state under Boiler Operator Duties and Remote Attendant Duties, and then the verbiage of your manual, make sure that what you're checking, that's stated in words, also appears on your boiler log as well so that the verbiage and the boiler log correspond to each other. As far as low water and all that kind of stuff, make sure you've got all that tied together.

MR. MUMMERT: Okay.

CHAIRMAN MORELOCK: And lastly, you do have the words in your emergency procedure highlighted, but if this manual was laying -- I

know you've got a placard on it, too. But it's always good to either have a tab or a colored page or something so if somebody picks this manual up, they can immediately know where the emergency procedures are.

MR. MUMMERT: I put tabs on it but they fell off before I sent it, so I just highlighted them.

CHAIRMAN MORELOCK: Okay.

MR. MUMMERT: But the one at my office has got tabs on it.

CHAIRMAN MORELOCK: If you could print it out on a bright yellow page or something like that.

MR. MUMMERT: Okay.

CHAIRMAN MORELOCK: Okay. All right. So that's the comments that I have.

Are there any others?

MR. BAUGHMAN: Yes, sir.

CHAIRMAN MORELOCK: Yes?

MR. BAUGHMAN: From a technical standpoint, Derrick, you had made mention that during the week they go through a test where I think you mentioned that somebody would let the remote station know that a test was being

performed. And when they perform that test, they're looking to see if a light comes on. What's the test? How is that performed?

MR. MUMMERT: When we do a blow-down, we can actually drop the water level and they'll shut it down on low water. And when it does kill the boiler, we want to verify that it sounded the alarm, for one, and that the boiler is actually dead. We cannot start -- flip the switch again. So that's what we're actually testing, to make sure the safeties are doing what they're supposed to.

MR. BAUGHMAN: So when I look at this remote boiler control station that's at the very end of the manual and I can see Boiler number 2, on the right, fairly well, I'm seeing a buzzer silencer, alarm silencer. And then I'm seeing the switch down below on or off. And so --

MR. MUMMERT: You've got -- on the right-hand side is Boiler Number 2. All those are for Boiler Number 2. On the left-hand side, everything else is for Boiler Number 1.

MR. BAUGHMAN: Yes, sir. My question being, is that you made mention before that when the alarm sounds, that if you hit the

silencer button, that also kills the boiler.

MR. MUMMERT: Yes.

MR. BAUGHMAN: And then we've also got a switch underneath of it that's on/off.

MR. MUMMERT: Yes. They can kill that, too.

CHAIRMAN MORELOCK: Okay. My question, I guess, is getting back to, still, if that silencing button is just for the alarm buzzer itself and whether that actually kills the boiler, I just want to be very firm on that.

MR. MUMMERT: Right. I understand what you're saying. No. When you hit that buzzer, it will silence the alarm, but it will also shut the boiler down.

MR. BAUGHMAN: Okay. And then redundant-wise, we've got another switch that has to be put in the off position.

MR. MUMMERT: That's just a backup to the backup.

MR. BAUGHMAN: Okay. On the left it says -- I can see it says "Do not turn off."

MR. MUMMERT: Right. Because if they kill that, it's going to shut the boiler off that's running.

MR. BAUGHMAN: Okay. But what does it say up above that? "Silence" --
MR. MUMMERT: "Buzzer silencer."
Oh, you mean on that tag?
MR. BAUGHMAN: Yes, sir.
MR. MUMMERT: "Silence only."
MR. BAUGHMAN: Silence only?
MR. MUMMERT: Yeah. Uh-huh.
MR. BAUGHMAN: Okay. So if it's doing silence only, I guess that's kind of where my question was leading.
MR. MUMMERT: It's confusing. Yeah, I see what you're saying.
MR. BAUGHMAN: Yes, sir.
MR. MUMMERT: Yeah, that needs to come off or clarified on that.
MR. BAUGHMAN: Okay. Well, I would like the inspector, at that particular time, to make note. And I'm sure that they will as they go through the functionality of that particular system.
MR. MUMMERT: Right.
MR. BAUGHMAN: Was this system built on site?
MR. MUMMERT: Yes.

MR. BAUGHMAN: Okay. So it's not necessarily UL listed.
MR. MUMMERT: This remote buzzer, here, no.
MR. BAUGHMAN: Okay.
MR. MUMMERT: I say that but I was not there at this time. I inherited this job when this hospital flooded and the guy quit, so -- it was there before me, so I assume it was -- I know part of this was done in-house, so I'm assuming the whole thing is not UL listed.
CHAIRMAN MORELOCK: Okay.
MR. BAUGHMAN: Is there a requirement that components be UL listed, or is that something that we've talked about before, or is there a particular requirement for that? I don't know. I know within CSD-1, it relates to it. And this is -- in the boiler itself, where is this tied into that shuts the boiler off? In other words, is it tied into the gas valve? Is it tied into the control circuit?
MR. MUMMERT: It's got a control circuit, yes.
MR. BAUGHMAN: It's tied into the control circuit.

MR. MUMMERT: Yes.
MR. BAUGHMAN: Okay.
MR. MUMMERT: Uh-huh. It's all electronic in there.
MR. BAUGHMAN: Okay. We had an incident some time back, and if I'm not mistaken, the remote shut-down switch is to turn the gas itself off. There's some questions about where the e-stops tie into and what have you, but we had an instant where the control circuit had shorted out. And because the emergency stop was tied into the control circuit, the boiler would not shut off. It continued to run. So that's why I ask, also, where the tie-in was for this.
MR. MUMMERT: I can double check on that, just to make sure.
CHAIRMAN MORELOCK: Any other questions or comments?
MR. BAUGHMAN: On the maintenance on-call list that you have under the four-hour boiler checks --
MR. MUMMERT: Yes, sir.
MR. BAUGHMAN: -- the number for Jackie Newell needs to have the area code with that also.

MR. MUMMERT: Okay. I assume that would be for all employees, right?
MR. BAUGHMAN: I would, yes.
CHAIRMAN MORELOCK: Anything else?
(No verbal response.)
CHAIRMAN MORELOCK: Okay. Hearing none, I'm going to call the question. All in favor say "aye."
MR. PISCHKE: Aye.
CHAIRMAN MORELOCK: Opposed?
MR. HARGROVE: Aye.
CHAIRMAN MORELOCK: Abstentions?
(No verbal response.)
CHAIRMAN MORELOCK: Okay. So I've got one for and one against and ...
MR. BAUGHMAN: I would vote no.
CHAIRMAN MORELOCK: Okay. So based on the current manual?
MR. BAUGHMAN: Based on the current manual and from what I've seen, I get some contradiction or some feeling from Derrick that we don't know exactly -- I don't get that we know exactly how things are tied in, where they're tied in.
MR. MUMMERT: No, I don't. I'll be

honest with you, I don't. I'd never seen a boiler until I got that job, and the only reason I got that job is because a guy quit.

MR. BAUGHMAN: And I appreciate your candid honesty with that, Derrick. And especially where you are in charge of training, also, it puts you in a very difficult position.

MR. MUMMERT: Right.

MR. BAUGHMAN: And I appreciate that very much, because that's what we're here for, is, ultimately, safety.

MR. MUMMERT: Right. Exactly.

CHAIRMAN MORELOCK: Okay. So with that, your variance approval has not been passed. You can take all the comments from the board and go back and revise your manual, clarify your boiler operating system, and you're welcome to come back and try again.

MR. MUMMERT: So what happens? I mean --

CHAIRMAN MORELOCK: You're still on the 20-minute rule right now.

MR. MUMMERT: Pardon me?

CHAIRMAN MORELOCK: You're going to have to operate your boilers on the 20-minute rule

until this is approved.

MR. MUMMERT: And who is the -- who can do that?

CHAIRMAN MORELOCK: You're going to have to have a boiler operator.

MR. MUMMERT: Well, I mean, it has to be maintenance or are you saying it could be anybody --

CHAIRMAN MORELOCK: It's going to have to be who you designate as your boiler operator.

MR. MUMMERT: Okay.

CHAIRMAN MORELOCK: Have you got a comment, Mr. Toth?

MR. TOTH: Yes. Question: Was this a renewal for the variance?

CHAIRMAN MORELOCK: No. This is a new --

MR. TOTH: It's brand new?

CHAIRMAN MORELOCK: It's new.

THE REPORTER: What's his name?

MR. TOTH: Marty Toth.

MR. MUMMERT: No. This was a renewal.

CHAIRMAN MORELOCK: This is a

renewal?

MR. MUMMERT: I copied this book page for page -- well, not page for page, but I used the old one.

CHAIRMAN MORELOCK: Let me go back and look. No. Well, I mean, the item on the agenda is for a new variance, and let me go back and see in the checklist.

MR. CHAPMAN: They had new boilers.

CHAIRMAN MORELOCK: The checklist is marked as a new variance.

MR. MUMMERT: Well, that's because I -- well, like I said, I'm ignorant when it comes to this. This is all new to me. This is the first time I've done this.

CHAIRMAN MORELOCK: Okay.

MR. MUMMERT: And I put "new" because it's new boilers.

MS. BENNETT: That's right.

CHAIRMAN MORELOCK: Okay.

MR. MUMMERT: Is that correct?

CHAIRMAN MORELOCK: Well, adding that new boiler, it is a new variance, yes.

MR. MUMMERT: Okay.

MR. TOTH: I believe that in the

past it's just -- it's a revision to an existing variance. The reason why he had to come before the board was because he had new equipment.

CHAIRMAN MORELOCK: That's correct. But from what we saw on our end, it was a new variance. So if you do have an existing variance, you need to work with the boiler unit on your existing variance. But as far as what you've given to us today, it has not been approved.

MR. MUMMERT: Well, I'm just as confused --

CHAIRMAN MORELOCK: So you'll have to go back to the boiler unit and see where you stand with your existing variance. Okay? Because, like I said, everything we had says it was a new variance. And that's what we were basing our review on.

MR. MUMMERT: So what should it be?

CHAIRMAN MORELOCK: Well, it could have come back as a modified or -- I don't know what the status of your existing variance is. Is it up for renewal?

MR. MUMMERT: That was one of the reasons, too, that I put down, because from going through and looking at the rules and regulations

from when I took this on, I found out you're supposed to be doing them every three years. That was way past expired.

CHAIRMAN MORELOCK: Okay.

MR. MUMMERT: That was another reason I went with the new.

CHAIRMAN MORELOCK: Okay. And if your variance has been -- it's not updated in a long time, they usually come back as a new one.

MR. MUMMERT: Okay. Well, then, that would have been correct. I just need to clean that up and --

CHAIRMAN MORELOCK: Okay. So you need to work with Sam on your existing variance. As far as adding this new boiler, you've got some work to do --

MR. HARGROVE: Two boilers.

CHAIRMAN MORELOCK: -- and come back to the board with this proposed new variance, or you can make it a modified, where you're going to modify your existing variance. But what we looked at today, we have not passed.

MR. CHAPMAN: This variance is no longer good because he's got new boilers altogether. There's no boiler --

CHAIRMAN MORELOCK: Oh, so both boilers in this manual were not part of the original variance.

MR. CHAPMAN: No.

MR. MUMMERT: That's correct.

CHAIRMAN MORELOCK: Okay. So this would be a new variance, then. So this will be a new variance. So until you get this approved, you're on the 20-minute rule.

MR. MUMMERT: Okay. I will pass it along. That's all I can do. I appreciate everybody's time. Thank you so much.

CHAIRMAN MORELOCK: Okay. Thank you.

MR. BAUGHMAN: And we appreciate you, Derrick. Thank you.

MR. MUMMERT: I'll get it straightened out. I may have to see you five more times, but I'll get it straightened out.

MS. BENNETT: Chairman Morelock, you may let him know, too, that the board minutes will be online. So the comments that the board made for revising your manual will be there.

MR. MUMMERT: Oh, great. That will be good.

CHAIRMAN MORELOCK: Yes.

MS. BENNETT: It will be a couple of weeks, but before the next meeting, that might help you in revising your manual.

MR. MUMMERT: That will be great. I appreciate it. I appreciate all the help I can get.

CHAIRMAN MORELOCK: Okay. Thank you.

Okay. I've got 10:14. Let's take about ten minutes for a break. I'm sure everybody would like to have a short break. And let's reconvene at 10:25, and we'll go to our next item.

(Recess observed.)

CHAIRMAN MORELOCK: Okay. We are down to Item 17-05, Domtar Paper Company. And they're requesting a variance for extension of boiler internal inspection to 24 months at their facility in Kingsport, Tennessee.

So gentlemen, introduce yourselves and present your item.

MR. SNEED: Brandon Sneed. So this request is to extend the already approved 18-month extension that we came and received last year to a 24-month extension.

CHAIRMAN MORELOCK: That's correct. That's the way it's presented to us, anyway.

MR. SNEED: Yes. That is a correct understanding. Essentially, the manual that we presented to you is essentially the same manual that was given to you last year with some minor adjustments, as far as training, a little bit of technical data that's been changed. No physical changes to the unit. No difference in training with the operators. So, essentially, it is the same manual that we presented to you last time and received the variance on.

CHAIRMAN MORELOCK: Okay.

MR. SNEED: And James can speak on the revisions.

CHAIRMAN MORELOCK: So for clarity --

MR. NEVILLE: To give a brief history, back in 2014, we presented this and were given an 18-month internal inspection window. And then, in September of 2016, we presented again and were given an 18-month window. So we're coming back to ask for a 24-month window, instead of the 18. And we've got some technical data that's updated in the inspection reports that we included

in this.
But it may be helpful to go back to the board meeting. We've got an Addenda 1 back in Section 10 that describes the items that the board asked for at that time. And Addendum 1, there were really four items that needed to be addressed.
There were some -- this is -- Mr. Robinson asked about some photos in one of the reports. That was a before picture that was shown, and we stated that that punch list item had been completed in that work. And --
CHAIRMAN MORELOCK: Can I interrupt you for just one second?
MR. NEVILLE: Yes.
CHAIRMAN MORELOCK: Are there any conflicts of interest?
(No verbal response.)
CHAIRMAN MORELOCK: Hearing none, proceed on.
MR. NEVILLE: Thank you. And then Item 2 was a -- the relief valve test reports needed to be updated and properly filled out. Those were shown in Addendum 1 as well. Then the PSA inspection was the Number 3, and that was a

letter from them. The smelt bed inspection date, there was a typo on that report. It should have been 2019 for that updated report. And the final item was Number 4, which was the updated training. And it was -- the monthly reports didn't quite give the breadth of training, the program that's on here.
Now, we also -- so that was in this addendum, but there was some supplemental data. Everyone should have this in front of them now. And that has some information we can go into as far as the two thicknesses. But, also, there's some training information. And this is the very latest training logs, as well as the SOP training logs, which is a sample that's for all of the employees. And that's a -- the last two pages of this supplemental gives the training exposure on the employees for that.
MR. SNEED: And just to explain, the regression charts that are in the smaller binder, those are projected five years into the future using PSA's trademark software that they have. And that can take our data that they've gathered for us since 2008 and project that as far as they want to in the future. But just to be

conservative, we had them go through 2021 to show what our two thicknesses would be in the specific areas that we have tested since 2008.
And all that data shows that we are well above the ASME minimum wall, even projecting into five years.
MR. NEVILLE: And that corresponds with information in Section 2 under Boiler Inspections. And this is 2.208, which was the projected two thickness values that we projected out to 2018.
MR. SNEED: And that calculation was made using a worse-case scenario of the lowest reading that we'd actually gotten since 2002, when the boiler was put into commission.
CHAIRMAN MORELOCK: Okay. So for the board members' benefit, the only changes to the manual since approval in September of 2016 is what you have summarized on 10.1R, Renewal Revisions, for this meeting today, correct?
MR. NEVILLE: Yes. Probably the most significant one was the FM Global Report, January of 2017. And that was included under Section 2.
MR. SNEED: And one other thing,

Mr. Chairman, that we don't have a record of, because there's no report that's recorded and sent to the owner, is that Sam Miller, who is an authorized inspector, did an external jurisdictional inspection in February of this year and provided that report to the State with no finding from that report.
CHAIRMAN MORELOCK: So if you look on 12R, your FM global report dated February 24, 2017, they are basically agreeing that the next proposed outage would be April 2018, for a total of up to 24 months of operation without a full maintenance outage.
They go on to say that they participated in the jurisdictional inspection on March 2016 and noted no known issues at that time that would preclude FM Global from supporting the extension request.
And then, basically, your revisions page, I just -- I went through all of those and made sure I could find the revisions based on that.
Okay. So do I have a motion for approval of Domtar's request for an extension to 24 months without an internal inspection -- before

the next internal inspection, contingent on Tennessee Board comments made today and a successful site visit from the Boiler Unit and the chief inspector of the State of Tennessee?

MR. BAUGHMAN: Motion made.

MR. PISCHKE: Second.

CHAIRMAN MORELOCK: All right. So what questions or comments do you have based on this information?

MR. HARGROVE: I have three questions. On page 11.11, in the initial binder, the last -- Number 6, the Conclusion and Recommendation, stated that consideration should be given to removing the smelt bed and the center crotch refractory by -- or doing inspection by the 2019 outage. What criteria are you or would you use in making that removal before then? Or are there criteria that you're using to make that removal?

MR. BENNETT: This is a big box with a floor and a slight slope. And after the unit is taken out of service for inspection, there may be a residue of smelt, what was molten salt, and now it's solidified on the floor. And there's a question of how many of these floor tubes, of

which there are roughly a hundred and something, should we inspect. And the question, something goes to the owner's concern about is there a mechanism for the floor tubes to be affected in any way by operating conditions.

This boiler has now operated for 16 years, and nowhere in the boiler floor or walls have we seen any damage mechanism thin the tubes. So the need to judiciously and cautiously watch the tubes is receding as the longer and longer period goes, proving that there's nothing happening to the tubes. That's unusual for this boiler because this boiler, not like many of the boilers in other pulp and paper mills, doesn't have the smelly stuff, the sulfer in the fuel; and, therefore, the damage mechanisms or corrosion mechanism for the steel tubes is not really in place. So this criterion for floor examination is just saying, "Oh, when I get in, I can't see all the tubes. I can see the wall tubes and I can see -- but I can't see all the floor tubes along all of their length. Should I check underneath that every now and then to see whether there's some reason I should be looking?"

And so there's an engineering

judgment criterion. More than anything, it would fall back to API580, 581. The risk-based inspection would say what is the damage mechanism. Maybe one or two mils per year. I've got 80 mils of corrosion allowance. Gee, that scheme would tell me I only need to do this every 20 or 30 years. I'll probably do it a lot more often than that just because I can, but it's awfully painful to do it because I've got to remove this glassy material from the floor. So these are the two balancing things.

So every four or five years would be a good industry practice for boiler floor checking where there are materials that take extra effort to remove, and, also, where the risk of removing brings a little bit of danger to the tubes. Some mills use guys with pneumatic drills. Some guys try hydroblasting. It's hard to remove the stuff. And you can do harm by doing it, so you tend to hold back for that reason and also not gallop into it because you know the damage mechanism is nonexistent. So it's really super conservative to even accept that recommendation.

MR. HARGROVE: Just a general question. Certainly there is risk factor from the

18 to 24 months. How would you describe the difference or the risk from going from 18 to 24 months, and how do you justify that?

MR. SNEED: Well, first to say from 2002 up until 2014 we did a yearly internal inspection before we received a variance for 18 months. When we first got our first 18-month extension and went in 18 months after our previous outage, the same punch list items were present as were in the year's past. There was no excessive damage, no damage that was not seen in the past, as far as air port openings, where you had to put refractory back in. But nothing that would cause concern to us that would prevent us from trying to go 18 or 24 months down the road.

Our training that we've given our operators, in my opinion, has only improved over the past two years, as far as how we handle the training, how we go through the training, how we track the training, and how we ensure that each foreman is going through that training with each individual the same.

So, as far as mitigating the risk, we feel very confident that the risk from going 24 months is the same as it is going 18 months,

for us.
MR. HARGROVE: So from a statistical measurement, you're saying or concluding that the risk is the same.
MR. SNEED: I agree, yes. Yes. And based on two thickness projections, which is the main thing that we look at, as far as the NDT that we do on the inside during an internal inspection, and as you can see from the small black book, even going out five years -- say if we went five years without an internal inspection, based on previous data, that we can conclude that the tube thickness loss would be minimal and not exceeding the corrosion rates that we've even seen that are minimum themselves.
CHAIRMAN MORELOCK: So the PSA report, to do that projection, how many years of actual data, thickness data, was used to develop that projection? Was it since the last inspection or did it go beyond that?
MR. SNEED: It went back all the way to 2008.
MS. BENNETT: They started doing their type of inspection in '08.
CHAIRMAN MORELOCK: Okay.

MR. SNEED: Yes.
MR. BENNETT: And that's the data they used for that projection.
MR. HARGROVE: I've looked at a couple of research papers on predicting that thickness. It will be really interesting to see, between 2008 and, you know, over that period, how your model is accurate in terms of making that judgment. I still want to make sure that we're documenting your statement that the risk involved to going 24 months is the same as it is at 18. I'm not sure I'm convinced of that. But I want to make sure that that's the statement that you're making.
MR. SNEED: Based on UG thickness readings that we have, I would say yes.
MR. HARGROVE: Okay. One last question. For the realtime on-line monitoring system that you have described as "Park view" -- is that correct?
MR. SNEED: That's correct, yes.
MR. HARGROVE: -- what specifically -- any cyber security methods that you deploy within the control system to avoid or minimize vulnerability?

MR. SNEED: So the only people who can access the control scheme of the unit or of the whole mill itself are the process control engineers that work for that specific area. It's under, essentially, a lock and key to even change the program. And they're the only ones who have access to those controls. And it's very firewall protected. And that's been proven in the past. I know that for a fact.
MR. HARGROVE: And just for clarity, identify the "they" again for me.
MR. SNEED: There's a process control engineer for each area of the mill. There's one specifically for the utilities department which would be responsible for the recovery boiler. There's one for the fiber line and there's one for the paper machine.
MR. BENNETT: And they're not on the web. They're not web linked.
MR. HARGROVE: All right. Thank you.
MR. BAUGHMAN: Gentlemen, the whole issue here is that if we make a bad determination, this boiler has got more volatility to it than your typical fire tube/water tube kind of

installation. So if we have a failure, we're all going to be accountable in some form or fashion, not only with the variance but with the results of what happens. And we know that we're talking about this from a maintenance longevity standpoint. We're approaching that. But when it gets down to it, it's really economics, is what's generating this forwards. And so I don't want that to ever blind us to the fact of why we're here. And that's safety.
MR. SNEED: Hundred percent.
MR. BAUGHMAN: Okay. With that said and done, during the 2014 outage on page 2.27 where the cracks were propagating towards the generating tubes, those were to be drill-stopped. We talked about that during previous -- but those cracks came about during that period of operational time. My concern with it is, is that if we go and extend out 24 months, that that might be something that gets past us. Of course it gets into the point, then, of if you've got a leak, the variance ends at that particular point in time and you get back to a status quo.
But my concern with it is, is that 24 months is an extremely long period of time.

Tube thickness is one thing. And in the report, there's been addressing of Tube Number 72 thinning, gouge marks, different types of entities that have come about, and some of that is because of the removal of the smelt bed and so forth. But my concern with it is, is that we might have an issue that's not even tube thickness related but it's crack related, i.e., on page 2.27, that could possibly affect, go across and propagate across the weld itself, and affect the tube. What's your thoughts on that?

MR. BENNETT: We have consciously taken note of every possible damage mechanism, including fatigue cracks, thermal fatigue cracks as described here. And the first thing about fatigue, anyway, is that it's unpredictable. We could inspect every day and give it a clean bill of health and still have a fatigue crack the next day. So that's an important understanding. But that's the point of these inspections when they do take place. And another six months of operation, in our judgment, doesn't compromise the tube integrity, because these kinds of thermal fatigue cracks in fill plates and membrane bars and things are very common and are very ordinary and almost

never -- I've never, in my 42 years, seen one go across a weld and into a tube, because the stress patterns in the tube is totally different from the stress pattern producing the crack in the fill bar, which is just a steel piece of metal welded on so that the air doesn't go anywhere.

So we're very conscious of that. When we do go in and do inspections internally, all of the intention is visually for any crack indications. None of that would show up at all, obviously, with thickness testing. So it's a high priority for the mill. If -- just, for example, if this particular crack had somehow made it into the tube, all that would have happened is there would have been a leak, and the leak would have been detected, and the boiler would have been promptly shut down. That's the standard protocol.

So you can't blow up a boiler from a little crack like this or a little leak like this. You have to have quite a big in-rush of water into the bottom of the furnace to produce anything exciting. Other than that, it's just like any power boiler with a leak, and you manage it exactly like that, except for that risk on that lower furnace explosion means that we don't mess

around. We hit a button. The boiler is turned off, drained, and emergency procedures are very well documented and trained. So there's no -- in my judgment, there's no possibility that something like this anywhere in the boiler, even down in the lower furnace, could produce an incident that we would care to read about any day in the news. It wouldn't be that exciting. It would just be a leak.

And that's happened on many boilers. We actually maintain -- we tell the rule that if you're looking for cracks and it's fatigue on a tube, then grind it out and remove it. If you've got to go too thin to do that, fix the tube after you've ground it out. But we just don't accept them and we are very conscious of that risk. And there isn't any increased risk here from running the boiler six more months, because it's nice and smooth. There's not any big cycling. The more times we take it down and start it up, the more times we increase the chances of those fatigue cracks doing something bad.

MR. HARGROVE: Have they already been drill stopped?

MR. BENNETT: I don't know if these

have.

MR. NEVILLE: Yes, they have.

MR. BENNETT: That's kind of an old wives' tale. It's something we do because it looks like we're doing the right thing. But a lot of times you can do drill stops and still see the crack continue because it's thermal fatique, and it doesn't behave as well as you'd like it to.

MR. NEVILLE: In Addendum 1, that was the line item 1 where we documented that that punch list item has been completed, and so that had been corrected.

MR. BAUGHMAN: Martin, did you have comment?

MR. TOTH: Yeah. I was just curious. What's the pressure of this boiler that we're referring to?

MR. BENNETT: 1250.

MR. TOTH: 1250PSI?

MR. SNEED: Correct.

MR. TOTH: If I may add, to say that a leaking water tube in a boiler of this nature would not be dangerous, I would refer you back to the boiler explosion of November of 2007 at the Massachusetts power plant where they had

the same type of situation occur that caused three fatalities. So I would be really concerned with saying that it's not dangerous. That particular boiler was at 1600PSI, which is a little higher than 1250, but just as dangerous.

MR. BENNETT: Well, we don't dispute that. Even 800 pounds is enough to cause a lot of damage --

MR. TOTH: Even 150 is enough.

MR. BENNETT: -- but depending on how it's released. So that's the point.

These boilers are designed with this particular emergency shut-down procedure as a industry-based response to this concern. I will repeat. This is a solar boiler. It doesn't even probably have that recovery boiler explosion propensity that the craft boilers, the ones with the sulfur, have. So you've got lower risk, inherently, and you've got the added protection of the ESP and the leak detection system. It's all there, so -- and these kinds of cracks, not from that exact thing that you see there -- but leaks in these tubes are common, and if you go to one of these conferences every six months, they have a description of all the little leaks that happened,

and everybody was fine. So we are very conscious of this in the industry, of maintaining very careful control over tiny leaks.

MR. BAUGHMAN: Very good. If we have a leak -- just so that I'm aware of this variance, if we do have a leak and the boiler has to be shut down to be repaired, how does that affect this variance that we're talking about?

CHAIRMAN MORELOCK: Well, if any of the six-month external inspections show a leak, you shut the boiler down immediately and you lose the variance.

MR. BAUGHMAN: If they have a leak before that external inspection, though, or during the period of operational time, how does that affect it?

CHAIRMAN MORELOCK: Well, whatever mechanism you do to find the leak is -- I mean, that's -- that's what's in 68-122-110(f), is that, you know, you'll have an external every six months, and if you have any leakage during those inspections, you shut the boiler down and you do a complete internal inspection and the variance is rescinded and will have to be reapplied for.

MR. BAUGHMAN: I guess what I'm

trying to clarify in my own mind, Brian, is if there's a leak, not necessarily at the time of that six-month inspection, but if they've had to tend to a leak during the period of operation, does that affect the variance?

CHAIRMAN MORELOCK: Well, you know, by the law, if you're going to take the law, if they have a leak in between that, then when the six-month external inspection comes up, they're going to find the leak, right, unless they've shut the boiler down?

MR. BAUGHMAN: Right. So if they have to shut --

CHAIRMAN MORELOCK: Now, they can shut their boiler down any time they want to. Just because it's a 24-month internal, they can do an internal annually if you want to. It's just you can't exceed 24 months. So if they find the leak themselves and shut the boiler down, do an internal, fix it, that would not damage their variance.

MR. BAUGHMAN: Okay. And that's what I was wanting to get set in my mind.

CHAIRMAN MORELOCK: Because that doesn't show negligence. That shows they're doing

their job.

MR. BAUGHMAN: When was the dissolving tank incident? What year?

MR. SNEED: I don't know the year right off the top of my head. I know it was something we discussed the last time we were here. Well before my time.

MR. BAUGHMAN: Well, that still kind of sticks in my mind. We asked the question during the initial -- as this was coming up, we asked if there had been any incidences, and they said no. And after we did some further homework, we found that there had been an incident. And that just kind of sticks with me, as far as -- because there had been an incident. There's still the evidence of that particular episode that's inside the boiler, although it's not causing any operational problems of what mechanism is in place that could prevent that or if it could have been prevented prior, back -- and I know that's a difficult question because it was prior, so -- that's one of the things, though, that just still stays in my mind.

MR. BENNETT: Well, when do you think that was? Was that on this new boiler even?

MR. BAUGHMAN: Yes, sir.
MR. SNEED: Yes.
MR. BAUGHMAN: Yes, it was.
MR. BENNETT: So the dissolving tank is obviously just a nonpressurized tank next to the boiler into which the smelt comes and mixes with water. So basically the point of the dissolving tank is not to dissolve the tank, but to dissolve the molten smelt into the water. And so when you bring this ribbon of molten -- think of molten glass, because it's red hot salt at 1400 degrees Fahrenheit, it comes into the water and makes a ferocious, boiling noise (indicating), and sometimes the flow of smelt into the tank isn't completely, ordinarily flowing because they have a little pluggage or something like that, and a big rush comes and boom, you get a big burst in the dissolving tank.

They're supposed to be constructed to take that internal hydraulic pulsing, but sometimes it overwhelms them if it's just poorly managed. That would not have any risk effect on the boiler itself. That's a separate component that's separated by an air gap probably that big (indicating) from the boiler itself. So I'm not

aware of cases where the dissolving tank blew up and had consequential damage on the boiler either. But maybe you have --
MR. SNEED: So there was a report that had to be filed by, at that time, his name was Chuck Hawkins, who has since retired. But -- I've seen that report but I can't tell you word for word, but there were things put in place to mitigate those from happening in the future. We had to provide that in the documentation that we sent to corporate. So that did happen, but I can't tell you for sure what those things to mitigate it was.
MR. BAUGHMAN: And that just leaves a question in my mind because it did cause damage --
MR. SNEED: It did.
MR. BAUGHMAN: -- and you're not aware of it.
MR. BENNETT: To the tank or to the boiler?
MR. BAUGHMAN: To the boiler.
MR. SNEED: To the smelt spouts.
MR. BAUGHMAN: To the smelt spouts, yes.

MR. BENNETT: To the spout. That's not the boiler either.
MR. SANDERS: Well, it was attached to the -- when it damaged --
MR. BAUGHMAN: But obviously, you're not aware of the incident yourself, and it happened prior to you guys being there, so it's kind of a tough position to put you in to have any discussion with it. My end of it is, is just making sure that any mechanisms have been put in place to try to mitigate any of this going forward. And that was really my concern with it.
MR. SNEED: I understand.
MR. PISCHKE: (Indicating.)
CHAIRMAN MORELOCK: Yes?
MR. PISCHKE: I wanted to get back to the crack propagation. I understand that, as a rule, the cracks on a nonpressure part, attachment, would not normally propagate into the weld and into the pressure retaining part. My question is more about the attachments themselves. And if you have an attachment that fails and the tubes start moving around in that boiler, would your system be able to detect this? Because I've seen that as a form of -- a failure mode, where

the tubes are moving and they're rubbing against each other and they can cause leakage. Would your system detect -- in addition to leaks, would it detect any kind of noise and rattling in the boiler like that?
MR. SNEED: So on a daily basis, each crew leader -- there's three crew leaders per day -- they are required to do a full walk-down from top to bottom of the unit. And things they look for are sounds that they didn't hear the day before. And so really the only thing I can think of, that would be the only mechanism that we would have in place to detect something like that. And they completely turn off the blower units to listen for any type of different sounds than they'd heard. And, again, that's done three times a day, and that's something they're required to do. So that could be the only mechanism that I can think of that would catch that.
MR. HARGROVE: Just for clarity, I think, Mr. Chairman, you asked each individual to identify themselves and their roles, so I would like to reiterate that and ask each of you to identify your name and, specifically, what is your role and responsibility.

MR. SNEED: My name is Brandon Sneed. I am the mechanical project engineer for the entire utilities department, which includes the recovery boiler. I handle any capital upgrade projects that happen in the utilities department, as well as any code work to the boiler that needs to be handled during an annual shutdown basis. So I'm the one responsible for contracting that work out.

MR. SANDERS: John Sanders. I'm the operations manager for the fiber line and utilities departments.

MR. WHITE: I'm Marshall White. I'm the assistant superintendent in the utilities area, mainly around this recovery boiler in the recaust area.

MR. BENNETT: I'm David Bennett. I'm a metallurgy and corrosion specialist. I work as a consultant to the mill. I'm also the industry liaison to the API 579-1, ASME FFS-1, post construction code.

CHAIRMAN MORELOCK: Any other questions or comments?

MR. BAUGHMAN: Yes.

CHAIRMAN MORELOCK: Go right ahead.

MR. BAUGHMAN: Under training, Utilities Department Training Summary, 11.14 -- and this is not on the -- this is not the addendum, so this may not -- since you've got the addendum here, this may not hold forth. So the addendum on 8.32 is the update to 11.14?

MR. SNEED: That is correct.

MR. NEVILLE: It is.

MR. BAUGHMAN: Good. Yeah, because I was just going through and looking at the waivers or DQs and the number of waivers or DQs that were itemized previously versus what's on there presently. And so that's pretty good. What I'm looking at as I'm going through this, though, is -- explain to me kind of what I'm looking at on this training grid. As I look at crew leaders, I'm looking at training. And so explain to me what I'm looking at from A, B, C, and D, through -- David down through Gary.

MR. SANDERS: Yeah, the date you see on the table is the date they were originally qualified for that position.

MR. BAUGHMAN: The date on the left-hand side or the far right? I guess it would be the far right.

MR. SANDERS: Oh, the far right on the department seniority and plant seniority?

MR. WHITE: No. He's in the big -- are you in the small binder we handed out?

MR. BAUGHMAN: Yes, sir, I'm on the small binder. So let's just say where it says David Kilgore, crew leader, 11/30/2012. And then it says 1st Assistant, 5/3/99. Is that when he first --

MR. SNEED: That's when he qualified for that position.

MR. BAUGHMAN: -- qualified for that position?

MR. SANDERS: So he qualified for the 1st Assistant on 5/3/99, and then he qualified for crew leader on 11/30/2012.

MR. BAUGHMAN: Okay. So what I'm looking at is, going through there, these folks, as they've come through, some of them go back -- Gary Kinsler came on in 1999. What's the updated training that gets to be involved in here? Because I'm interested to know the further training that these folks are encountering.

MR. SANDERS: So every three years they go back through a recertification process

where they train on job-specific tasks. And then every year they review the emergency SOPs and --

MR. SNEED: Those are on the next page. A snapshot of that is on the next page of all the SOPs that they have to be trained and qualified on.

MR. WHITE: They have to do the emergency SOPs annually, and then every three years, they have to do the emergency SOPs, the standard SOPs, as well as a recertification of the position. Now, that's just for the people around the recovery board. That's the crew leader, 1st assistant, and 3rd assistant.

MR. SNEED: And, David, you're not going to see Gary's name on there, I don't think, only because this is just a snapshot.

MR. NEVILLE: That's a snapshot of that.

MR. SNEED: I have all 56 pages in this that shows every single person, and they're all complete, for this training.

MR. BAUGHMAN: Very good. Thank you for that explanation, because that's --

MR. SNEED: I thought that's where you were going.

MR. BAUGHMAN: Thank you.
MR. SNEED: Even though we believe in printing a lot of paper.
CHAIRMAN MORELOCK: Okay. I've got a quick question on page 2.89R, which is part of the FM Global Risk Report under Tab 2. It says in the second paragraph that "The mill is in the midst of a recovery boiler steaming rate increase." And so you are showing in the addendum, going from 545 to 565, the FM Global Report states the steaming rate will be increased from 580 to 560.
MR. SNEED: I can explain that.
CHAIRMAN MORELOCK: Okay.
MR. SNEED: So earlier this year, we had Andritz, who did our previous circulation study on the boiler, continue their study. And what we asked them to do was look at the boiler from a circulation standpoint and tell us what the achievable steaming rate would be without any capital upgrades.
CHAIRMAN MORELOCK: Okay.
MR. SNEED: So they came back to us and said that 600,000 pounds per hour would be our max steaming rate that the boiler would be

qualified to run at. Essentially that's circulation and steam valve relief capacity, which we are above 600,000.
The 580 that's in the FM Global Report is a typo. It technically doesn't even need to be there. It needs to just say the 600, from 545 to 600. And I do see the confusion there. It makes sense.
CHAIRMAN MORELOCK: Okay.
MR. SNEED: But we've actually limited that down. We don't run anywhere near 600 because we don't have the air capacity. There's more airports that would need to be put in to run that at a continuous rate, and we did not want to invest capital money at the time.
CHAIRMAN MORELOCK: Okay. Down there at the bottom of the same page, it states that your paper machine, you're going to have it down May of 2017 to replace some bolts. What status will the recovery boiler be in during that paper machine shutdown?
MR. SNEED: Well, the plan, best-case scenario, would be to keep it hot, because we don't want to thermally take it from hot to cold. So that is the plan.

CHAIRMAN MORELOCK: Okay. All right. Any other questions or comments?
MR. SNEED: And, too, to say, if we do have to take it down cold, we would still like to have the economical impact of not having to do the internal inspection.
CHAIRMAN MORELOCK: To open it up? Okay.
MR. SNEED: Because if we went with the 18-month inspection and went down in October, then it would still be a full-mill shutdown with being a one-line mill. And corporate has changed our outage to May, so we can't just go down to May and October.
CHAIRMAN MORELOCK: Any other comments?
MR. BENNETT: If I may, just a little context. Industry-wide, this move to go from one-year to two-year outages on these units is fully under way. Many boilers in the industry of the craft, the more dangerous versions are already on two-year main outage cycles. This is really more of a bureaucratic challenge for us to get the permits and everything properly organized. There hasn't been any perceived risk industry-wide

of, "Oh, we shouldn't let them do that." It's quite accepted in the industry to be on these two-year main outage cycles.
CHAIRMAN MORELOCK: Well, and kudos to Domtar. They did their homework two years ago, because they came to us and they had 39 jurisdictions that already permit extensions of boiler internal inspection frequencies. So they brought that to us. And we do realize that. We are seeing that.
It goes back to what Dave said, though, is -- you know, our main concern is public safety, so we're going to push hard, and you prove your point and we're fine. So, you know, we've done our due diligence and you've done your due diligence, and that way the public is safe.
MR. BAUGHMAN: Does the VA fall -- and I apologize, because I hadn't gotten to the point of reading up on the VA to that extent. But how does the VA fall within this inspection?
MR. SNEED: So the VA, per guidelines, is on a one-to-three year inspection interval. And if it -- in its previous inspection, if there were any issues found, then you increase that frequency to go to the one year.

But if there were no issues found, then you were able to go to the two or three years.
MR. BAUGHMAN: And what schedule are we in right now with it?
MR. SNEED: Well, we inspected it in 2016 and had no findings. So at least two years. But we could possibly go three.
CHAIRMAN MORELOCK: But now your VA is an unfired pressure vessel, right?
MR. SNEED: I'm not sure what you're --
MR. BENNETT: Yes.
MR. SNEED: It's unfired, yeah. It's not --
CHAIRMAN MORELOCK: So, by law, it would be a two-year internal, by the State of Tennessee.
MR. SNEED: So we've done it in the past, a once-a-year internal --
CHAIRMAN MORELOCK: Okay.
MR. SNEED: -- with UT and MT inside. Not as frequent, but we have done an internal, taking the heads off every year.
CHAIRMAN MORELOCK: Yeah. Okay.
MR. BAUGHMAN: So we have no -- in

other words, what we've clarified there is it can't go three years. It's got to be --
CHAIRMAN MORELOCK: Not without an RBI program like you've seen Valero and Wacker present.
MR. BENNETT: And we do that on a -- any -- we are constrained by the state rule. We would -- RBI would say --
CHAIRMAN MORELOCK: Well, and that's up to you. We're not going to tell you what to do about that.
MR. BENNETT: Right. We understand that.
MR. BAUGHMAN: The other boiler -- I know this is outside the realm of what we're discussing, but the other boiler is not part of this.
MR. SNEED: That's correct.
MR. BAUGHMAN: And is there any thoughts of that? Or is it going to be status quo, still, once a year?
MR. SNEED: It will still be once a year.
MR. BAUGHMAN: Okay. Thank you.
MR. SNEED: It's a completely

different-fired unit. It's not -- it's a -- it's a power boiler. We burn what we call hog fuel. It's not a recovery boiler.
MR. BENNETT: Different damage mechanisms, different challenges of managing the grate and all those kinds of things that don't allow us to think of these extended outages.
MR. SNEED: We can run without the hog fuel boiler in operation. We can run the rest of the mill.
MR. BAUGHMAN: But when the DA goes down, is that a single DA for both, or it's separate DAs?
MR. SNEED: They're not even close.
MR. BAUGHMAN: Good. Very good. Thank you.
MR. SNEED: You're welcome.
CHAIRMAN MORELOCK: Anything else?
(No verbal response.)
CHAIRMAN MORELOCK: Hearing none, I'm going to call the question. All in favor say "aye."
(Affirmative response.)
CHAIRMAN MORELOCK: Opposed?
(No verbal response.)

CHAIRMAN MORELOCK: Abstentions?
(No verbal response.)
CHAIRMAN MORELOCK: Not voting?
(No verbal response.)
CHAIRMAN MORELOCK: You have a two-year extension for internal inspection based upon addressing any comments with the board and a successful site visit by the boiler unit of the State of Tennessee.
Thank you, gentlemen.
MR. SNEED: Thank you. Is there any follow-up comments? I know we had some last time, but is there any one that we need to address, as far as the manual goes, that we need to get answers to you on? I didn't recall writing any down, so ...
CHAIRMAN MORELOCK: I don't know of anything specific. But just like Carlene said, it would be in your best interest to just kind of go over all the discussion and make sure there's not been anything left out.
MR. SNEED: Okay.
CHAIRMAN MORELOCK: And it will be public, on online, in a couple of weeks.
MR. SNEED: Thank you.

CHAIRMAN MORELOCK: Thank you.
Okay. So that concludes our action items, new business. That takes us to Item 8, which is Open Discussion Items. And our first item is "Job description for Boiler Inspector 4," which would be the chief inspector.
At the last meeting, the board was provided a job description, and I think we made some recommendations where it said to correct the name of the National Board of Boiler and Pressure Vessel Inspector. That's what comes to mind. And I think you-all were going to make some corrections to that, and that's about it, right?
MS. JEFFERSON: Yes. Did you see a copy of the new --
CHAIRMAN MORELOCK: I have not seen a copy of the new ones.
MS. BENNETT: It's in your book, your notebook.
CHAIRMAN MORELOCK: Okay.
MS. JEFFERSON: Chairman, you'll see at the very top -- unit board members, you'll see at the very top it says Class Title Boiler Inspector 4, because that's the actual class title. Our working title is Chief Boiler

Inspector.
CHAIRMAN MORELOCK: Okay.
MS. JEFFERSON: Under "Minimum qualifications," you'll see where that has been revised from ten years to five years. After surveying other states and talking with other chief boiler inspectors, we found that five years was more reasonable based on all the other states' information.
And you'll see under "Other requirements" that the applicant must possess a valid commission issued by the Board of Boiler and Pressure Vessel Inspectors.
CHAIRMAN MORELOCK: Are there any questions from the board? This is an internal policy to the Department of Labor and Workforce Development, so there's no voted action for this. But we can provide comments.
MS. JEFFERSON: And just to give you-all a little bit of just feedback, I guess, as to why that was changed. I think we talked about it before. But originally, there was a ten-year requirement in the law. We found it very difficult to find and to hire -- recommend someone with ten years' experience. We interviewed lots

over an 18-month period. But if they had the qualifications, then they weren't satisfied with the salary, because, of course, the state government salary is a lot more in the private sector. So we ran into complications trying to fill the position.
So that we wouldn't be bound by state law, it was recommended that we change that and remove that from state law and handle it internally.
CHAIRMAN MORELOCK: Okay.
MR. HARGROVE: Based on the applicants that we did have, was there a significant number that would meet this new requirement, meaning less than five years or five years -- five to ten, I guess?
MS. JEFFERSON: Well, actually, five years is what it requires now. That's the minimum now. And I think we would be better off, yes. I think we would be in a better position. Of course Sam is our chief, and so we hope to have him for a while and we don't have to worry about that.
MR. BAUGHMAN: I may be missing it in here, reviewing this, Kim, but is there a test

administered, as there is with anybody --
MS. JEFFERSON: No. If you take a look at others' requirements, examination methods, examination experience are 100 percent, but there's no test. We basically rely on the National Board of Boiler and Pressure Vessel inspection just to ensure that they're commissioned.
CHAIRMAN MORELOCK: The commission exam is their test.
MR. BAUGHMAN: Very good.
CHAIRMAN MORELOCK: Any other comments or questions?
(No verbal response.)
CHAIRMAN MORELOCK: Okay. Thank you for presenting that.
All right. Our next item is recommendations for -- we still have two vacant -- well, with Eugene's departure from the board, resigning from the board, we do have vacancies. One for the international boilermaker representative and the insurance representative. We have received three qualified applicants for the insurance representative, but we only have one for the boilermaker labor representative. So if

you have recommendations, please let us know who they are so we can get those to the State and get those to the governor. We have to have three.

MR. PISCHKE: Is there a deadline?

MS. JEFFERSON: Yes. We're hoping to get that done by March, the end of March.

MR. PISCHKE: Okay.

MS. JEFFERSON: And what we've done, as far as the insurance representatives, we had three and we received one additional last week, so we have a total of four. Of those, only two were Tennessee residents. So we've been asked to actually obtain one more. I think we need one more so that we can submit three Tennessee residents to the governor's office. That's for the insurance representative's position.

As far as the international boilermaker representative, I've asked Sam to take a look at the information that we received within the department that we received during the time of the -- during the interview process. We received a list of applicants, and some were a part of boilermaker -- the boilermaker industry. And so he's going to take a look at that to determine if we can receive three applications and resumes

based on that information. But, of course, if you-all know someone, then we would ask you-all to submit that information to Carlene so it can be submitted.

CHAIRMAN MORELOCK: Okay. So there's where we're at with that, so if you have any names, let us know.

MR. BAUGHMAN: Let me ask you, just so I have a clarification, because I don't know. I'll ask if I don't know. What is a qualification of an international boilermaker representative? That's labor union? A union -- just the clarification on the definition of who it is we can recommend.

MS. JEFFERSON: Dan's looking at the law.

CHAIRMAN MORELOCK: Well, I mean, historically, that's what it's been.

MR. BAILEY: It says one shall be a representative of the boilermakers or practical steam operating engineers.

CHAIRMAN MORELOCK: It's representing labor -- organized labor involved with pressure equipment. Would that be a fair statement?

MR. BAILEY: I think it is, yes.

MR. PISCHKE: Do they have to be actively working in the industry at the time, or can it be somebody that's retired or recently retired, or do they have to ...

MR. BAILEY: Well, the statute is kind of silent on that. It just says that one will be a representative of the boilermakers or practical steam operating engineers. Whether that's a retired representative -- it really doesn't say one way or the other.

CHAIRMAN MORELOCK: Okay. Mr. Toth?

MR. TOTH: I, maybe, can add a little bit to that. This goes in line with the National Board of Boiler Pressure Vessel Inspectors that pretty much has the same stipulation in place. However, they extend it off to a pipe fitters union, boilermakers union, unions that cover boiler operators also.

To say that it needs to be active or not, I can tell you from my experience that appointment comes from whatever body they belong to, so, therefore, in the past, we've had the actual boilermakers union appoint an individual

and then they are accepted by the governor's office. So if that helps you in any way.

CHAIRMAN MORELOCK: Okay.

MR. BAUGHMAN: But it can extend past the boilermakers union to the pipe fitters and so forth.

MR. TOTH: Absolutely. As what was read from the statute. And just -- historically it's been boilermakers, but it didn't need to be, necessarily. It just had to be within the environment.

MR. BAUGHMAN: Great. Well, that expands it a little bit.

CHAIRMAN MORELOCK: Okay. Good.

MR. BAUGHMAN: Thanks, Marty.

CHAIRMAN MORELOCK: Any other questions or comments?

(No verbal response.)

CHAIRMAN MORELOCK: Okay. We need those by the end of March.

Okay. Our next discussion item is Rennai. And the only information I have is concerning the three-foot clearance and -- I don't know if that's the board's interpretation from 2007 that discusses the one and a half foot for

certain devices with 400,000 BTUs or less. So who is here to speak about that?

(No verbal response.).

CHAIRMAN MORELOCK: Nobody?

(No verbal response.)

CHAIRMAN MORELOCK: All right. We'll put it on the table and bring it back in June.

All right. Moving along.

MR. TOTH: Mr. Chairman?

CHAIRMAN MORELOCK: Yes.

MR. TOTH: I might add, just the discussion that we had in recess, I just wanted to make sure it's noted that the past board cases and interpretations are not currently presiding on the State's website, and I think it's critical that those be put back on as soon as possible.

CHAIRMAN MORELOCK: And just so you know, the boiler unit has done a great job of -- up until last week, the interpretations went up through 2007. So we had a deficit between 2007 and today. And they've done a good job of catching that up. But then, when it was put up, the old document was removed and both of them should have stayed so you would have the whole

picture.

And so they'll work to get that rectified, may clean up the new ones a little bit, because it was just a list. So that's ongoing and we'll get that straightened out.

MR. TOTH: Thank you.

CHAIRMAN MORELOCK: But I do want to thank the boiler unit for getting that done. That was a little bit of work and we appreciate their efforts to get that done, so very good.

I do want to thank Mr. Bailey for the next item. We had a typo when we issued the revised Tennessee Rule 800-3-3. In the calculation for existing pressure vessels, it referenced PG-27, which is actually a Section 1 reference. It should have been UG-27. Mr. Bailey was successful in getting that typo actually corrected. So it's completed. He sent us letters stating that that's been done, so we can take that off the list. So that's the good job.

Thank you, Mr. Bailey, for that.

MR. BAILEY: Thank you.

CHAIRMAN MORELOCK: The next item on the list is we had looked at a proposed revision to Tennessee Code Annotated 68-122-109(a)

due to changes in how the National Board of Commissioning Exam is given. And we discussed this at the last meeting, and Mr. Toth made a great suggestion, that -- if you look in our recently revised rules, this is already addressed. And so he suggested, since the legislative process is a little onerous to get through, the board can submit an interpretation or hear an interpretation related to Rule 800-3-3. So what I have here is that. And so I'm going to pass this around.

And we don't have to take action on this today because this is a discussion item, but I'll just briefly talk about it because our time is getting short. But basically, what is in 800-3-3.06 for inspector qualifications, and specifically paragraph 3, the examination for certificate of competency, it now states that unless other arrangements are made, the examination for inspectors certificate of competency shall be held in conjunction with a quarterly meeting of the board at such locations as it designates -- it gives a reference to NB411 -- or at an Applied Measurements Professional, AMP, location or during the last day of the National Board In-service Commission

two-week course. So that is what we are doing today.

And so what you have before you is -- I will have Carlene put this on our June agenda as an action item to basically request an interpretation to say -- Inquiry 1 would be, are the examination requirements for the certificate of competency in Tennessee Rule 800-03-03.06, inspector qualifications, paragraph 3(a), correct and current with the requirements of NB263RCI-1, rules for commission inspectors, part 2, commission and endorsement examinations?

The reply to that would be yes.

Inquiry 2 would be are the requirements in Tennessee Code Annotated 68-122-109(a) examinations for chief deputy or special inspectors correct and current with the requirements of NB263?

And the reply to that would be no.

Tennessee Code Annotated 68-122(a), examinations for chief deputy and special inspectors should be revised. And then we provide background information for the reasons for that. And basically, the reason for the requested change would be these changes to the Tennessee Code

Annotated are needed due to the changes in how the National Board Commission exam is provided. The exam no longer only provided by at least two Tennessee Board of Boiler Rules members at the jurisdiction, but is provided at the jurisdiction by the boiler unit and also provided on demand locations; for example, Applied Measurements Professionals, or AMP, and also administered by the National Board on the last day of the National Board Commission course.

And that's a lot of information to throw at you, so we'll get that out and you can review that. But I would like for that to be an action item on the June agenda.

Do you have any questions right off the bat about that?

(No verbal response.)

CHAIRMAN MORELOCK: Thank you, Martin, for the suggestion. It was a good one.

Okay. Our next item is Mr. Baughman is going to give us an update regarding formation of the committee to make recommendations on boiler training. And like I stated at the beginning, during the approval of the minutes, the Tennessee board did vote that action in September 2016, but

we still do not have a charter or a scope for this committee.

So Mr. Baughman?

MR. BAUGHMAN: Yeah. The update on this is that it's a very slow work in progress, being that Mr. Smith, Jesse Smith, deputy boiler inspector, has been spearheading this, getting it together. And along with work and life, this moves along at a slow pace. But what Jesse has done is he's looked into other states that have boiler operator requirements or training requirements. Not so much just, even, certification, but any state that has a requirement for training and/or certification. And then he's asking for input, especially from the boots-on-the-ground people, other inspectors within the state, others within the industry, and then expanding upon that so that we've got information to bring back and start analyzing and having discussion on it. We want to have this as a continuing open discussion. But it takes multiple people to bring these ideas to the table, to bring -- to be able to form this in a manner that can then be brought before the State and proposed in whatever form or fashion. We want to

make sure that we do due diligence on this, and it's certainly not going to happen in a short period of time.

We're at least now getting the ball rolling to have these discussions, and one of the things that's coming about is the realization that this can have such an impact and be one of the most important things that we do to affect public safety that the public will never know about. And that's a pretty awesome thing to be involved with.

But to think that my wonderful 89-year-old mom, who still drives, which is of a concern, can operate a boiler if so qualified by the owner. And that's a scary proposition. So being that we're now even within the point of having discussion on this is pretty exciting in my mind.

But Jesse, for one, started off with an apology because of things of nature and life that didn't allow this to move as quickly as he would like. And no apologies necessary, that this will all come about in the time that it's supposed to. But know that we are investigating the other states first so that we get a good overview of what else is out there in the industry. And that

will help us formulate what we're going to present down the road.

CHAIRMAN MORELOCK: Okay. Any questions or comments?

MR. GROSS: (Indicating.)

CHAIRMAN MORELOCK: Yes?

MR. GROSS: Jeremy Gross from Valero.

Dave, have you talked to Shelby County? Their boiler operators have to have a boiler's license and take an exam and go through that process.

MR. BAUGHMAN: We have. Shelby County, Arkansas, Minnesota, Texas, Michigan -- but Shelby County has been one -- just for the purpose of conversation -- Shelby County was looking to rescind their requirements. And the reason being, the rest of the state doesn't have one. So by having some communication with them, and that got taken off of the table.

But I thought, "Wow, people are actually looking at how the rest of the state transacts its training requirements and -- so yeah. But it's kind of a long answer to a short question.

MR. TOTH: Marty Toth.
One of the things -- I think this is a wonderful idea. This is something that we looked at a number of years back, as Brian alluded to, and Deborah was there, too. The biggest concern that you're going to have, and the support has got to come from above, is the blow-back that you're going to get from constituents of the legislature. That was one of the reasons why I had to pick between two. One was an installation permit, and the other was boiler operator. And I chose to fight this battle and earn the installation permits when approved. It was because of that very thing. And so getting that support is going to be critical, moving forward, to put something into place.
MR. BAUGHMAN: And I agree wholeheartedly, especially when you start looking at dollars and numbers. I mean, it makes sense, though, because we're here for public safety. That's our main charge. And you've got to understand the economic equations of the impacts of what that -- how that comes into play. But if you present this in discussion to Representative Harper, any of the representatives, and let them

know that with the training that they've got or with the abilities that they have, that they can operate a boiler, then it starts putting things in perspective and we can work through the money end of things.
And I think that with that input and with that understanding of what we're presenting, that we've got to be cognizant of what we're bringing to the table to make sure that -- it might not have all the meat and potatoes on the front end, but I think that what we're doing is laying the groundwork that we can build upon to keep it moving. But just having anything in place is going to be a step above where we're at.
MS. JEFFERSON: And, Chairman, if I might, at one of the other board meetings we mentioned that in order for the department to submit legislative recommendations and in order for you also to submit those recommendations for the next year, we have to have that information between May and June.
CHAIRMAN MORELOCK: Right.
MS. JEFFERSON: So I just wanted to remind you-all, because we're into March now, and we'll need to have that information, by the

latest, the end of June so we can pass that on to our legislative liaison so the department can decide if that's something that they want to pursue.
MR. BAUGHMAN: And just off -- to extend upon that, I don't believe there's going to be anything being presented this go-around.
CHAIRMAN MORELOCK: So with that said, do you want me to go ahead and submit my marked-up copy of 68-122-109(a) that we're also going to chase as an interpretation as well?
MS. JEFFERSON: Yes.
CHAIRMAN MORELOCK: Okay. I'll make sure the board members have an opportunity to review that mark-up one more time, and we'll have that to you before June.
MS. JEFFERSON: Thank you.
CHAIRMAN MORELOCK: Okay.
MR. TOTH: (Indicating.)
CHAIRMAN MORELOCK: Yes?
MR. TOTH: Is there a reason why that the boiler operator requirements couldn't go through rules and regulations versus the statute?
MS. JEFFERSON: It depends on what the current law says.

MR. BAILEY: Currently it's in the statute, so ...
MR. TOTH: For a boiler operator? It's in the statute, or is it in the rules and regulations?
MR. BAILEY: I believe it's in the statute.
MR. TOTH: And I'm sorry to put you on the spot, but that's just one thing you may want to look into, is --
MS. JEFFERSON: Yes. If it's pertaining to a current rule, then it will go through the rulemaking process. But if it's pertaining to a law, then it has to go through legislation.
MR. TOTH: Absolutely. And it's been a while since I've dove into 68-122, so that may be one avenue you want to look at.
CHAIRMAN MORELOCK: Well, I'm pretty certain there's no requirements for boiler operators in Rule 800-3-3.
MR. TOTH: I am too, but, you know, like I said, it's been a while.
CHAIRMAN MORELOCK: Because I just spent way too much time reorganizing that, so I'm

pretty sure it's not in there.

Okay. Moving on to Item 9, there are no board cases and interpretations.

And Item 10 is the next board meeting will be June 14th, 2017 right here at the Department of Labor and Workforce Development.

And our last item is Item 11. And before we adjourn, I did want to say a big thank you to Cassandra and all those who take our minutes. And I especially appreciate the condensed version that you're sending out with -- basically, you have four pages on a page, so instead of having something that's 200 pages, this is manageable. So it's easy to read. I certainly encourage everybody to go out and look on this online. It captures all of my poor East Tennessee English and everything, so it's at least funny to read. But it's also got a lot of good information in it, so Cassandra, thank you. We really do appreciate you doing that.

THE REPORTER: Thank you.

CHAIRMAN MORELOCK: Anything else?

(No verbal response.)

CHAIRMAN MORELOCK: Hearing none, I'm going to call this meeting adjourned.

END OF THE PROCEEDINGS.

C E R T I F I C A T E

STATE OF TENNESSEE)

COUNTY OF WILLIAMSON)

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

That the within is a true and accurate transcript of the proceedings taken before the Board and the Chief Inspector or the Chief Inspector's Designee, Tennessee Department of Labor & Workforce Development, Division of Workplace Regulations and Compliance, Boiler Unit, on the 15th day of March, 2017.

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

IN WITNESS WHEREOF, I have hereunto set my hand this 15th day of April, 2017.

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Cassandra M. Beiling, CCR, LCR# 371
Notary Public State at Large
My commission expires: 3/15/2020

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