

FOR THE CASE OF
Board of Boiler Rules Meeting

TRANSCRIPT OF
September Meeting

September 20, 2017

Stone & George

COURT REPORTING

2020 Fieldstone Pkwy

Suite 900 - PMB 234

Franklin, TN 37069

(615) 268-1244

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1. STATE OF TENNESSEE
DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT
2. BOILER UNIT DIVISION
3.
4.
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8. TRANSCRIPT OF PROCEEDINGS
9. OF
10. BOARD OF BOILER RULES
11. September 20, 2017
12. BEFORE: Michael Pischke
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23. -----
DOMINIQUE A. DUBOIS, LCR# 686
24. STONE & GEORGE COURT REPORTING
2020 Fieldstone Parkway
Suite 900 - PMB 234
25. Franklin, Tennessee 37069
(615) 221-1089

1. The above-styled cause came on for
2. hearing on this the 20th day of September, 2017,
3. before the Board of Boiler Rules of Tennessee
4. Department of Labor and Workforce Development, at
5. 220 French Landing Drive, P.E.A.R.L Room, 1st
6. Floor, Nashville, Tennessee, when and where the
7. following proceedings were had, to wit:
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1. APPEARANCES
- 2.
3. Michael Jay Pischke, Board Member, Boiler
Manufacturer Representative, Acting Chairman
- 4.
5. David Baughman, Board Member, Owner/User
Representative
6. Terry Fox, Board Member, Boiler Maker
Representative
- 7.
8. Harold Bowers, Board Member, Insurance
Representative
9. Sam Chapman, Chief Boiler Inspector
10. Eugene Robinson, Assistant Chief Boiler Inspector
11. Kim Jefferson, Esq., Assistant Administrator
12. Dan Bailey, Esq., Legal Counsel
13. Carlene T. Bennett, Board Secretary
14. Stephanie Crossman, Department of Labor & Workforce
Development
- 15.
16. Deborah Rhone, Department of Labor & Workforce
Development
17. Lynn Kirby, Department of Labor & Workforce
Development
- 18.
19. Dallas Word, State of Tennessee
20. Richard Dickerson, State of Tennessee
21. Chris O'Guin, State of Tennessee
22. Randall Kelley, State of Tennessee
23. Jesse Smith, State of Tennessee
24. Tim Holt, State of Tennessee
25. Mark Neumann, State of Tennessee
- Michael L. Gafford, State of Tennessee

1. Sammy G. Sitz, State of Tennessee
2. Thomas E. Spangler, State of Tennessee
3. Danny Peters, State of Tennessee
4. Chris Hays, BASF
5. Brittany Davis, BASF
6. Larry Ritter, Travelers
7. David Parham, Travelers
8. Richard Goldsmith, Sunbelt Marketing
9. John Wood, Sunbelt Marketing
10. Jim Vaughn, Holliston Mills
11. Louis Lampton, Ergon Terminals, Inc.
12. Joel Pastorek, Ergon Terminals, Inc.
13. Marc Lauderdale, Ergon Terminals, Inc.
14. Steve Clark, Ergon Terminals, Inc.
15. David Ogletree, Ergon Terminals, Inc.
16. James Golden, Stonecrest Medical Center
17. Eric Watts, Fresenius Medical Care
18. Douglas Mayhew, Fresenius Medical Care
19. Benjamin Manuel, Fresenius Medical Care
20. Derrick Mummert, Milan General Hospital
21. James Neville, Neville Engineering
22. Rohan Scafe, Rinnai America Corporation
23. Kelsey Dorough, Rinnai America Corporation
24. Jason Siler, Rinnai America Corporation
25. Richard Eng, Wacker Chemical

1. AGENDA
2. I. Call Meeting to Order
3. II. Introductions and Announcements
4. III. Adoption of the Agenda
5. IV. Approval of the June 14, 2017 Meeting Minutes
6. V. Chief Boiler Inspector's Report
7. VI. Assistant Chief Boiler Inspector's Report
8. VII. Old Business
9. * 17-06
10. VIII. New Business
11. * 17-11
12. * 17-12
13. * 17-13
14. * 17-14
15. * 17-15
16. * 17-16
17. IX. Open Discussion Items
18. * Status of the 2017 Tennessee Boiler Safety Conference
19. * Update on National Board Commission Exam
20. * Rinnai wants to understand the TN Boiler Codes better
21. X. Rule Cases and Interpretations
22. XI. The next Board of Boiler Rules Meeting is scheduled for 9:00 a.m. (CT), Wednesday, December 13, 2017, at the Department of Labor & Workforce Development Office
- 23.
- 24.
- 25.

1. PROCEEDINGS
2. MR. PISCHKE: Let's call the meeting
3. to order of the Tennessee Board of Boiler Rules.
4. Let's start off with some announcements and
5. introductions.
6. As far as announcements, safety
7. first. In the event of an emergency or a natural
8. disaster, security personnel will take all of the
9. attendees to a safe place in the building or
10. direct them to exit the building on the Rosa Parks
11. side, which I believe is this side?
12. MR. CHAPMAN: Yes.
13. MR. PISCHKE: Okay. Okay. We'll
14. start with some introductions. My name is Mike
15. Pishke. I'm a board member and taking the place of
16. Brian Morelock who is out sick today.
17. MR. BAUGHMAN: I'm Dave Baughman.
18. I'm a board member.
19. MR. BOWERS: Harold Bowers, board
20. member.
21. MR. FOX: Terry Fox, board member.
22. MR. CHAPMAN: Sam Chapman, Chief
23. Inspector.
24. MR. ROBINSON: Eugene Robinson,
25. Assistant Chief.

1. Building located at 220 French Landing Drive, Nashville, Tennessee.

2. XII. Adjournment

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1. MS. BENNETT: Carlene Bennett, board
2. secretary.
3. MS. JEFFERSON: Kim Jefferson,
4. Assistant Commissioner.
5. MR. BAILEY: Dan Bailey, legal
6. counsel.
7. MR. PISCHKE: I would like to welcome
8. our new members, Terry Fox and Harold Bowers.
9. MR. FOX: Thank you.
10. MR. PISCHKE: This is their first
11. meeting.
12. Other announcements, Dr. Keith
13. Hargrove was unable to make the meeting, as well.
14. We definitely miss both Brian and Keith.
15. The next item of the agenda is the
16. adoption of the agenda. I'll entertain a motion
17. to adopt the agenda.
18. MR. BAUGHMAN: So moved.
19. MR. PISCHKE: Do I have a second?
20. MR. BOWERS: Second.
21. MR. PISCHKE: All those in favor,
22. say, "aye."
23. MR. BAUGHMAN: Aye.
24. MR. BOWERS: Aye.
25. MR. FOX: Aye.

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1. MR. PISCHKE: Opposed?
2. (Whereupon a discussion was
3. whispered.)
4. MR. PISCHKE: Okay. I'm sorry. I
5. overlooked the introductions of the audience. Can
6. we begin to the right here and -- yeah.
7. MR. HAYS: I'm Chris Hays,
8. engineering specialist with BASF Corporation.
9. MS. DAVIS: I'm Brittany Davis,
10. process engineer at BASF.
11. MR. RITTER: Larry Ritter, Travelers.
12. MR. PARHAM: Dave Parham, Travelers.
13. MR. GOLDSMITH: Richard Goldsmith for
14. non-manufacturing, Sunbelt Marketing.
15. MR. WORD: Dallas Word, State of
16. Tennessee, boiler inspector, Memphis.
17. MR. VAUGHN: I'm Jim Vaughn. I'm a
18. mechanical engineer with Holliston Mills.
19. MR. DICKERSON: Richard Dickerson,
20. State of Tennessee, boiler inspector.
21. MR. O'GUIN: Chris O'Guin, State of
22. Tennessee, boiler inspector.
23. MR. KELLEY: Randall Kelley, State of
24. Tennessee, boiler inspector.
25. MR. SMITH: Jesse Smith, State of

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1. Tennessee, boiler inspector.
2. MR. LAMPTON: Louis Lampton, Ergon
3. Terminaling.
4. MR. PASTOREK: Joel Pastorek, Ergon
5. Terminaling.
6. MR. LAUDERDALE: Marc Lauderdale,
7. Ergon.
8. MR. CLARK: Steve Clark, Ergon
9. Terminaling.
10. MR. OGLETREE: David Ogletree, Ergon
11. Terminaling, facility manager.
12. MR. SITZ: Sammy Sitz, State of
13. Tennessee, boiler inspector.
14. MR. SPANGLER: Thomas E. Spangler,
15. Tennessee State boiler inspector.
16. MR. PETERS: Danny Peters, boiler
17. inspector, Knoxville office.
18. MR. GOLDEN: James Golden, Stonecrest
19. Medical Center, facility manager.
20. MR. WATTS: Eric Watts, facilities
21. maintenance manager in Fresenius Medical Care.
22. MR. MAYHEW: Douglas Mayhew,
23. Fresenius Medical Care and maintenance manager.
24. MR. MANUEL: Ben Manuel, Fresenius
25. Medical Care.

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1. MR. MUMMERT: I'm Derrick Mummert,
2. Milan General Hospital, maintenance manager.
3. MR. GAFFORD: Michael Gafford, State
4. of Tennessee, boiler inspector.
5. MR. NEUMANN: Mark Neumann, State of
6. Tennessee, boiler inspector.
7. MR. HOLT: Tim Holt, State boiler
8. inspector.
9. MR. NEVILLE: James Neville, Neville
10. Engineering.
11. MR. WOOD: John Wood with
12. non-manufacturing Sunbelt Marketing.
13. MR. SCAFE: Rohan Scafe, Rinnai
14. America Corporation.
15. MR. DORROUGH: Kelsey Dorrough,
16. Rinnai America Corporation.
17. MR. SILER: Jason Siler, Rinnai
18. America Corporation.
19. MS. KIRBY: Lynn Kirby, admin, WRC.
20. MS. CROSSMAN: Stephanie Crossman,
21. admin, WRC.
22. MR. PISCHKE: Thank you. I'd like to
23. also remind everyone that this is an open meeting
24. and if you have something to say or add to the
25. subject, please raise your hand and be recognized.

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1. Also, anyone presenting, please press the button on
2. the microphone and turn it from red to green to
3. activate it. So -- okay? Did I miss anything else?
4. Okay. The next item on the agenda is
5. approval of the June 14th, 2017 meeting minutes.
6. Before I do that, there's a signature
7. log going around. Please fill in your name and
8. your association. Okay.
9. Okay. I'll entertain a motion to
10. approve the meeting minutes from June 14th.
11. MR. BAUGHMAN: So moved.
12. MR. PISCHKE: Second?
13. MR. FOX: Second.
14. MR. PISCHKE: All those in favor, say
15. "aye."
16. MR. BOWERS: Aye.
17. MR. BAUGHMAN: Aye.
18. MR. FOX: Aye.
19. MR. PISCHKE: Opposed? Not voting?
20. Motion carries. Next item is Chief Boiler
21. Inspector's report. Mr. Chapman?
22. MR. CHAPMAN: Thank you. Total
23. numbers of inspections was 2,352 from the state
24. inspectors. From the insurance inspectors -- oh,
25. thank you -- 6,623, giving us a total of 8,975.

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1. Total number of delinquent number of
2. vessels is 68,940. Out of that, 1,119 state
3. inspectors. Insurance inspectors is 470, giving
4. us a total of delinquent, 1,589.

5. Number of code violations found were
6. 30. Violation -- uncorrected violations are nine.
7. Variance inspectors performed will be provided by
8. the assistant chief (verbatim). We -- the
9. National -- administered three National Board
10. examinations on September the -- September the
11. 6th. I know I'm not getting anything right.
12. September the 6th. That is the Chief Report.

13. MR. PISCHKE: Thank you. The next
14. item is the Assistant Chief Boiler Inspector's
15. Report.

16. MR. ROBINSON: First of all, I'll
17. take a moment and we want to recognize the three new
18. deputy inspectors. I'm going to ask that you stand
19. so people can get to see your face. We only have
20. three -- we have four. The fourth one is due to
21. take the examination at the end of next week. He's
22. at the National Board right now, and these three
23. gentlemen, they really dogged the test, and I know
24. I'm going to put a little ad-lib into the notes and
25. I'm sorry, but they really dug deep to find code

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1. questions. Chief and I were very proud of them.
2. MR. CHAPMAN: Yes.
3. MR. ROBINSON: State your name, sir.
4. MR. O'GUIN: Chris O'Guin.
5. MR. ROBINSON: Where are you -- give
6. me your location.
7. MR. O'GUIN: Davidson County.
8. MR. GAFFORD: Michael Gafford,
9. Memphis.
10. MR. NEUMANN: Mark Neumann, East
11. Tennessee.
12. (Applause.)
13. MR. ROBINSON: Thank you. As of
14. today, a variance update, we have 116 known
15. variances out in the state of Tennessee. Forty-five
16. or thirty-nine percent of those variances require a
17. follow-up inspection. And 44 or 38 percent, they
18. have been verified and approved, so they're actually
19. operable.
20. We've got two -- or two percent
21. requiring reinspection. And we've got 25 or 22
22. percent no longer utilizing the variances, or the
23. boilers are placed in dormancy. This quarter,
24. we've completed six variance audits with five
25. approved and one requiring follow-up inspection.

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1. The locations: Sumner Regional, Pillsbury,
2. Yoplait, Country Delight, McKendree Village. Tri
3. Star was rejected based on training and lack of
4. E-stops. That's all.

5. MR. PISCHKE: Does that conclude your
6. report? Thank you very much. The next item of
7. business is Old Business. The Item 17-06 -- I don't
8. believe we received handouts for this item. Is --

9. MR. ROBINSON: The -- LaFollette
10. Medical Center had an admission to come to the
11. meeting and they were offered a seat, and I think
12. that they decided not to (verbatim). So --

13. MR. PISCHKE: Okay.

14. MR. ROBINSON: We had postponed it
15. last meeting, and unfortunately, I think that
16. perhaps the Board may want to consider just removing
17. it after you take a vote for non-attendance, for
18. non-representation.

19. MR. PISCHKE: I don't know. How does
20. the committee feel about the -- do we table it for
21. one more meeting or --

22. MR. BAUGHMAN: Is there a protocol
23. for that?

24. MR. PISCHKE: That's -- Mr. Bailey?
25. MR. BAILEY: Can you remove -- yes.

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1. Sure.
2. MS. JEFFERSON: So the item can be
3. removed from the agenda without voting.
4. MR. PISCHKE: Okay.
5. MS. JEFFERSON: Without voting on it.
6. MR. PISCHKE: Okay. So I guess we'll
7. remove this item from the agenda.
8. MR. ROBINSON: Very well.
9. MR. PISCHKE: Okay. This leads us to
10. New Business. Item 17-11. And before we start, I'd
11. like to ask if anyone has any conflict with this
12. item?

13. MR. BOWERS: I do.
14. MR. PISCHKE: You do. So --
15. MR. BAILEY: All right. Just state
16. what the conflict is.
17. MR. BOWERS: My insurance company, we
18. insure this location.
19. MR. BAILEY: All right. Your
20. discussion would be to limit it to anything that
21. doesn't involve -- I'm sorry. Any discussion you
22. would have, would have to be limited to -- I really
23. don't know how this is going to be limited, to be
24. honest with you, if you're insuring them.
25. Well, there is a conflict of

1. interest, but the -- I think if it's a financial
 2. interest, you're probably not going to be able to
 3. partake in the discussion at all.
 4. MR. BOWERS: Okay.
 5. MR. BAILEY: Or the vote.
 6. MR. BOWERS: Okay.
 7. MR. NEVILLE: I do have a request to
 8. postpone this item. My client is unable to attend
 9. this meeting this morning. So Kayser-Roth would
 10. like to be postponed for one meeting.
 11. MR. BAILEY: State your name for the
 12. record, please.
 13. MR. NEVILLE: James Neville, Neville
 14. Engineering.
 15. MR. BAILEY: And do you represent --
 16. what is it -- Kayser?
 17. MR. NEVILLE: Kayser-Roth. Yes, I
 18. do.
 19. MR. BAILEY: Okay.
 20. MR. PISCHKE: So we'll table till the
 21. next meeting. Thank you.
 22. MR. NEVILLE: Thank you.
 23. MR. PISCHKE: Next item is 17-12. Do
 24. we have any conflicts of interest on this item
 25. within the Board? Okay. You represent them, as

1. well?
 2. MR. NEVILLE: Yes.
 3. MR. PISCHKE: Okay. Go ahead and
 4. push the button. It'll turn green and state your
 5. name -- names and --
 6. MR. NEVILLE: James Neville with
 7. Neville Engineering.
 8. MR. WATTS: Eric Watts, Fresenius
 9. Medical Care.
 10. MR. MAYHEW: Douglas Mayhew,
 11. Fresenius Medical Care.
 12. MR. NEVILLE: Today we're requesting
 13. a variance to the 20-minute rule regarding two
 14. boilers, newly installed at Fresenius Medical Care
 15. in Knoxville, Tennessee. These boilers, when they
 16. go into operation, will be on-demand 24/7, providing
 17. high-pressure steam for heating and their process.
 18. Their process is dialysis-related products.
 19. If I can have you turn to the site
 20. plan on page two of their variance request, there
 21. are three remote stations that they would like to
 22. request that they can monitor from. One is the
 23. guard shack at the top right. Then the boiler
 24. room is located directly south from there, about
 25. 820 feet. There is a boiler control room, which

1. is just outside the boiler area, about 27 feet.
 2. They're going to be monitoring from there
 3. primarily. Then the third location that they
 4. would like to have a remote station is in the
 5. lobby at the front of their building. That is
 6. approximately 609 feet from the boiler room.
 7. As far as those monitoring the
 8. boiler, at the remote station, there will be
 9. security officers, and that is the only attendant
 10. at the remote station, will be the security
 11. officers. Now, the boiler operators for this
 12. facility are -- their job title is Engineering
 13. Maintenance Technician II. We've listed their job
 14. descriptions in Appendix G, and they will be
 15. monitoring the boiler every four hours while on
 16. the variance.
 17. If you have any questions, we'd be
 18. glad to take questions. Yes, sir?
 19. MR. BOWERS: Now, you will be
 20. monitoring this boiler -- I assume these boilers run
 21. 24/7, correct?
 22. MR. WATTS: Yes, sir.
 23. MR. BOWERS: Okay. So during the off
 24. hours, do you have a maintenance/boiler operator
 25. who's going to be there --

1. MR. WATTS: Yes, sir.
 2. MR. BOWERS: -- 24 hours a day?
 3. MR. WATTS: We have a security guard
 4. and an engineering technician there or maintenance
 5. technician there 24/7.
 6. MR. BOWERS: Okay. What training
 7. does the security guard have to operate the boilers?
 8. MR. WATTS: The training is given by
 9. the maintenance technician with the criteria we have
 10. that is documented, and the engineering -- or
 11. maintenance technician is trained by our local
 12. Boiler Supply company.
 13. MR. BOWERS: Do you feel this
 14. boiler's going to be operated just as safely as it
 15. is on the 20-minute rule?
 16. MR. WATTS: Yes, sir. Very safe.
 17. MR. PISCHKE: A point of order, I
 18. need a motion to discuss.
 19. MR. BOWERS: Okay. Oh, sorry.
 20. MR. PISCHKE: That's okay. We're all
 21. new at this. Motion to discuss?
 22. MR. BAUGHMAN: Motion to discuss.
 23. MR. PISCHKE: Second? Second. Okay.
 24. THE REPORTER: Could we have a verbal
 25. second, please? I didn't hear you. Did you --

1. MR. FOX: Second.
 2. THE REPORTER: Okay. Thank you.
 3. MR. PISCHKE: Thank you. Okay.
 4. MR. BOWERS: I'm done with my
 5. discussion.
 6. MR. PISCHKE: Okay. Okay.
 7. MR. BAUGHMAN: Sir. How are the
 8. boilers operated presently?
 9. MR. WATTS: They are operated with
 10. security guards that are there 24/7 and engineer --
 11. or maintenance technicians, also. We monitor them
 12. every 20 minutes currently.
 13. MR. BAUGHMAN: Monitoring them how?
 14. MR. WATTS: With the security guard
 15. and the maintenance technician. They are doubling
 16. up on it.
 17. MR. BAUGHMAN: Via -- are they
 18. physically --
 19. MR. WATTS: Yes.
 20. MR. BAUGHMAN: -- looking at it?
 21. MR. WATTS: Every 20 minutes,
 22. physically looking at it. They're located at the
 23. station that's 27 feet away, and we are monitoring
 24. it and document it every 20 minutes, all the
 25. readings.

1. MR. BAUGHMAN: Okay. When you're
 2. looking at it, are we looking at it just from the
 3. standpoint of calling it line-of-sight or are we
 4. looking at it with any specific criteria?
 5. MR. WATTS: We walk up to the boiler
 6. and we have specific criteria that we check on the
 7. boiler and the deaerator.
 8. MR. BAUGHMAN: And what are those
 9. criteria, just for my own --
 10. MR. WATTS: The pressure -- hang on
 11. just a second. Hang on just a second. We've got
 12. one of the guys here.
 13. MR. BAUGHMAN: You bet. Yeah.
 14. Thanks for taking the time.
 15. MR. MANUEL: We monitor steam
 16. pressure, DA level --
 17. MR. BAILEY: State your name for
 18. the --
 19. MR. MANUEL: Oh, I'm sorry.
 20. Benjamin Manuel, Fresenius Medical Care. So we
 21. check the steam pressure, the DA level, the water
 22. level in the boiler, and -- one more thing, the --
 23. oh, the sight glass. We make sure the sight
 24. glass --
 25. MR. WATTS: Yeah. The sight glass,

1. there's water in the sight glass. That's correct.
 2. MR. BAUGHMAN: So how you're
 3. operating it now is very -- a very safe means of
 4. operation. So how does this add to the safety
 5. aspect by being able to now check it every four
 6. hours?
 7. MR. WATTS: How does that add to the
 8. safety?
 9. MR. MAYHEW: Will it maintain the
 10. same?
 11. MR. BAUGHMAN: Correct.
 12. MR. MAYHEW: Yeah. It would maintain
 13. the same. It's the same parameters. The
 14. attendant's there.
 15. MR. NEVILLE: The Hawk 4000 controls
 16. on both of these boilers will be monitoring the
 17. safety levels, as well. They will be -- I mean --
 18. at the remote station, staffing those in a -- while
 19. they're on the variance.
 20. MR. BAUGHMAN: Sure.
 21. MR. NEVILLE: So --
 22. MR. BAUGHMAN: I guess my point is if
 23. we have a sight glass happen to break --
 24. MR. NEVILLE: Yes.
 25. MR. BAUGHMAN: -- the Hawk doesn't

1. monitor a sight glass rupture.
 2. MR. WATTS: That's true.
 3. MR. MANUEL: It monitors the level.
 4. MR. BAUGHMAN: The water level.
 5. MR. MANUEL: Yes, sir.
 6. MR. BAUGHMAN: Yes. But not so much
 7. if we've got an incident with the sight glass. It
 8. doesn't monitor whether we have a combustion sight
 9. glass break and -- so it monitors a lot but not
 10. everything. So I understand what we're saying and
 11. why we're going to the variance. I just want
 12. everybody to know that we're training security
 13. guards or you're having security guards in this
 14. position of attending a piece of equipment that has
 15. more power than dynamite. And in doing so,
 16. understanding that that training goes beyond
 17. training to the manual in a conscientious manner of
 18. operating the boiler itself.
 19. Speaking with the DA, going to the
 20. equipment description on Appendix A, Boiler Data,
 21. under the DA data sheet, we're got the N.B. number
 22. but we don't have a Tennessee Number assigned.
 23. MR. MAYHEW: There is one. I can't
 24. tell you what it is, but it was inspected.
 25. MR. BAUGHMAN: Okay. And just for

1. the record, I'd like it to be part of --
 2. MR. MAYHEW: Yes, sir.
 3. MR. NEVILLE: We can update that
 4. field.
 5. MR. BAUGHMAN: So on this, it's
 6. showing the unit is a Bryan 700-gallon capacity,
 7. design pressure 50 PSI, but the DA is operating
 8. atmospheric. I don't quite understand that since
 9. the DA is not an atmospheric application unless
 10. there's a problem with the DA itself. So could you
 11. elaborate a little on that?
 12. MR. WATTS: I don't have an answer
 13. for you on that.
 14. MR. NEVILLE: I will get some more
 15. information on that.
 16. MR. BAUGHMAN: Okay.
 17. MR. MAYHEW: It's about seven pounds.
 18. I'll tell you that.
 19. MR. BAUGHMAN: About what it should
 20. be.
 21. MR. MAYHEW: Okay. So --
 22. MR. BAUGHMAN: Yeah. Exactly. It
 23. should be seven to ten PSI, but I just noted that it
 24. did show that it was atmospheric and didn't know
 25. why.

1. How are we communicating between the
 2. Hawk and the rest of the remote stations? Are we
 3. doing anything via web-based communications? How
 4. are we communicating?
 5. MR. NEVILLE: Those should all be
 6. hardwired.
 7. MR. BAUGHMAN: I'm sorry. You --
 8. MR. NEVILLE: Those are hardwired
 9. connections for each of the boilers. So -- you
 10. can --
 11. MR. WATTS: The one -- we're going to
 12. hardwire all of them and the one that goes -- the
 13. further is 821 feet, is going to be fiber-optic.
 14. MR. BAUGHMAN: Okay. And how is the
 15. communications back to maintenance personnel, should
 16. there be any needs for communication, is this via --
 17. MR. WATTS: Telephone or a
 18. walkie-talkie. We have the option of both of those.
 19. We usually use cell phones for communication.
 20. MR. BAUGHMAN: Okay. How many
 21. maintenance personnel do you have?
 22. MR. WATTS: Currently, we have seven
 23. maintenance personnel.
 24. MR. BAUGHMAN: So on the weekends,
 25. from what Mr. Bowers was asking before, it sounds

1. like there's how many security guards on --
 2. MR. WATTS: One security guard and
 3. one technician.
 4. MR. MANUEL: On each shift.
 5. MR. BAUGHMAN: Okay. I take it the
 6. security guard has other duties?
 7. MR. WATTS: No.
 8. MR. BAUGHMAN: He doesn't make any
 9. rounds whatsoever?
 10. MR. WATTS: Nothing.
 11. MR. BAUGHMAN: He just stays at the
 12. guard station?
 13. MR. WATTS: Or at -- correct. That's
 14. all he does.
 15. MR. BAUGHMAN: Okay. So should there
 16. be an incident within the facility itself, he would
 17. not respond to it. He would stay put.
 18. MR. WATTS: That's his job. Correct.
 19. And he'll help notify 911 or direct traffic if he's
 20. out there, but other than that, he's right there.
 21. MR. BAUGHMAN: Okay. And then we've
 22. got one maintenance personnel on call. And he's not
 23. necessarily on call; he's at the facility.
 24. MR. WATTS: He's on site all the
 25. time.

1. MR. BAUGHMAN: So on the weekends,
 2. there will be somebody, not only the security guard,
 3. but there'd be a maintenance --
 4. MR. MAYHEW: Yes. 24/7.
 5. MR. BAUGHMAN: -- technician.
 6. MR. WATTS: We have two people on
 7. site all the time. Correct.
 8. MR. MANUEL: 24/7.
 9. MR. BAUGHMAN: Very good. That's all
 10. I got for now.
 11. MR. NEVILLE: Okay.
 12. MR. BAUGHMAN: Thank you.
 13. MR. PISCHKE: Okay. I had a couple
 14. questions.
 15. MR. NEVILLE: Yes.
 16. MR. PISCHKE: On the training of the
 17. personnel in the procedures, is there any kind of
 18. testing criteria or, you know, is it just
 19. instructional and, you know, how often is this done
 20. and --
 21. MR. NEVILLE: Are you talking about
 22. training to the variance manual or training for the
 23. boiler attendant?
 24. MR. PISCHKE: Reacting to the boiler
 25. alarms --

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1. MR. NEVILLE: Okay.
2. MR. PISCHKE: -- and emergency
3. procedures, and so on and so forth.
4. MR. NEVILLE: There will be yearly
5. training, as far as to the variance. As far as
6. training the boiler operators to be a qualified
7. boiler operator, that would be -- outside training
8. is brought in --
9. MR. PISCHKE: Yeah.
10. MR. NEVILLE: -- to do on-site
11. training.
12. MR. PISCHKE: But the security
13. officers and the maintenance employees that will be
14. responding to this -- or, you know, involved in the
15. variance, are they just trained once and that's it
16. or --
17. MR. WATTS: We have requirements that
18. we train annually on the boiler and the training of
19. the boiler. The company policies are that.
20. MR. PISCHKE: Do they have any other
21. safety responsibilities, site safety
22. responsibilities?
23. MR. WATTS: As far as the security
24. guard or the --
25. MR. PISCHKE: Either of them. Both

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1. of them.
2. MR. WATTS: At this time, security
3. guards do not have any other criteria that they're
4. responsible for other than the boiler. The
5. maintenance technicians do have some other plant
6. equipment they're responsible for maintaining and
7. keeping an eye on, but they're not solely at the
8. boiler all the time.
9. MR. PISCHKE: That's just one of the
10. things that I like to ask when it comes to training
11. and the personnel is their involvement in safety and
12. how integrated safety is into their roles and
13. responsibilities and their daily activities and how
14. much that's a part of the company culture in
15. operating this, because this is a very, as my
16. colleague pointed out, this is dangerous equipment.
17. So safety's number one. Any other --
18. MR. FOX: I agree with what you're
19. saying. We don't -- my deal on the training part of
20. it is we don't want someone resetting a boiler if
21. they do not -- if they don't understand what that
22. boiler's actually out on. The consequences of
23. trying to start it back up without recognizing what
24. the fault is. That's --
25. MR. BAUGHMAN: I've got something

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1. more.
2. MR. PISCHKE: Okay.
3. MR. BAUGHMAN: If you'll pay -- turn
4. to job description under G-2 --
5. MR. NEVILLE: Okay.
6. MR. BAUGHMAN: -- and if you can read
7. for me -- since we just said that the security
8. officer does not leave the security station, could
9. you read for me what that job summary states?
10. MR. WATTS: Observes and reports
11. activities and incidents as assigned client
12. providing for security and safety of client property
13. and personnel. Makes periodic tours of -- check for
14. irregularities and inspect protection devices and
15. fire control equipment. Preserves order and may act
16. as enforce regulations and directives for the site
17. pertaining to personnel, visitors, and, premise
18. (verbatim).
19. MR. BAUGHMAN: Thank you, brother.
20. Going on down to number five, I'll read that. The
21. security officer patrols assigned site on foot or in
22. vehicle; checks for unsafe conditions, hazards,
23. unlocked doors, security violations, blocked ingress
24. and egress, mechanical problems, unauthorized
25. persons, so forth and so on.

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1. Number six, protects evidence or
2. scene of incident in the event of accidents,
3. emergencies, or security investigations; sets up
4. barriers and signage, and provides direction or
5. information to others.
6. That sounds like he doesn't stay in
7. the security office.
8. MR. WATTS: Right.
9. MR. BAUGHMAN: From your --
10. MR. MAYHEW: Obviously.
11. MR. BAUGHMAN: Yes.
12. MR. MAYHEW: This person is --
13. contrary to what this says, this job description is
14. not accurate to reflect what they're doing. I don't
15. know how this --
16. MR. NEVILLE: This is a generic -- or
17. not necessarily generic, but this is a job
18. description that was, I guess --
19. MR. WATTS: It was provided by --
20. MR. NEVILLE: Provided by --
21. MR. WATTS: -- security to us.
22. MR. NEVILLE: -- security. So this
23. is -- I guess, it's not tailored to that specific
24. position.
25. MR. BAUGHMAN: Why is that --

1. MR. NEVILLE: Which it needs to be
 2. more --
 3. MR. BAUGHMAN: Why have we got this
 4. in the manual if it's not an accurate representation
 5. of the job description? Otherwise, this is a
 6. copy/paste, put it in as filler, it doesn't make any
 7. difference kind of, piece of paper in here, and I
 8. take exception to that.
 9. MR. PISCHKE: I would tend to agree.
 10. If there's a specific contractual agreement -- I
 11. assume the security guards are contracted or are
 12. they --
 13. MR. WATTS: They are contract.
 14. MR. PISCHKE: Okay. If there's a
 15. specific contractual agreement on the duties that
 16. are specific to this site, then we should have those
 17. in that manual and they should be spelled out very
 18. clearly.
 19. MR. BOWERS: Yeah. The problem is,
 20. you know, any incident is usually a combination of a
 21. bunch of events happening. So if this security
 22. guard who's supposed to be monitoring the boiler,
 23. he's taking care of other situations -- you know,
 24. it's usually not one thing that happens. Usually,
 25. it's several things that happen that ended up a big

1. problem. And that's -- I think that's one of our
 2. concerns that if this is true, which you say it's
 3. not, that there'll be nobody monitoring the boiler
 4. for a certain amount of time.
 5. MR. PISCHKE: Yeah.
 6. MR. BAUGHMAN: And this is -- excuse
 7. me. This is an integral part of what you're asking
 8. for in this variance. And because it's a
 9. description that you said, well, it's generic, that
 10. you've got a contract with this security company, as
 11. it states right here, it's very contradictory to
 12. what you're laying out there. And all I can go with
 13. is what you've got --
 14. MR. NEVILLE: Absolutely.
 15. MR. BAUGHMAN: -- in here.
 16. MR. NEVILLE: Yes. This definitely
 17. needs to be modified to the way they're operating --
 18. plan to operate, because obviously, their
 19. requirements that a security officer be at the
 20. station, you know, not doing controls, that would be
 21. required to have the variance. So -- but this --
 22. MR. BAUGHMAN: And did you review
 23. this, James?
 24. MR. NEVILLE: I did. You know. But
 25. at the time, the thought was there would be more

1. than one security officer, so one would be at the
 2. station at all times. There may be another one
 3. doing a -- so that's where it -- the quantity. So
 4. there may be, you know, roaming security guards, but
 5. the request is that there would always be someone at
 6. the remote station while they were operating under a
 7. variance. So --
 8. MR. PISCHKE: I guess that was my --
 9. when I first read this, that was my assumption, as
 10. well --
 11. MR. NEVILLE: Right.
 12. MR. PISCHKE: -- is that there would
 13. be multiple. But obviously --
 14. MR. WATTS: Well, we are a start-up
 15. facility, and we are trying to get organized with
 16. various, different things. One of the reasons we've
 17. hired security guards is to support us with the
 18. boilers. You know, to make us -- help us monitor
 19. them. They're not so much for walking around and
 20. doing security checks and things of that nature.
 21. And I know that's not in here, but, you know, that's
 22. the reason why.
 23. So we -- you know, our HR department
 24. had talked at one time about having two people.
 25. When we talked to him first, that's what we had

1. planned. Things changed. You know. It's --
 2. things have changed since we drove down here this
 3. morning. So we're up in a bit of a flux and we're
 4. trying to get things lined out. So you are
 5. correct. We will modify this.
 6. MR. PISCHKE: Are there any other
 7. comments, questions?
 8. MR. BAUGHMAN: Eugene does.
 9. MR. PISCHKE: Go ahead, Eugene.
 10. MR. ROBINSON: So sir, is this a
 11. conceptual manual or is it realistic right now?
 12. MR. WATTS: Other than this right
 13. here, everything else is in alignment.
 14. MR. ROBINSON: So when you talk about
 15. your emergency stop buttons, for example, it shows
 16. that -- it's subjective. It says that they should
 17. be at the door, but it really doesn't say that.
 18. MR. WATTS: It should be at where?
 19. MR. ROBINSON: At each door. Page
 20. B-2, Paragraph 6.
 21. MR. BAUGHMAN: What page?
 22. MR. ROBINSON: B-2, Paragraph 6.
 23. MR. NEVILLE: Yes.
 24. MR. WATTS: Those are in place.
 25. MR. ROBINSON: Well, that statement

1. needs to be cleaned up. It made me believe that it
 2. was conceptual, which --
 3. MR. WATTS: Okay.
 4. MR. ROBINSON: You've got two
 5. boilers, correct?
 6. MR. WATTS: Correct.
 7. MR. ROBINSON: And you're going to
 8. have one switch at each door for the two boilers,
 9. correct?
 10. MR. WATTS: They're there currently.
 11. Yes.
 12. MR. ROBINSON: Yes, sir.
 13. MR. MAYHEW: There's two. There's
 14. one E-stop for each boiler, so there's two.
 15. MR. ROBINSON: That's unacceptable.
 16. MR. CHAPMAN: There's only one E-stop
 17. for --
 18. MR. NEVILLE: One shuts both.
 19. MR. WATTS: Per two boilers?
 20. MR. CHAPMAN: -- no matter how many
 21. boilers you've got in that room.
 22. MR. WATTS: Okay.
 23. MR. CHAPMAN: One button kills
 24. everything.
 25. MR. WATTS: Okay.

1. MR. ROBINSON: And the rationale is,
 2. trying to figure out which boiler is -- to shut off
 3. is going to be a challenge sometimes.
 4. Sir, that's all I have. That's all I
 5. have.
 6. MR. BAUGHMAN: Do we have a site plan
 7. of the boiler room itself?
 8. MR. NEVILLE: We did not. Not in
 9. this manual, currently. We have a power piping and
 10. feedwater diagram but not a plot plan of the -- just
 11. the boiler room itself.
 12. MR. BAUGHMAN: Do we not usually have
 13. that?
 14. MR. NEVILLE: We typically do. We
 15. can add that to the manual, if you'd like.
 16. Regarding the security officers and
 17. their monitoring, if they were to leave their
 18. post, you know, we do state in here that, if for
 19. any reason they have to leave their post, they
 20. would resort back to the 20-minute rule. So they
 21. would be -- if for any reason he had to respond to
 22. an emergency, they're no longer on the variance,
 23. they would have to monitor that boiler every 20
 24. minutes from the boiler room.
 25. MR. BOWERS: So he would basically

1. talk back to the operator and say, hey, I've got a
 2. situation here.
 3. MR. NEVILLE: Yes. Absolutely.
 4. MR. BOWERS: I need to leave.
 5. MR. NEVILLE: Right. The remote
 6. station cannot be left unattended and, you know, not
 7. monitoring the boiler. So, you know, there is that
 8. protection built in.
 9. MR. BAUGHMAN: So if security
 10. personnel cannot by chance, for whatever reason, get
 11. in touch with maintenance, then he will then act as
 12. the boiler attendant.
 13. MR. NEVILLE: He would shut the
 14. boiler -- I mean, if there is -- I mean, if he has
 15. to leave the remote station, he would shut the
 16. boilers off if he can't make contact with the boiler
 17. attendant.
 18. MR. BAUGHMAN: Okay. And then what
 19. happens?
 20. MR. NEVILLE: I mean, well, the
 21. boilers are off. So, you know, I'm sure there would
 22. be a response.
 23. MR. BAUGHMAN: I'm just saying, in
 24. case the boiler -- let's say, a maintenance tech
 25. gets sick on the job.

1. MR. NEVILLE: Sure.
 2. MR. BAUGHMAN: And he's incapacitated
 3. for whatever reason, security then -- even if we
 4. don't have an alarm --
 5. MR. NEVILLE: Right.
 6. MR. BAUGHMAN: -- security personnel
 7. is then to operate the boiler under the 20-minute
 8. rule. The problem being is that we've just got one
 9. security person who then has to leave his duties as
 10. a security officer to operate the boiler or he shuts
 11. the boilers off and stays at his security station,
 12. one or the other.
 13. MR. NEVILLE: Right.
 14. MR. BAUGHMAN: Either way, it's not a
 15. good scenario. But --
 16. MR. NEVILLE: Well, you know, they
 17. would shut the boilers off and then call on the
 18. emergency call list and report that outage if the
 19. boiler attendant on duty could not be reached or was
 20. sick or -- so people would be notified of that
 21. condition.
 22. MR. BAUGHMAN: Yeah. I understand.
 23. I'm just thinking about Memorial Days, Christmas,
 24. holidays trying to get in touch with somebody --
 25. MR. NEVILLE: Yeah.

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1. MS. BENNETT: -- off site to be able
2. to notify them and then that timeframe of having
3. them come in and so forth. You've got to -- kind of
4. got to look at all the different avenues that play
5. into the operation of this piece of equipment.
6. MR. PISCHKE: Mr. Robinson?
7. MR. ROBINSON: Just two questions.
8. MR. NEVILLE: Yes.
9. MR. ROBINSON: Your monitoring
10. stations, you have two monitoring stations, correct?
11. MR. NEVILLE: There were three.
12. MR. ROBINSON: The boiler room.
13. MR. NEVILLE: Right. Right outside
14. the boiler room.
15. MR. ROBINSON: Two with the exception
16. of the boiler room.
17. MR. NEVILLE: Yeah. Boiler control
18. rooms.
19. MR. ROBINSON: The question is, what
20. mechanism do you use to identify who's in which
21. monitoring station?
22. MR. NEVILLE: You want to --
23. MR. WATTS: So we will have
24. documentation of when someone leaves one and the
25. other one becomes active, and we will exchange that

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1. with the engineering tech and the boiler room -- or
2. the security guard.
3. MR. ROBINSON: Is that a manual
4. exchange, electronic, phone call?
5. MR. WATTS: As far as, when you say
6. manual --
7. MR. ROBINSON: I hand it off to
8. Chief.
9. MR. WATTS: What'll happen is,
10. physically, we'll do that, yes.
11. MR. NEVILLE: And then it should be a
12. log on the --
13. MR. WATTS: And we'll have it logged
14. and documented.
15. MR. ROBINSON: Electronic log or --
16. MR. WATTS: Electronic log.
17. MR. ROBINSON: Okay. Your training
18. methods, as far as the monitoring, have you
19. performed training already? Are your people
20. trained?
21. MR. WATTS: Yes.
22. MR. ROBINSON: And they're trained
23. to -- I'm sorry, go ahead.
24. MR. NEVILLE: Possibly not trained to
25. this manual yet, but training as far as boiler --

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1. MR. WATTS: As far as boiler
2. management, right. And attendant.
3. MR. ROBINSON: So they're not trained
4. to the manual.
5. MR. WATTS: Correct.
6. MR. NEVILLE: Not yet. Not yet.
7. MR. WATTS: That's not -- that's
8. correct.
9. MR. ROBINSON: Okay. That's what --
10. that's --
11. MR. BOWERS: Does the security
12. guard -- I see where the guard shack is. Does he
13. have a vehicle there all the time?
14. MR. WATTS: That's a good question.
15. We don't -- I don't know. We don't have the
16. security guard station ready to move into yet.
17. MR. BOWERS: Okay.
18. MR. WATTS: So I would imagine they
19. would have some sort of a -- you know, a golf cart
20. or something like that. That would be most likely
21. what will happen, but we don't have that yet.
22. MR. BOWERS: Well, the reason I was
23. addressing that, you know, if you have to -- the
24. security guard has to check the boiler, it's
25. 800-something feet over there. You know. It's a

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1. pretty good little ways. That's why -- by the time
2. you walk over there, it'd take 20 minutes to get
3. over there and get back. You know. So -- till he'd
4. have to walk back again. So he'd have to pretty
5. well be in the boiler room if he's going to station
6. at the security guard station (verbatim). So that's
7. why I was wondering if there was going to be a
8. vehicle that he could run over to the boiler room
9. and check it.
10. MR. BAUGHMAN: There was one mention
11. of a personnel that -- and just caught my attention
12. real quick. You mentioned an engineering tech?
13. MR. WATTS: Originally, that's what
14. we called him when I first hired him, but they're
15. not engineering techs now.
16. MR. BAUGHMAN: Okay. Although we
17. just called him an engineering tech. That was just
18. a slip.
19. MR. WATTS: I know. It is.
20. MR. BAUGHMAN: Okay.
21. MR. WATTS: It's -- my apology. I'm
22. not using the correct terminology.
23. MR. BAUGHMAN: Okay.
24. MR. WATTS: We had to change the
25. names after we first hired them.

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1. MR. BAUGHMAN: All right. So what
2. would his title now be?
3. MR. WATTS: It's --
4. MR. NEVILLE: Engineering Maintenance
5. Technician II.
6. MR. WATTS: Engineering Maintenance
7. Technician II. Yeah.
8. MR. BAUGHMAN: Thank you for pointing
9. that out. All right. Thank you.
10. MR. PISCHKE: Yeah. That's in
11. Appendix G.
12. MR. BAUGHMAN: Okay.
13. MR. PISCHKE: Any other questions or
14. comments?
15. MR. BAUGHMAN: So presently, you
16. mentioned that the guard shack is not operational?
17. MR. WATTS: Correct.
18. MR. BAUGHMAN: Okay. Okay. That's
19. pretty exhaustive. You did well.
20. MR. PISCHKE: We have someone in the
21. back.
22. MR. PETERS: May I say a few words?
23. Danny Peters, boiler inspector. I'm the inspector
24. that has registered the boiler with the State, and
25. the boiler is about a 500-horsepower boiler.

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1. There's two of them and a DA tank. I registered
2. those through the permit procedure. I've seen these
3. boilers and seen the facility a couple times. I've
4. been back on an internal, external, run through
5. low-water cutoff alarms, flame failure on both the
6. boilers. The company is -- I mean, you could eat
7. off the floor if you'd see the company. It's -- I
8. mean, it has to be sterilized. They said that they
9. work in the medical industry with people that need
10. dialysis. And the process is -- I mean, it's
11. 100-percent sterile.
12. Their boiler room is the same way.
13. You could eat off the floor. But that's neither
14. here nor there. Their boiler room has -- their
15. control room where they can see the boilers, I've
16. seen their -- they have already had their manual
17. intact, their personnel, their engineering
18. department, their boiler operators; I've seen
19. that. And their 20-minute rule, they're abiding
20. by that.
21. And the shock buttons -- we mentioned
22. the shock buttons. They had two shock buttons and
23. I recommended two shock buttons, because in their
24. process of -- at two doors, because you've got
25. boiler one, boiler two. Their process is

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1. sensitive, and I let them know that they need to
2. label boiler one, boiler two on the shock buttons.
3. But -- and with their boilers, boiler one, boiler
4. two at each door to designate the difference in
5. the shock buttons.
6. I've also looked at -- they've got
7. several autoclaves there, air tanks; I've
8. registered all those with the State. Should have
9. a Tennessee Number to the DA tank, hopefully. I
10. don't know.
11. MR. BOWERS: The question on that one
12. is if it's under 50 PSI, it wouldn't be
13. registered -- what do you think, Sam?
14. MR. BAUGHMAN: It's 50 PSI.
15. MR. CHAPMAN: 50 PSI.
16. MR. BAUGHMAN: That's the rating on
17. the --
18. MR. BOWERS: Okay. Okay. Okay.
19. MR. CHAPMAN: Yeah.
20. MR. BOWERS: It did say what the
21. safety -- okay.
22. MR. CHAPMAN: Yeah.
23. MR. BOWERS: Do you feel like their
24. boiler operators do a good job there?
25. MR. PETERS: Yes. I talked with

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1. them. I could tell. You know. You could tell
2. after a while with this communication, but they
3. had -- their computer room was compatible to the
4. Hawk system on both the Cleaver-Brooks boilers. We
5. went through a scenario with low-water cutoff. I
6. looked at their process that they do inside the
7. boiler room -- or the boiler control room with their
8. operator, and I was well pleased at how they
9. maintained it.
10. MR. BAUGHMAN: Danny, I'll just ask
11. you real quick. You mentioned checking low waters,
12. checking things, have you checked the airflow
13. switch?
14. MR. PETERS: I know that it went
15. through a purge system, post-purge, but as far as
16. the airflow switch, I didn't -- we didn't check. We
17. went through a flame failure and primary and
18. secondary low-water cutoff.
19. MR. BAUGHMAN: And the reason I ask
20. that is that we've seen combustion explosions over
21. the years from the failure of an airflow switch, and
22. rarely does the airflow switch get checked. And on
23. the Hawk system, you also have to enable whether
24. it's checking the airflow switch. It typically
25. checks it to be closed, but it doesn't check it for

1. being reopened. And if it sticks in the closed
 2. position and then you lose the blower motor, the
 3. boiler thinks it's still got air and it'll load up
 4. and have what we refer to as a self-cleaning stack
 5. incident.
 6. MR. PETERS: Will that show in the
 7. computer readout as it goes through the purge? Will
 8. it show that, though, that it's proved?
 9. MR. BAUGHMAN: Yes.
 10. MR. PETERS: The power switch.
 11. MR. BAUGHMAN: If it's in the closed
 12. position. Let's say the airflow switch is stuck
 13. closed. It's a diaphragm switch, so it can stay
 14. closed. So it'll go through a pre-purge and it'll
 15. come back down and go into the ignition sequence,
 16. and it'll try to light off, because it things its
 17. got air, because that airflow switch is closed.
 18. So it's an important part of what
 19. we're checking to make sure that that airflow
 20. switch is working properly. And, of course, if we
 21. don't check it, we don't know. But -- so what I'm
 22. getting at is these controls, as sophisticated as
 23. they are, man made them. Man's operating it. Man
 24. maintains it. And if man's involved, it's not
 25. perfect.

1. So working as a team within this
 2. aspect, we want to make sure that we're all
 3. working towards the goal of not talking about an
 4. incident.
 5. MR. PETERS: I'll make sure that we
 6. do go through a safety check with that airflow the
 7. next time.
 8. MR. BAUGHMAN: Super.
 9. MR. PISCHKE: Any other questions,
 10. comments? Well, what's your pleasure, as far as --
 11. you want us to vote or would you like to revise?
 12. MR. NEVILLE: I'd like to go over the
 13. items that we will revise for the -- first of all,
 14. as far as the security officer, we will have -- this
 15. is -- was provided by the security company that they
 16. work with. We will have a tailored one, as well,
 17. for the other shifts where they're just operating
 18. one security officer at the -- so we would like to
 19. provide a manual with additional information there.
 20. Also, on the deaerator information,
 21. we will update that with the Tennessee Number and
 22. the seven pound operating pressure for that.
 23. And I believe those were the -- and
 24. one other piece of information that was mentioned
 25. as far as the boiler room, a plot plan of the

1. boiler room and the -- showing the exits on that
 2. and modifying the shutoffs to one. So --
 3. MR. WATTS: One E-stop.
 4. MR. NEVILLE: One E-stop. Those are
 5. the three items that I had -- or four items that I
 6. had that we will modify.
 7. MR. BAUGHMAN: I've got one other
 8. item to address and that's on page H-1 under
 9. Appendix H, the Boiler Variance Training Log.
 10. MR. NEVILLE: Yes.
 11. MR. BAUGHMAN: So where do we
 12. presently stand? As of today, we've got no training
 13. that's in place --
 14. MR. NEVILLE: That's --
 15. MR. BAUGHMAN: -- according to the
 16. log sheet.
 17. MR. NEVILLE: That is correct.
 18. MR. BAUGHMAN: Okay.
 19. MR. NEVILLE: Right. I mean, you
 20. know, we're applying for a variance. You know.
 21. Once the variance is approved, then we would train
 22. individuals on what the variance is, because this
 23. document could change, so we don't want to train
 24. them to a document that hasn't been approved by the
 25. Board.

1. MR. FOX: There's normally a pretty
 2. high turnover rate with security personnel, we've
 3. seen in the past. Is that something that -- when
 4. you receive a new security officer, they're going to
 5. get trained?
 6. MR. WATTS: That's a good point.
 7. It's possible. Most likely, you're correct in that.
 8. We will train anyone who is new that comes in prior
 9. to them coming in. We'll be notified that the
 10. person who was supposed to come in is not going to
 11. come in for whatever reason. They won't necessarily
 12. divulge that, but we will train them ahead of time
 13. before their scheduled start date.
 14. MR. PISCHKE: Can we see some of
 15. those spelled out in more detail in the manual,
 16. those types --
 17. MR. NEVILLE: Right.
 18. MR. PISCHKE: -- of agreements with
 19. security?
 20. MR. NEVILLE: As far as their
 21. training before --
 22. MR. PISCHKE: Training and
 23. requirements and --
 24. MR. NEVILLE: Okay.
 25. MR. PISCHKE: -- verification of

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1. training and -- before they --
2. MR. NEVILLE: Okay.
3. MR. BAUGHMAN: And refresh me again,
4. who's in charge of training personnel?
5. MR. WATTS: We have Boiler Supply
6. training the technicians, and then the technicians
7. are training the security personnel.
8. MR. BAUGHMAN: And for new hires,
9. when they come in, who is going to be responsible?
10. MR. WATTS: We have a training
11. organization that is giving them orientation, and
12. they'll give them, you know, the basics. And then
13. whenever they're finished with that, our engineering
14. techs will go over the same trainings for the
15. boiler.
16. MR. BAUGHMAN: And is that laid out
17. in the manual, James?
18. MR. NEVILLE: As far as the training,
19. if you'll look on G-6, you know, we've got on-site
20. boiler training there listed. But as far as more
21. detail than that, no, we don't -- we have not
22. documented that.
23. MR. ROBINSON: Page 5, Paragraph 2.
24. MR. NEVILLE: Yes. Yes. Regarding
25. training for the boiler variance.

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1. MR. ROBINSON: Right.
2. MR. NEVILLE: Yes.
3. MR. ROBINSON: Yes.
4. MR. NEVILLE: Yes. Okay.
5. MR. ROBINSON: But now, which leads
6. me to another question.
7. MR. NEVILLE: Yes.
8. MR. ROBINSON: Who is the facilities
9. and maintenance manager?
10. MR. WATTS: That's me.
11. MR. ROBINSON: You're responsible for
12. training all incoming personnel assigned to boiler
13. duties and keeping a documentation log.
14. MR. NEVILLE: Yes.
15. MR. ROBINSON: But you said it was
16. Boiler Supply.
17. MR. WATTS: Well, Boiler Supply
18. trains our engineering technician -- our -- yeah,
19. engineering --
20. MR. NEVILLE: Boiler attendant.
21. Right. The boiler attendants are trained by Boiler
22. Supply. So I guess we've got two things going on
23. here. The training to the variance manual, how we
24. handle the variance and then qualifying a boiler
25. attendant.

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1. MR. ROBINSON: Attendant.
2. MR. NEVILLE: So we have --
3. MR. ROBINSON: So if you would -- so
4. anybody new coming into -- if you get a phone call
5. for replacement of a new security guard, then you --
6. MR. WATTS: Right.
7. MR. ROBINSON: -- are responsible for
8. making sure --
9. MR. NEVILLE: And keeping the log --
10. MR. WATTS: Right.
11. MR. NEVILLE: -- of that training.
12. MR. WATTS: That's correct.
13. MR. ROBINSON: Dave, does that --
14. MR. PISCHKE: Does that clarify?
15. MR. BAUGHMAN: Somewhat. You
16. mentioned -- there was somebody else that you just
17. mentioned that's involved in training, too, that
18. I --
19. MR. WATTS: Well, we have a --
20. MR. BAUGHMAN: -- need clarification
21. on.
22. MR. WATTS: -- corporate trainer who
23. does orientation. You know. Things like, you know,
24. your basic general company policies and things of
25. that nature. And then we have the training for the

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1. specific job duties of what the boiler requirements
2. are with checks and things like that. And then the
3. training of the book, obviously, is part of it, as
4. well.
5. MR. BAUGHMAN: So there's some
6. multiple entities that'd be involved in training, it
7. sounds.
8. MR. WATTS: To get someone up to
9. speed, yes. A new person. That's correct.
10. MR. BAUGHMAN: Okay. And that should
11. be identified, also, a little --
12. MR. WATTS: Okay.
13. MR. BAUGHMAN: -- more clarification
14. on -- because, as we know, this is a copy and paste,
15. James.
16. MR. NEVILLE: Well --
17. MR. BAUGHMAN: This is very much --
18. MR. NEVILLE: -- as far as the
19. facility and maintenance manager, you know, he is
20. the one person responsible for making sure the
21. documentation is filled out. I mean, he is -- will
22. have subordinates that he's handing off the training
23. to. We can document that, if that's what -- you
24. know.
25. MR. BAUGHMAN: Well, and you're

1. saying that he's responsible for the
 2. documentation --
 3. MR. NEVILLE: Yes.
 4. MR. BAUGHMAN: -- but it also says
 5. he's responsible for training. Not just responsible
 6. for documentation --
 7. MR. NEVILLE: Right.
 8. MR. BAUGHMAN: -- but he's
 9. responsible for the training, as this states.
 10. MR. NEVILLE: Absolutely.
 11. MR. BAUGHMAN: Okay. And from what
 12. he's saying -- is that others are involved in that
 13. training, also, not just himself. And so I -- since
 14. there's multiple entities involved in training --
 15. MR. NEVILLE: Absolutely.
 16. MR. BAUGHMAN: -- they need to be
 17. identified.
 18. MR. NEVILLE: Okay.
 19. MR. PISCHKE: Any other questions,
 20. comments, clarifications?
 21. MR. BAUGHMAN: Well, the only other
 22. clarification I've got, Mike, is under Personnel
 23. Responsible for Remote Monitoring, in the first
 24. section, Remote Station Personnel, it just says, a
 25. trained boiler operator must attend the boiler, and

1. I don't see anything under "boiler operators" as job
 2. descriptions. I see "security officer" and
 3. "engineering maintenance tech II/boiler attendant,
 4. but I don't see a trained boiler operator.
 5. MR. NEVILLE: Right. And --
 6. MR. BAUGHMAN: And so just from a
 7. clarification standpoint, a trained boiler
 8. attendant -- since we don't have an operator listed
 9. in any capacities -- not unless I missed --
 10. MR. NEVILLE: Right. I mean, that
 11. would be -- I mean, the only trained boiler operator
 12. would be the engineering maintenance technician II,
 13. so -- yeah. We could change that to an attendant.
 14. So --
 15. MR. BAUGHMAN: That was a lot.
 16. MR. PISCHKE: That was a lot. Yeah.
 17. Any more?
 18. MR. BOWERS: No.
 19. MR. BAUGHMAN: No. You guys did
 20. well.
 21. MR. PISCHKE: Should we move to
 22. accept contingent?
 23. MR. BAUGHMAN: Well, you put the
 24. motion out there.
 25. MR. BOWERS: Put the motion out

1. there?
 2. MR. BAUGHMAN: You cannot.
 3. MR. BOWERS: Okay.
 4. MR. BAILEY: No, he --
 5. MR. BAUGHMAN: Oh, no --
 6. MR. BAILEY: He didn't have a
 7. conflict with this one.
 8. MR. BAUGHMAN: -- this isn't a
 9. conflict. I'm sorry. Excuse me.
 10. MR. BAILEY: Yeah, you can make --
 11. MR. BAUGHMAN: Sorry, Harold.
 12. MR. PISCHKE: You can --
 13. MR. BAUGHMAN: You're the new guy.
 14. MR. PISCHKE: You can move.
 15. MR. BAUGHMAN: You cannot. No, I'm
 16. sorry.
 17. MR. BOWERS: Yeah, I move -- I motion
 18. that we -- vote --
 19. MR. ROBINSON: You can't --
 20. MR. BAILEY: Yeah.
 21. MR. PISCHKE: Do I --
 22. MR. BAILEY: He didn't have a
 23. conflict with this one.
 24. MR. ROBINSON: Okay.
 25. MR. BAILEY: It was the other one.

1. MR. ROBINSON: Okay. Good. That's
 2. my fault.
 3. MR. BOWERS: Yeah.
 4. MR. BAUGHMAN: Yeah.
 5. MR. PISCHKE: Yeah.
 6. MR. BAUGHMAN: No, I did the same
 7. thing.
 8. MR. PISCHKE: He did the same thing.
 9. MR. BAILEY: We'll make sure this is
 10. right.
 11. MR. BOWERS: Yeah. I move to vote,
 12. yea or nay on this, contingent and that this stuff
 13. is updated. Of course, Sam's going to be checking
 14. this when he does his visit. Updated to what we
 15. talked about today.
 16. MR. PISCHKE: Do we have a second?
 17. MR. BAILEY: Well, I think the
 18. motion --
 19. MR. PISCHKE: Okay.
 20. MR. BAILEY: You said either yay or
 21. nay. I think either -- you have -- the motion
 22. either has to be to accept it or reject it.
 23. MR. BOWERS: Exactly.
 24. MR. BAILEY: If it's to accept it,
 25. it's to accept it based on the contingent that they

1. fix the things that you have pointed out.
2. MR. BOWERS: Yes. Okay.
3. MR. BAILEY: So -- I mean, that -- so
4. which way do you want to go?
5. MR. BOWERS: To -- a vote to accept
6. it and that they fix the -- update the stuff they --
7. MR. BAILEY: Okay. Thank you. Any
8. second?
9. MR. PISCHKE: Do we have a second?
10. No second?
11. MR. FOX: I'll second that.
12. MR. PISCHKE: Okay. So I'll call for
13. the question. All those in favor, say, "aye."
14. (No verbal response.)
15. MR. PISCHKE: Opposed?
16. THE REPORTER: You have to say it
17. verbally, please.
18. MR. BOWERS: Aye.
19. MR. PISCHKE: Two ayes. Opposed.
20. MR. BAUGHMAN: No.
21. MR. PISCHKE: One no.
22. MR. BAILEY: Am I allowed to vote
23. on --
24. MR. BAUGHMAN: Yes.
25. MR. PISCHKE: Okay. I vote for,

1. based on --
2. MR. NEVILLE: Based on the
3. modifications that --
4. MR. PISCHKE: -- the contingencies.
5. MR. BAUGHMAN: I'd like to add --
6. MR. NEVILLE: Thank you.
7. MR. BAUGHMAN: -- do we have ever see
8. the revision ourselves? We do not? You said we do?
9. MR. CHAPMAN: We do.
10. MR. BAUGHMAN: And when do we see
11. those?
12. MR. CHAPMAN: No. The Board doesn't,
13. but I get them.
14. MR. BAUGHMAN: You get them.
15. MR. CHAPMAN: I get them.
16. MR. NEVILLE: Mr. Chapman checks
17. those. Yes, sir.
18. MR. PISCHKE: The motion carries, by
19. the way.
20. MR. NEVILLE: Okay. We're approved.
21. Thank you.
22. MR. BAUGHMAN: Good job, guys.
23. MR. NEVILLE: Thank you.
24. MR. BOWERS: Good job. Yeah.
25. MR. PISCHKE: Yeah. Thank you very

1. much. We're going to take a brief 10-minute break.
2. Yeah.
3. And we have a presentation before the
4. break. Can we --
5. MS. RHONE: I have a -- just before
6. the break, we have a special presentation. During
7. our trainings, we have what we call the
8. Douglas Pippin Memorial Award. We implemented that
9. in 2004, and that was based on -- we had Assistant
10. Chief, Douglas Pippin, who passed away in 2004. So
11. each year, during our conference, we like to
12. recognize one of our boiler inspectors, which we
13. know all of them are very diligent. But we'd like
14. to recognize one of our boiler inspectors.
15. And this year, our award says, on the
16. Department of Labor and Workforce Development
17. Workplace Regulations and Compliance, be it known
18. that Dallas Word --
19. (Applause.)
20. MS. RHONE: -- that Dallas Word is
21. awarded the 2017 Douglas Pitman Memorial Achievement
22. Award in recognition of outstanding commitment and
23. dedication to the interest and achievements of the
24. goals of the Tennessee Boiler Unit this 20th day of
25. September, 2017.

1. (Applause.)
2. MS. RHONE: All right.
3. Congratulations.
4. MR. WORD: Thank you.
5. MR. BAUGHMAN: Still going to take a
6. break?
7. MR. PISCHKE: Going to take a break.
8. (Recess observed.)
9. MR. PISCHKE: Okay. We'll get
10. started again. The next item on the agenda is
11. 17-13, Milan General Hospital. Representative?
12. MR. NEVILLE: This is James Neville
13. with Neville Engineering. I represent Milan General
14. Hospital.
15. MR. MUMMERT: And I'm Derrick
16. Mummert. I'm the maintenance manager from the
17. hospital.
18. MR. BAUGHMAN: Hey, Derrick.
19. MR. MUMMERT: Hello.
20. MR. NEVILLE: We're back today to
21. request --
22. MR. BAILEY: Excuse me. Any
23. conflicts?
24. MR. PISCHKE: Oh, I'm sorry. Yes.
25. Thank you. I had it written right here, too. Are

1. there any conflicts of interest that we need to
 2. identify at this time? Okay. Hearing none, please
 3. proceed.
 4. MR. NEVILLE: We're here today to
 5. request a boiler variance for two boilers. These
 6. boilers are operated on-demand 24 hours a day, seven
 7. days a week, furnishing high-pressure steam for
 8. space heating, potable water heating, dietary
 9. equipment sterilizers, and humidification.
 10. On Appendix A-2, it lists those
 11. boilers. I'll have you flip there and we'll --
 12. MR. MUMMERT: A-1. It's A-1.
 13. MR. NEVILLE: Or A-1. Pardon me.
 14. And those boilers are Tennessee Number T106752 and
 15. T103962. Those are both Cleaver Brooks boilers.
 16. They were manufactured in 2015.
 17. Both of those boilers have the
 18. Hawk 4000 control system. In the site plan, we
 19. list the boiler room and the remote station. And
 20. that is -- the distance between those is 192 feet.
 21. The individuals that will be
 22. monitoring those boilers at the remote station is
 23. a respiratory therapist. They will be monitoring
 24. the alarm panel and responding to alarms. And the
 25. individuals that will be monitoring as boiler

1. attendants -- there are three -- or four listed.
 2. Pardon me, three listed. The maintenance manager
 3. II, the senior maintenance mechanic, and the
 4. general maintenance mechanic. Those are listed on
 5. page seven.
 6. MR. MUMMERT: And I actually have
 7. three senior maintenance mechanics.
 8. MR. NEVILLE: So we've detailed the
 9. emergency procedures for this when an alarm -- and
 10. that is on page 10 on the colored page part of the
 11. checklist. We've listed our emergency call list on
 12. page 11. And as far as training the individuals to
 13. be boiler attendants, if you'd like to elaborate on
 14. how they are trained --
 15. MR. MUMMERT: Yeah. Morgan &
 16. Thornburg is coming out of Memphis. They did my
 17. boiler swap-out. When they did the actual
 18. installation, once it was up and running, they did a
 19. on-hands training with my guys for a day to make
 20. it -- you know shutdown, startups, troubling how to
 21. do the alarms, how to test everything. And then six
 22. months later when we switched the boilers, they came
 23. back with my same group of guys and did a -- showed
 24. us how to open it up for an internal inspection and
 25. get it ready for the inspector to do that.

1. As far as the other folks, we do a --
 2. I do a walkthrough, which -- show them where all
 3. the mercy stops are, where the alarm panel's
 4. located, and I also do that with the department
 5. managers every six months, just as a refresher,
 6. because it is a hospital. We want to make sure
 7. if -- no matter who's there, somebody has the
 8. ability or knows where the location of all the
 9. safety shutdowns are for these.
 10. MR. PISCHKE: Okay.
 11. MR. NEVILLE: Also at the remote
 12. station, there is a new shutoff panel --
 13. MR. MUMMERT: Yes.
 14. MR. NEVILLE: -- that has been
 15. installed that is -- you have listed. So
 16. previously, that was a deficiency as far as the
 17. control system. So that has been modified.
 18. MR. MUMMERT: Yes.
 19. MR. PISCHKE: Okay. That --
 20. MR. NEVILLE: If there are any
 21. questions, we'd like --
 22. MR. PISCHKE: Okay. Do I have a
 23. motion to discuss?
 24. MR. BAUGHMAN: Motion to discuss.
 25. MR. FOX: I'll second.

1. MR. PISCHKE: Second? Okay. So
 2. questions, comments? Do we have --
 3. MR. BAUGHMAN: One or two.
 4. MR. PISCHKE: Okay.
 5. MR. BAUGHMAN: Your name again is --
 6. MR. MUMMERT: Derrick.
 7. MR. BAUGHMAN: You look familiar.
 8. MR. MUMMERT: I was here in March.
 9. MR. BAUGHMAN: I thought you looked
 10. familiar.
 11. MR. MUMMERT: Yeah. I had to go back
 12. and fix some things, but that's all -- hopefully --
 13. and hire somebody to help me.
 14. MR. BAUGHMAN: Okay. And this is for
 15. that same hospital?
 16. MR. MUMMERT: Yes. Uh-huh.
 17. MR. BAUGHMAN: Okay. And how many
 18. hospitals are you responsible for?
 19. MR. MUMMERT: Two hospitals and two
 20. medical centers.
 21. MR. BAUGHMAN: It's pretty a good
 22. workload.
 23. MR. MUMMERT: Too much work load.
 24. MR. BAUGHMAN: Yeah. That's a big
 25. responsibility, Derrick, and I know that's a lot to

1. shoulder.
2. Being that, we've got three senior
3. mechanics. Are those three senior mechanics also
4. spread between two hospitals and two medical
5. centers?
6. MR. MUMMERT: I've got one that's
7. part-time, and he stays in Gibson County, which is
8. where Milan Hospital is at. He stays only in those
9. three facilities there, because Humboldt, Trenton,
10. and Milan's all in Gibson County. So he stays in
11. between those three, as needed. The other two are
12. full-time at Milan.
13. MR. BAUGHMAN: So we've got one
14. part-time in -- you said Gibson. Is that Milan
15. also?
16. MR. MUMMERT: Yes. Uh-huh. Milan.
17. MR. BAUGHMAN: Okay. So we've got
18. one part-time and two full-time.
19. MR. MUMMERT: Senior maintenance.
20. And there's one general maintenance that stays at
21. Humboldt who also covers for Milan.
22. MR. BAUGHMAN: Okay. And then we've
23. got one in Humboldt.
24. MR. MUMMERT: Yes.
25. MR. BAUGHMAN: Which is how far from

1. Milan?
2. MR. MUMMERT: Eighteen miles.
3. MR. BAUGHMAN: Okay. So personnel
4. that are at the hospital at any one time, besides
5. the respiratory therapist would be who?
6. MR. MUMMERT: Engineering-wise?
7. MR. BAUGHMAN: No. Just who would be
8. responsible for the boiler?
9. MR. MUMMERT: I'm there two days a
10. week and my two senior maintenance mechanics work
11. Monday through Friday. And then also, the
12. administrator. When I'm not there she kind of picks
13. up as the department manager when I'm not there. If
14. there's questions that come up, she'll have to take
15. care of that. She's there all week, Monday through
16. Friday.
17. MR. BAUGHMAN: So we've got two -- at
18. least two maintenance people that are there --
19. MR. MUMMERT: Monday through Friday.
20. MR. BAUGHMAN: -- Monday through
21. Friday.
22. MR. MUMMERT: Correct.
23. MR. BAUGHMAN: Do they work 12-hour
24. shifts?
25. MR. MUMMERT: No.

1. MR. BAUGHMAN: Okay.
2. MR. MUMMERT: 6:00 to 2:30.
3. MR. BAUGHMAN: 6:00 to 2:30. So that
4. leaves a little gap --
5. MR. MUMMERT: Uh-huh.
6. MR. BAUGHMAN: -- of no
7. maintenance --
8. MR. MUMMERT: That's correct.
9. MR. BAUGHMAN: -- techs on site.
10. MR. MUMMERT: All my guys also carry
11. cell phones that are tied into the computer system.
12. So any time there's an issue, regardless -- one of
13. them's on-call 24/7, every day. Regardless of which
14. one goes off, which -- well, I mean, if the boiler
15. goes off, no matter which one is on call, they all
16. get the phone call. Even I do. So all five of us
17. get the phone call.
18. MR. BAUGHMAN: Via the computer.
19. MR. MUMMERT: Correct.
20. MR. BAUGHMAN: You ever have a
21. computer issue?
22. MR. MUMMERT: Oh, yes.
23. MR. BAUGHMAN: Me, too.
24. MR. MUMMERT: All the time.
25. MR. PISCHKE: Once or twice.

1. MR. BAUGHMAN: Yeah. So during those
2. times that there are not any technicians, there's
3. always a respiratory therapist that'll be --
4. MR. MUMMERT: 24/7. There's usually
5. two at a time.
6. MR. BAUGHMAN: There's two at a time.
7. MR. NEVILLE: Yeah.
8. MR. BAUGHMAN: Okay. Is there ever
9. an instance where, for lack of a more diplomatic
10. term, I guess, where multiple people can be coughing
11. up a lung, that the respiratory therapist may be at
12. multiple patients?
13. MR. MUMMERT: You're talking about,
14. like, after hours when maintenance is not there --
15. MR. BAUGHMAN: At any --
16. MR. MUMMERT: -- or any time?
17. MR. BAUGHMAN: -- time.
18. MR. MUMMERT: Well, yeah. That's
19. possible. Yes.
20. MR. BAUGHMAN: Okay.
21. MR. MUMMERT: During the day, it's
22. not so much of an issue, as long as I've got guys
23. there. Yes.
24. MR. BAUGHMAN: Sure. So -- but
25. they're the ones that are monitoring. The

1. maintenance wouldn't be at the nurses station to
 2. monitor, should there be an event where these people
 3. have to get up and attend to a patient in dire
 4. straights.
 5. MR. MUMMERT: That's correct.
 6. MR. BAUGHMAN: Okay.
 7. MR. MUMMERT: Except during normal
 8. work hours.
 9. MR. BAUGHMAN: Sure.
 10. MR. MUMMERT: Yeah.
 11. MR. NEVILLE: That would revert to
 12. the 20-minute rule --
 13. MR. MUMMERT: Yeah.
 14. MR. NEVILLE: -- if --
 15. MR. BAUGHMAN: So --
 16. MR. NEVILLE: -- at that -- if the
 17. remote station --
 18. MR. BAUGHMAN: -- there's a medical
 19. emergency that mandates these people -- if --
 20. MR. NEVILLE: Yes.
 21. MR. BAUGHMAN: -- I was having an
 22. emergency in a hospital room and I needed attendance
 23. right away, I'm just wondering if the respiratory
 24. therapist is going to be able to take the time
 25. knowing that somebody is in medical straights -- and

1. just talking real life.
 2. MR. MUMMERT: Right.
 3. MR. BAUGHMAN: -- that they're going
 4. to take the time to get somebody in to monitor the
 5. boilers and wait for them to monitor the boilers
 6. while this patient's in --
 7. MR. MUMMERT: Respiratory therapy is
 8. an occupation that's going away, basically. I mean,
 9. I hate to say that, but it's going by the wayside.
 10. Most -- all of the nurses now aren't being trained
 11. for that, even at -- we don't have any RTs at Camden
 12. Hospital. None at all. It's all done by nurses.
 13. Same thing at Milan. Most -- all the nurses are
 14. doing all the RT stuff.
 15. MR. BAUGHMAN: Interesting. So what
 16. you're saying is, is that the RT at some point in
 17. time is not going to be the one monitoring the
 18. boiler.
 19. MR. MUMMERT: Not monitoring the
 20. boiler but not -- may not be monitoring the patients
 21. that you're talking about. It could be the nurse
 22. doing the RT job.
 23. MR. BAUGHMAN: Okay. So this RT may
 24. change at some point in time to nurse.
 25. MR. MUMMERT: Hopefully, not at that

1. hospital, because we're so big and do so much
 2. volume.
 3. MR. BAUGHMAN: Okay. I'm just kind
 4. of getting a clear path --
 5. MR. MUMMERT: Right. Right. I
 6. understand.
 7. MR. BAUGHMAN: -- and moving forward
 8. to --
 9. MR. MUMMERT: There's no plans in the
 10. foreseeable future that RT will go away at that
 11. hospital.
 12. MR. BAUGHMAN: Okay. Do the
 13. respiratory therapists feel comfortable in attending
 14. the boiler?
 15. MR. MUMMERT: Not at first,
 16. especially if they're new. They're hesitant, scared
 17. of it. But, you know, after a -- we don't just
 18. throw them down at one time and say, here, that's
 19. yours. Look at it and figure it out. You know.
 20. There's a -- we have a process where we tag-team
 21. them with somebody for usually -- depending on how
 22. fast they get comfortable, how fast they learn, it
 23. could be up to, you know, six weeks.
 24. And we try to rotate them with
 25. everyone there, every -- like all RTs. We might

1. have six of them. That way, they could see
 2. different perspectives from different ones. So,
 3. you know, everybody's got their little pet peeves.
 4. So we try to rotate them with everybody so that
 5. it's not the same person training them. You know.
 6. MR. BAUGHMAN: You bet. I can
 7. imagine -- I mean, especially going in and being a
 8. therapist and a nurse and going into this piece of
 9. equipment.
 10. MR. MUMMERT: Yeah.
 11. MR. BAUGHMAN: You know.
 12. MR. MUMMERT: Yeah. It's
 13. intimidating.
 14. MR. BAUGHMAN: Well, so is working on
 15. people as a patient. I'm more intimidated --
 16. MR. MUMMERT: It depends on if
 17. they're --
 18. MR. BAUGHMAN: -- from that
 19. standpoint than working on the boiler.
 20. MR. MUMMERT: -- unconscious or not.
 21. MR. PISCHKE: That would be just as
 22. bad as one of us -- yeah -- attending a patient.
 23. MR. BAUGHMAN: So we've got a person
 24. in Humboldt. We've got two full-time there. We've
 25. got one part-time. As these technicians are working

1. at -- do they have duties at the other hospitals,
 2. too?
 3. MR. MUMMERT: Only the general
 4. technician. Yeah. The part-time just -- I put him
 5. wherever I need him.
 6. MR. BAUGHMAN: Okay. And the general
 7. technician is the one that -- is he the one at
 8. Humboldt or is he --
 9. MR. MUMMERT: Humboldt. Yes.
 10. MR. BAUGHMAN: Okay. So that leaves
 11. us two full-time working Monday through Friday, 6:00
 12. to 2:00 on their shifts, giving us somewhat of a
 13. little gap. If either one of those goes sick or is
 14. on vacation or the flu bug comes through and --
 15. MR. MUMMERT: I cover for them.
 16. MR. BAUGHMAN: You cover for them.
 17. Good.
 18. MR. MUMMERT: And if something
 19. with -- if they're down and I go on vacation or if I
 20. become sick, the -- or I mean, the system-wide
 21. hospital has boiler -- their own boilers and
 22. everything. Now, they have qualified people there
 23. that can step in and help cover for us at the big
 24. house.
 25. MR. BOWERS: The question I have --

1. MR. BAUGHMAN: Thanks, Derrick.
 2. MR. BOWERS: -- is that you've got
 3. two guys; do they work on opposite shifts?
 4. MR. MUMMERT: No.
 5. MR. BOWERS: They're working
 6. together.
 7. MR. MUMMERT: Yes, sir.
 8. MR. BOWERS: So they're only working
 9. eight hours.
 10. MR. MUMMERT: That's correct.
 11. MR. BOWERS: Out of 24 hours.
 12. MR. MUMMERT: Correct.
 13. MR. BOWERS: So you've got 16 hours,
 14. basically, you're relying on that boiler operation
 15. to, I don't know, a respiratory therapist? Right?
 16. MR. MUMMERT: And alarms.
 17. MR. BOWERS: Right. That's --
 18. MR. NEVILLE: Wait. That's --
 19. MR. BOWERS: -- a lot of time. And
 20. you're only working 40 hours a week, so you're
 21. leaving nobody there on weekends, right?
 22. MR. MUMMERT: Yes.
 23. MR. BOWERS: So basically --
 24. MR. MUMMERT: Well, on the weekends,
 25. I do -- my maintenance guy that's on call has to go

1. in every weekend, and we do the boiler checks and
 2. stuff. We go in and test the alarms. We do have a
 3. routine on the weekends.
 4. MR. BOWERS: Yeah. So that's a lot
 5. of hours that you're relying on somebody -- if
 6. you've got a multiple car wreck and those people are
 7. tied up -- you know, like -- I'm not sure they're
 8. not going to say, hey, I can't work on this patient.
 9. I've got to go check the boilers. You know. It's
 10. like -- it's a lot of time there that's --
 11. MR. MUMMERT: If there's something
 12. that extensive that it's going to take that many
 13. people, we do a code surge drill.
 14. MR. BOWERS: Yeah.
 15. MR. MUMMERT: Well, it's not a drill
 16. at that point. It's real. But if we do a code
 17. surge, then we call everybody in anyway.
 18. MR. BOWERS: Yeah. You know. You
 19. know. You've got a lot of automatic controls
 20. nowadays and -- you know, and everything's on cruise
 21. control. But, you know, I don't fly very often, but
 22. I like to have a pilot in there. You know. Not a
 23. stewardess, you know, checking on the controls. You
 24. know. It's a lot of time there that you really
 25. don't know how well-trained these people are going

1. to be as far as -- you know, like, a person hired as
 2. respiratory therapist, you know, like, uh, you're
 3. going to be a boiler operator? And these are pretty
 4. good-sized boilers. I mean, they could do a lot of
 5. damage. A lot of damage.
 6. MR. BAUGHMAN: To further that
 7. conversation, Derrick -- and thanks again for coming
 8. up here. You've been very forthright in the past,
 9. and you still are, and I appreciate that in itself,
 10. because we are working with equipment that carries a
 11. high liability.
 12. MR. MUMMERT: That's correct.
 13. MR. BAUGHMAN: I should say. So are
 14. you in charge of the incoming training?
 15. MR. MUMMERT: Yes. I usually set it
 16. up with Morgan & Thornburg. If it's maintenance
 17. people, Morgan -- I bring Morgan & Thornburg. I've
 18. got a contract for them to maintain my equipment,
 19. and they'll come in and do the training for new.
 20. And I usually pull my other guys down there as a
 21. refresher while they're going through it with new
 22. people so the guy's not alone by himself or gal, if
 23. it's a gal.
 24. MR. BAUGHMAN: Okay. But Morgan & --
 25. MR. MUMMERT: Thornburg.

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1. MR. BAUGHMAN: -- Thornburg?
2. MR. MUMMERT: Uh-huh. Out of
3. Memphis.
4. MR. BAUGHMAN: Are they listed in the
5. manual as the ones --
6. MR. MUMMERT: They only did the
7. initial on-hands with the -- I guess it would be the
8. boiler operators. Yeah. The attendant, I do.
9. MR. NEVILLE: On G-3, we list
10. training but we don't call out that company
11. specifically. We say "trained and qualified
12. on-site."
13. MR. MUMMERT: Yeah.
14. MR. NEVILLE: So, you know, that
15. training company could change, so we didn't
16. specifically, you know, mention that company.
17. MR. BAUGHMAN: Okay. I'm not
18. familiar with Morgan & Thornburg, so I'm just -- not
19. that I know everybody in the industry --
20. MR. MUMMERT: Right.
21. MR. BAUGHMAN: -- by any stretch, I
22. just haven't been in any communication with them
23. over the years. Has there already been some
24. training put in place? Has there already been
25. training performed?

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1. MR. MUMMERT: Yeah. I went over
2. the -- like, the safety features and stuff for
3. attendants and stuff to make sure they know where
4. the basic stuff is, you know, the mercy shutoffs,
5. make sure they know how to activate them, make sure
6. they know the call schedule, who's on call, and, you
7. know, how to activate the alarms, how to shut down
8. the boilers remotely if there's a problem.
9. And when we do the boiler test every
10. morning, we actually have them -- the RTs at the
11. ER shut it down from in there just so they're in
12. the habit of being able to push the button and see
13. what it feels like, what it's going to do. And
14. then, you know, they have to reset it there before
15. we can turn it back on down at the boiler room.
16. So yeah, we do a lot of hands-on with that.
17. MR. BAUGHMAN: So there's been
18. training, but is there a training log that's been
19. filled out?
20. MR. MUMMERT: I have it at the
21. office. Yeah.
22. MR. NEVILLE: Right. So the training
23. log here is just representative. It's not a
24. training log, per se, of the, you know, the active.
25. This is what we will keep if it's approved, not, you

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1. know, the active log that they have --
2. MR. MUMMERT: Right.
3. MR. NEVILLE: -- as of today.
4. MR. MUMMERT: And it looks just like
5. this log that's in here, but it's got their names
6. and signatures and dates. And then there's copies
7. of the test that we give them.
8. MR. BAUGHMAN: How long does it take
9. to schedule somebody from Morgan & Thornburg to come
10. in from the time you call them --
11. MR. MUMMERT: I can usually call him,
12. have him there within a few minutes, because he
13. lives right there, within 20 miles of the hospital.
14. MR. BAUGHMAN: Unless he's on
15. vacation or what have you.
16. MR. MUMMERT: True. Yeah. I mean,
17. but they're pretty fast. They've got an office in
18. Jackson now, which they didn't till two years ago.
19. MR. BAUGHMAN: I guess what I'm
20. getting at is that since we've got respiratory
21. therapists that are operating and one calls in for
22. whatever reason and there's somebody else that's
23. going to be put in that position, if they're not
24. trained --
25. MR. MUMMERT: They're not allowed to

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1. do it.
2. MR. BAUGHMAN: They're not allowed to
3. do it.
4. MR. MUMMERT: They have to call me.
5. MR. BAUGHMAN: Okay.
6. MR. MUMMERT: Or whoever's on call,
7. maintenance.
8. MR. BAUGHMAN: Okay. What kind of
9. feed water system do you have, Derrick --
10. MR. MUMMERT: Old leaky one.
11. MR. BAUGHMAN: -- for these two
12. boilers?
13. MR. MUMMERT: Old leaking one. I
14. don't know. It's a Cleaver-Brooks. I'm in the
15. process of changing it right now as we speak. It's
16. being upgraded.
17. MR. BAUGHMAN: Okay.
18. MR. MUMMERT: They -- the money is
19. there. The capital is obligated. Morgan &
20. Thornburg is the company that's changing it out.
21. Their company should be -- hopefully, in the next
22. four to six weeks, actually, start the work.
23. MR. FOX: Good.
24. MR. MUMMERT: And it's going to be
25. a -- and I don't know the name brand of the new one

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1. off the top of my head. I've got a copy of it.
 2. MR. FOX: Is it a feedwater tank or
 3. is it a deaerator?
 4. MR. MUMMERT: It's a tank. It's a
 5. tank.
 6. MR. FOX: A deaerator?
 7. MR. MUMMERT: No.
 8. MR. FOX: No.
 9. MR. BAUGHMAN: The kind you got is a
 10. very common one in the industry.
 11. MR. MUMMERT: Yeah.
 12. MR. FOX: Yeah.
 13. MR. ROBINSON: I'm kind of smiling.
 14. I couldn't help but look on your checklist and it
 15. said, check for leaks.
 16. MR. MUMMERT: Yeah. Yeah.
 17. MR. ROBINSON: That's what they
 18. meant.
 19. MR. MUMMERT: That's why we're
 20. replacing it. Yeah. We kept finding that.
 21. MR. PISCHKE: Yeah. If there's no
 22. leaks, then there's something wrong.
 23. MR. MUMMERT: Yeah. It was probably
 24. empty.
 25. MR. ROBINSON: Derrick, I would

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1. prefer -- and I think Chief would agree. I would
 2. prefer not to see leaks. Period.
 3. MR. MUMMERT: Right. Exactly. But
 4. if they don't look, they won't find them, and if we
 5. find them, we need to fix them. And we do get steam
 6. leaks, you know, from, you know, the --
 7. MR. ROBINSON: Grommets.
 8. MR. MUMMERT: -- the grommets and
 9. stuff. So that's why it's on there is for them to
 10. visually check. I don't want to go down there and
 11. see something hissing and not tell me, because then
 12. I -- if I'm not there that day, it may go two or
 13. three days before I get there and it may already be
 14. too late. It could be a matter of tightening up
 15. bolts instead of replacing a gasket. So yes, I want
 16. them to look for that.
 17. MR. BAUGHMAN: How much experience
 18. have you got in operating a boiler, Derrick?
 19. MR. MUMMERT: The last time I --
 20. well, I've been here five years. Before that, I was
 21. in the Coast Guard on an icebreaker. I ran main
 22. compulsion boilers, salt water systems, old mud
 23. drums and --
 24. MR. BAUGHMAN: A little different
 25. than the private sector, but --

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1. MR. MUMMERT: Yeah. I used to stand
 2. inside those, but I can't do that here.
 3. MR. BAUGHMAN: Good. Under G-9, or
 4. on page G-9, Milan General Hospital Job Description,
 5. job title, respiratory therapist. Under the job
 6. summary/scope of responsibility, is there anywhere
 7. under that job summary/scope of responsibility the
 8. boiler -- or the attendants of the boiler?
 9. MR. MUMMERT: Not under that, but
 10. it's down under --
 11. MR. NEVILLE: Under essential --
 12. MR. MUMMERT: -- the essential
 13. functions.
 14. MR. NEVILLE: Yeah.
 15. MR. BAUGHMAN: I see it under
 16. "essential job functions." I don't see it under
 17. scope of responsibility.
 18. MR. MUMMERT: Right.
 19. MR. BAUGHMAN: And so the job
 20. functions don't match the scope of responsibility.
 21. MR. MUMMERT: You're correct. Yeah.
 22. MR. NEVILLE: We can add --
 23. MR. BAUGHMAN: So I would --
 24. MR. NEVILLE: We can add wording to
 25. that as the facility directs.

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1. MR. BAUGHMAN: Well, I just want to
 2. make sure as a respiratory therapist gets handed
 3. this piece, which I'm sure they do, that they're
 4. understanding completely that under their scope of
 5. responsibility, that this is there and -- gee whiz,
 6. if I was a trained respiratory therapist and that
 7. was my scope of education and training --
 8. MR. MUMMERT: It might scare them
 9. from coming in there. Yeah.
 10. MR. BAUGHMAN: -- and then they say,
 11. oh, yeah, by the way, let's walk down to the boiler
 12. room.
 13. MR. MUMMERT: Right.
 14. MR. BAUGHMAN: And this is -- it's
 15. not under your responsibility, but you're also going
 16. to be responsible for -- what horsepower boilers are
 17. these?
 18. MR. MUMMERT: 150.
 19. MR. BAUGHMAN: 150-horse boilers.
 20. Yeah. So at any rate, if --
 21. MR. MUMMERT: Right.
 22. MR. BAUGHMAN: Yeah. If you make the
 23. paperwork jive -- I just can't really imagine that
 24. these people that do a wonderful job at what they're
 25. trained to do would really feel comfortable and be

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1. confident at doing this.
2. MR. MUMMERT: I understand.
3. MR. BAUGHMAN: And that's not a
4. dis --
5. MR. MUMMERT: Right.
6. MR. BAUGHMAN: -- on any person, I'm
7. just saying that in the health care environment --
8. it'd be like taking the surgeon and saying, hey, you
9. do a great job, but you're going to need to take
10. care of the boilers, too.
11. MR. MUMMERT: Actually -- I won't go
12. there, but -- I have surgeons thinking they're
13. mechanics sometimes.
14. MR. BAUGHMAN: I understand.
15. MR. MUMMERT: So I'll just let it go
16. at that.
17. MR. BAUGHMAN: I would not feel
18. comfortable in somebody asking me, Dave, by the way,
19. you mind monitoring this heart/lung machine for a
20. few minutes? Okay. Thanks, Derrick.
21. MR. MUMMERT: You're thinking trauma
22. centers. You're thinking -- we're not thinking
23. Milan respiratory. There's a big difference.
24. MR. BAUGHMAN: I'm sure.
25. MR. PISCHKE: I have some mixed

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1. feelings, myself. As I truly understand, you know,
2. the size of an operation can dictate or mandate
3. who -- you know, how many people you -- specialists
4. you can have doing different jobs. And so I can
5. relate to that, and I've been put in those similar
6. situations before. But I still have some concern
7. about the scope of the knowledge that's required.
8. And I guess as long as there's a
9. really sound training plan and a training program
10. and a validation -- or verification of that
11. training, you know, I feel much better about it.
12. Because, you know, I'm sure these folks are, you
13. know, capable enough of learning this information.
14. You know.
15. MR. NEVILLE: Now, when you're
16. talking of the training, do you mean the variance
17. training or training to operate a boiler or both?
18. MR. PISCHKE: Well, whatever they're
19. called upon to do.
20. MR. NEVILLE: Yes.
21. MR. PISCHKE: You know, especially in
22. this --
23. MR. NEVILLE: Okay.
24. MR. PISCHKE: -- in this variance
25. training. But if they're called upon to do

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1. something, we need to understand that they've been
2. trained and that that training has been verified or
3. validated. That -- okay. They understand. They're
4. proficient at whatever they're doing. I mean, if
5. we -- if the person doing it is a trained boiler
6. operator, we know that they've had the proper
7. training and proficiency. When somebody's not, we
8. don't know what they have.
9. MR. NEVILLE: Correct.
10. MR. PISCHKE: And so as long as we
11. have a solid training program and a verification of
12. that training, that they got it, they understand it,
13. they understand what they need to do, they're
14. comfortable with it, so on and so forth, it doesn't
15. really bother me what their other skills are. They
16. may be skilled at a lot of things that, you know,
17. don't come into play. I guess that's my take on the
18. whole thing.
19. MR. BOWERS: And I feel like the same
20. way. You know. If you look at the importance of
21. the job, you're talking about, you know, you've got
22. it 40 hours manned by a trained operator, 120 hours
23. is basically with somebody -- not that a respiratory
24. therapist. I'm sure they could be the best boiler
25. operator there is. The problem is, when it comes

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1. down to saving a life here or operating a boiler, of
2. course, saving a life is a lot more important. You
3. know.
4. And that -- if you had somebody like
5. a janitor, he could throw down a mop and go check
6. the boilers, but you can't throw down a patient
7. and just go check the boilers when you've got
8. alarms going off. It just seems like the most
9. important job they're to do is work on a patient.
10. Definitely boilers are going to be secondary to
11. them.
12. It just scares me that you've got --
13. you know, they have a more important job to do.
14. And even though the boilers are way up there
15. important -- I mean, you could do a lot of damage,
16. kill a lot of people. You know. But if they're
17. working on a patient, they just can't -- you've
18. got alarms going off. It just seems like that is
19. not a good choice to have a respiratory therapist,
20. or anybody who's got to work on patients, checking
21. boilers. That's my opinion. Just --
22. MR. PISCHKE: It wouldn't be the
23. first time -- I mean, that --
24. MR. BOWERS: Oh, no.
25. MR. PISCHKE: -- we've seen this --

1. MR. BOWERS: No. No.
 2. MR. PISCHKE: -- with nurses or, you
 3. know, nurses stations.
 4. MR. BOWERS: Yeah. That's right.
 5. MR. PISCHKE: Things like that.
 6. MR. BAUGHMAN: So I'm just going to
 7. interject this, Derrick, because you've got a good
 8. background working with the Coast Guard and with
 9. propulsion and boilers, I take it, within the coast
 10. guard. I feel like you've been put in a position of
 11. bringing something to the table that you may not
 12. really fall in step with, from the standpoint of
 13. safety, but you've been put in a position of saying,
 14. I've got to bring this to the --
 15. MR. MUMMERT: Exactly.
 16. MR. BAUGHMAN: Okay.
 17. MR. MUMMERT: Yeah.
 18. MR. BAUGHMAN: And I -- you know,
 19. it's easy enough to see, but I thought, you're very
 20. intelligent and competent and you have a good
 21. background in mechanical operation, i.e. within the
 22. boiler end of it. And so to say, Dave, or any of
 23. us, yes, I'm doing this because it enhances safety.
 24. It's -- you know, I'm on board with this, you're put
 25. in a position of having to bring something to the

1. table from --
 2. MR. MUMMERT: A requirement.
 3. MR. BAUGHMAN: Yes. And it puts you
 4. in a pickle, and we're basically doing it because of
 5. manpower.
 6. MR. MUMMERT: Exactly. That's
 7. exactly why we're here.
 8. MR. BAUGHMAN: Yeah. And so
 9. understanding that -- and I understand. For me,
 10. it's all about safety. That's why we're here.
 11. MR. MUMMERT: Yes.
 12. MR. BAUGHMAN: And this equipment
 13. carries such a potential for catastrophic death,
 14. injury, or destruction, and we want to make sure
 15. that we attend to all of it and not do this as some
 16. kind of get-out-of-jail-free card.
 17. MR. MUMMERT: Yes. I agree.
 18. MR. BAUGHMAN: And so, henceforth the
 19. questions, henceforth the -- going through this to a
 20. higher degree. And I want to make sure that your
 21. input is given on how you might make things
 22. different, how you might have ideas of making things
 23. better than what we've got presented, because what's
 24. presented, I have a hard time wrapping my arms
 25. around it.

1. MR. MUMMERT: Yeah. I can only tell
 2. you the building's been there since 1965, and that's
 3. how it's been ever since 1965. And it's -- the
 4. reason I found out I had to do this, because I found
 5. the old one had expired and that you all approved,
 6. and it was the same group of people, nothing's
 7. changed. We're still training the same group of
 8. people. I mean, I know that's not --
 9. MR. BAUGHMAN: No.
 10. MR. MUMMERT: -- an answer, but
 11. that's what I'm dealing with.
 12. MR. BAUGHMAN: I understand.
 13. MR. PISCHKE: There's some relevance
 14. to that.
 15. MR. BAUGHMAN: Yeah.
 16. MR. PISCHKE: I mean, when you have a
 17. program and it has been successful, there's some
 18. relevance to that.
 19. MR. BAUGHMAN: Absolutely.
 20. MR. BOWERS: So you've had a variance
 21. for a number of years.
 22. MR. MUMMERT: Sure.
 23. MR. BOWERS: And you've been doing
 24. this and never had any problem?
 25. MR. MUMMERT: Well, I've only been

1. there since 2010.
 2. MR. BOWERS: Okay. Have you had a
 3. problem in the last seven years?
 4. MR. MUMMERT: No. No.
 5. MR. BOWERS: And they're doing their
 6. checks, the respiratory -- they're doing their
 7. checks and --
 8. MR. MUMMERT: Yes.
 9. MR. PISCHKE: Mr. Robinson?
 10. MR. ROBINSON: What has happened
 11. is -- backtracking through our variance
 12. identification process, we've identified a lot of
 13. variances that are out there, and we've started to
 14. make phone calls. And the phone calls are specific
 15. in question: What are you doing? And we're finding
 16. out that, such as Derrick, he's had a variance, but
 17. it's obsolete.
 18. So now, we ask him the questions. If
 19. they've got equipment changes or editorial
 20. changes, if that's the case, then it has to come
 21. before the Board if it's an equipment change.
 22. That's why Derrick's here today.
 23. MR. MUMMERT: Yes.
 24. MR. BAUGHMAN: The way you've got
 25. your E-stops installed presently, describe how -- if

1. we've got a failure in the boiler room, describe
2. what happens.
3. MR. MUMMERT: The E-stops, there's
4. one by each exit door coming out of the boiler room.
5. There's only two exits out of the boiler room. When
6. you hit it, no matter which boiler, there's one
7. switch for both boilers, and it kills the field
8. shutoff, which kills also the main board, as well.
9. MR. BAUGHMAN: So it's wired into the
10. gas valves --
11. MR. MUMMERT: Yes.
12. MR. BAUGHMAN: -- themselves?
13. MR. MUMMERT: Yes.
14. MR. BAUGHMAN: Okay.
15. MR. MUMMERT: That was a question
16. that came up in March and I had to go back and
17. verify it.
18. MR. BAUGHMAN: That's good.
19. MR. MUMMERT: And we tested it to
20. make sure.
21. MR. ROBINSON: That's good.
22. MR. BAUGHMAN: Yeah.
23. MR. ROBINSON: That's the code.
24. MR. BAUGHMAN: You're doing -- going
25. back to the computer, calling out -- describe to me

1. how the Hawk system communicates. Does it
2. communicate via the computer?
3. MR. MUMMERT: It feeds the
4. information through the computer so you can do a
5. visual look at everything, but it also calls the
6. phones. It's like a separate system. There's,
7. like, a computer system and a phone system.
8. MR. NEVILLE: Expanded annunciator.
9. MR. MUMMERT: Yeah.
10. MR. BAUGHMAN: Okay. So it is using
11. that via an Internet-based --
12. MR. MUMMERT: Yeah.
13. MR. BAUGHMAN: -- web-based.
14. MR. MUMMERT: Ethernet, Internet,
15. yeah.
16. MR. NEVILLE: Right. For the phone.
17. Right. For the phone text messages.
18. MR. MUMMERT: Yes.
19. MR. ROBINSON: You've got back-up
20. power for the boiler?
21. MR. MUMMERT: Yes.
22. MR. ROBINSON: A generator?
23. MR. MUMMERT: Yes.
24. MR. ROBINSON: Does it also supply
25. power to the computer?

1. MR. MUMMERT: Yes.
2. MR. BAUGHMAN: Have there been any
3. computer issues specific there?
4. MR. MUMMERT: Not since I've been
5. there.
6. MR. BAUGHMAN: Super.
7. MR. MUMMERT: And we just upgraded it
8. with a new system. When we did the boilers, we
9. upgraded the system, as well. New monitors, new
10. CPUs, everything.
11. MR. PISCHKE: Are there any other
12. employees present, on-site, in other capacities --
13. you know, cleaning crews or security or anyone else
14. during -- you know, during off hours, weekends
15. and --
16. MR. MUMMERT: The maintenance is
17. security.
18. MR. PISCHKE: Okay.
19. MR. MUMMERT: It's only there when
20. we're there. Off hours, housekeeping is not there
21. 24/7. They leave, maybe 11:00 o'clock at night.
22. The only ones there -- it's minimal-staffed at after
23. hours. You've got maybe one person in the lab.
24. You've got your staff on the fourth floor with the
25. inpatients, maybe anywhere. Depending on the number

1. of patients, any -- it could one to three people
2. there. Usually, there's one doctor on staff 24/7.
3. Two RTs, one x-ray -- or two x-rays, depending on --
4. again, inpatient level. And maybe three or four
5. nurses. That's the entire after-hours past
6. midnight.
7. MR. PISCHKE: I'm just wondering if
8. there was -- there could be any other positions that
9. would make more sense to have them in the
10. progression of responsibility.
11. MR. MUMMERT: We looked originally at
12. doing housekeeping, but they have such a big
13. turnover. The RTs -- none of them's left since I've
14. been there and some of them were there a lot longer
15. before I got there. The housekeeping seems like it
16. turns over monthly --
17. MR. PISCHKE: Okay.
18. MR. MUMMERT: -- because of the pay
19. and the job, I think.
20. MR. BOWERS: So I guess you feel
21. pretty confident in the RTs doing that job.
22. MR. MUMMERT: I do.
23. MR. BOWERS: Because you've been
24. doing it seven years now, right?
25. MR. MUMMERT: Yes. And there's never

1. been an issue. And I actually quiz them, too, and
 2. so does the administrator. We do what's called an
 3. environmental care survey where we pick a different
 4. department every month and we quiz them. We've got
 5. a set list of questions of stuff, and we'll actually
 6. quiz them.

7. And then when it gets to the RT,
 8. we'll ask them specific -- how often are you going
 9. down there? What are you looking at? Do you know
 10. where the emergency stops are and stuff like that.

11. I'm also the safety officer. So --

12. MR. BOWERS: Okay.

13. MR. BAUGHMAN: So you came on in
 14. 2010.

15. MR. MUMMERT: Correct.

16. MR. BAUGHMAN: You got advised, when,
 17. that you needed to put this variance in place?

18. MR. MUMMERT: I didn't know nothing
 19. about a variance until I started doing the --

20. changing out the boilers, and I had to go with --
 21. getting the approval from Mr. Chapman to do the

22. boilers. And that's when I'm learning. And that --

23. MR. BAUGHMAN: Okay. So this has
 24. only been within recent --

25. MR. MUMMERT: In the last --

1. MR. NEVILLE: Yes.

2. MR. MUMMERT: -- two years --

3. MR. BAUGHMAN: Okay.

4. MR. MUMMERT: -- that I've even found
 5. out this was required.

6. MR. PISCHKE: How old was the
 7. original variance?

8. MR. MUMMERT: I think it expired in
 9. '98.

10. MR. ROBINSON: Approximately. Yes.
 11. Our records were really not very good, but the last
 12. official date of the origin on the manual said '98.

13. MR. BAUGHMAN: So when you came on
 14. board and started operating, how did we attend to
 15. the boilers?

16. MR. MUMMERT: They'd already had a
 17. plan in place. There was a guy who worked there
 18. when I took in, he was the senior maintenance guy.

19. He'd been there 38 years. So basically, he was
 20. telling me what to do and stuff, because I really
 21. didn't know. This is the only hospital I got that
 22. has boilers that requires that type of service.

23. Most everything else has got water heaters. So this
 24. is the only facility I got that has those boilers.

25. And so my training came from this guy that had been

1. there 38 years.

2. MR. BAUGHMAN: So he didn't pass
 3. along this variance?

4. MR. MUMMERT: I don't know that he
 5. even knew. I really don't know if he knew.

6. MR. BAUGHMAN: Okay.

7. MR. MUMMERT: I can't speak for him.

8. MR. BOWERS: But how would you
 9. operate the boiler on a -- would you check them
 10. every 20 minutes or were you checking every four
 11. hours?

12. MR. MUMMERT: They were doing four
 13. hours.

14. MR. BOWERS: Four hours. So you
 15. know, you were operating under a variance --

16. MR. MUMMERT: Yes.

17. MR. BOWERS: -- even though you
 18. didn't know you had a variance.

19. MR. MUMMERT: That's correct.

20. MR. BOWERS: But you were operating
 21. as you had a variance.

22. MR. MUMMERT: Yes.

23. MR. ROBINSON: Until we notified
 24. him --

25. MR. MUMMERT: Right.

1. MR. BOWERS: Yeah.

2. MR. ROBINSON: -- that he was in
 3. violation.

4. MR. PISCHKE: Is it safe to assume
 5. that if they would have had continuance of that
 6. variance from -- as we went along --

7. MR. ROBINSON: Predecessors?

8. MR. PISCHKE: I'm sorry?

9. MR. ROBINSON: From my predecessors?

10. MR. PISCHKE: Yeah. Would --

11. MR. ROBINSON: They'd be okay.

12. MR. PISCHKE: Would we be asking
 13. these same questions? I guess, that's --

14. MR. BAUGHMAN: Yeah. I think so.

15. MR. PISCHKE: Would we --

16. MR. ROBINSON: That's a good
 17. question.

18. MR. MUMMERT: Well, I put new boilers
 19. in, so it would have had to have been redone anyway.

20. MR. PISCHKE: Yeah.

21. MR. BAUGHMAN: Well, I'm just
 22. wondering if that original variance had the same
 23. personnel monitoring, RE (sic) -- a respiratory
 24. therapist --

25. MR. MUMMERT: Yeah. I used them when

1. I drew the first one up in March that y'all tore me
2. up on (verbatim).
3. MR. PISCHKE: So it did -- yeah.
4. MR. BAUGHMAN: Okay. Interesting.
5. MR. PISCHKE: Yeah.
6. MR. ROBINSON: I've got --
7. MR. PISCHKE: Go ahead.
8. MR. ROBINSON: Just two questions.
9. On your page 8, Item 3, 5; is that a true statement?
10. 24/7.
11. MR. MUMMERT: I'm sorry, where was
12. that again?
13. MR. ROBINSON: Page 8.
14. MR. MUMMERT: Uh-huh. Oh, number 5.
15. MR. ROBINSON: Under "Procedures,"
16. daily -- normal daily duties, Item 5. Is that --
17. MR. MUMMERT: Yeah. Well --
18. MR. ROBINSON: -- a true statement?
19. MR. MUMMERT: -- what we're calling
20. an attendant is the RT or the maintenance.
21. MR. NEVILLE: Well --
22. MR. ROBINSON: Well, that's not --
23. MR. NEVILLE: -- that's the rub here,
24. I think is that --
25. MR. ROBINSON: That's not a true

1. statement.
2. MR. NEVILLE: It would be a true
3. statement if they staffed, you know, the general
4. maintenance mechanics all three shifts. You know.
5. Putting the RT as the boiler attendant, even though
6. they're monitoring, this variance does not reflect
7. that. They -- if that was the case, we would need
8. to add them to --
9. MR. ROBINSON: That statement.
10. MR. NEVILLE: -- page seven --
11. MR. ROBINSON: But as --
12. MR. NEVILLE: -- as a monitor.
13. MR. ROBINSON: As it stands --
14. MR. NEVILLE: But as it stands, that
15. is not the case. Yeah. We do not list them as a
16. boiler attendant.
17. MR. ROBINSON: So it needs to either
18. be --
19. MR. MUMMERT: Monitor?
20. MR. NEVILLE: Right. It needs to
21. either be staffed by more mechanics to operate --
22. MR. ROBINSON: So it's not --
23. MR. NEVILLE: -- in this manner --
24. MR. ROBINSON: -- really a true
25. statement. It needs to be cleaned up.

1. MR. NEVILLE: That -- I believe that
2. it should be -- like, number five should say, you
3. know, a boiler attendant should be on site at all
4. times. Because if you're monitoring under the
5. variance --
6. MR. ROBINSON: Well, it says that,
7. but I'm just asking if it's true. I don't know.
8. MR. NEVILLE: Yeah. Yeah.
9. MR. ROBINSON: Is it true? Yes or
10. no?
11. MR. NEVILLE: Yes. It needs to be
12. true to operate under --
13. MR. BAUGHMAN: That's not what he's
14. asking.
15. MR. NEVILLE: I mean, any --
16. MR. MUMMERT: As it is now, it's not.
17. MR. NEVILLE: As it is now, no.
18. MR. ROBINSON: So it's not true.
19. MR. MUMMERT: That's right. As it is
20. right now.
21. MR. ROBINSON: That's all. That's
22. all.
23. MR. NEVILLE: Right.
24. MR. MUMMERT: Yeah.
25. MR. ROBINSON: Okay. So you would

1. have to clean it up some. Okay.
2. MR. PISCHKE: Is that possible to
3. clean that up easily or to change that?
4. MR. NEVILLE: Well, I don't think
5. that the intent there -- I think we would need to
6. add the -- a -- under the boiler attendant, if we
7. need to add another individual there, as a
8. respiratory therapist that only monitors and you
9. still have a respiratory therapist at the remote
10. station, then that can work. So --
11. MR. ROBINSON: Do what you say, say
12. what you do.
13. MR. NEVILLE: That's -- so that's
14. what we need to add. I don't think we need to
15. change, as far as the boiler attendant should be on
16. site at all times.
17. MR. ROBINSON: Okay. Okay.
18. MR. NEVILLE: So --
19. MR. PISCHKE: What's your second?
20. MR. ROBINSON: I was -- I didn't see
21. anything on a DA tank. Do you have one?
22. MR. MUMMERT: No.
23. MR. NEVILLE: No.
24. MR. ROBINSON: You don't.
25. MR. MUMMERT: No.

1. MR. ROBINSON: Okay. So are you --
 2. your steam is condensate and return. So it's --
 3. MR. MUMMERT: Yes.
 4. MR. ROBINSON: -- a 24/7 continuous
 5. loop. Okay. No more questions.
 6. MR. PISCHKE: Anyone else?
 7. MR. ROBINSON: Go ahead, Dave. I
 8. defer.
 9. MR. PISCHKE: Go ahead, Dave. We
 10. know you have at least one more in you.
 11. MR. BAUGHMAN: No. I'm just -- for
 12. one, I really respect Derrick and --
 13. MR. ROBINSON: Yeah. I do, too.
 14. MR. BAUGHMAN: -- the position you're
 15. in, the honesty, the candor. You're trying to do
 16. everything you can with what you've got, and I'm
 17. impressed by that, Derrick.
 18. MR. BOWERS: Yeah. I think you did a
 19. good job and you're controlling it pretty good.
 20. MR. BAUGHMAN: What I don't want to
 21. do is to be having a discussion down the road on any
 22. kind of incident and thinking about this discussion
 23. and going, gosh -- you know. But everybody's doing
 24. what they can and you bring to the table that the
 25. RT, in your estimation, is competent and that you've

1. got competent maintenance personnel.
 2. To that extent, how long have those
 3. personnel, the senior and the fella in Humboldt
 4. and part-time, how long have they been on board?
 5. MR. MUMMERT: The general tech in
 6. Humboldt's been there 14 years. The -- one of the
 7. senior techs has been there 10. The other one's
 8. been there nine.
 9. MR. BAUGHMAN: And the part-time?
 10. MR. MUMMERT: Oh. That was the
 11. part-time. The one senior tech's new. He's been
 12. there less than a year or right at a year now.
 13. MR. BAUGHMAN: Okay. I'm good.
 14. MR. PISCHKE: How about the
 15. inspector? I mean, do we have any more input from
 16. inspectors that we can --
 17. MR. DICKERSON: Yeah. I'll say
 18. something.
 19. MR. BAILEY: Identify yourself.
 20. MR. DICKERSON: I'm Richard
 21. Dickerson, a State boiler inspector. These are in
 22. my area.
 23. West Tennessee Health Care is the
 24. biggest hospital between Memphis and Nashville.
 25. It's located in Jackson. And this facility in

1. Milan, it's probably 15 miles. So any major
 2. incidents, they go to Jackson. And this is just,
 3. I would call, a little, minor hospital. You know.
 4. And I mean, they don't do major
 5. surgeries. Everything is brought to Jackson. You
 6. know. And I mean, it's a real small hospital.
 7. You know. And basically, that's about it.
 8. MR. BAUGHMAN: Is there any surgery
 9. that's performed there?
 10. MR. MUMMERT: They have --
 11. occasionally do surgery. Yeah. They do a lot of
 12. GIs, mostly GIs.
 13. MR. BAUGHMAN: So they use the
 14. boilers -- do they have an autoclave that their --
 15. MR. MUMMERT: Yes.
 16. MR. BAUGHMAN: -- sterilization --
 17. MR. MUMMERT: Yes.
 18. MR. BAUGHMAN: Okay.
 19. MR. BOWERS: Without -- go ahead.
 20. MR. BAUGHMAN: So if there was a
 21. boiler alarm, the one E-stop's going to kill both
 22. boilers. So if we're in a position of sterilization
 23. or in the autoclave, it's going to shut down that
 24. process --
 25. MR. MUMMERT: Yes.

1. MR. BAUGHMAN: -- at that point in
 2. time.
 3. MR. MUMMERT: Yeah. And it
 4. records -- the sterilizer records any shutdowns,
 5. whether it finishes normally or it doesn't finish
 6. normally. And then if it doesn't finish normally,
 7. they have to recycle it, do it again. We have a
 8. process in place for all that.
 9. MR. BAUGHMAN: If both boilers are
 10. shut down, how would the tech identify what the
 11. problem is?
 12. MR. MUMMERT: If they shut down?
 13. Both of them? It's got an alarm panel. It'll tell
 14. you.
 15. MR. BAUGHMAN: Okay.
 16. MR. MUMMERT: And they also print it
 17. out. It shows up -- certain alarms also show up on
 18. the -- like the other day we had a flame failure,
 19. and it'll actually say that on the phone when you
 20. get a text.
 21. MR. BAUGHMAN: What if there's an
 22. alarm that doesn't lock the boiler out? A primary
 23. low-water cutoff goes out on alarm.
 24. MR. MUMMERT: Well, I've never seen
 25. that happen.

1. MR. BAUGHMAN: Resets itself. It's
 2. going to alarm typically before the secondary does.
 3. It goes down, the boiler goes off an alarm -- I
 4. guess my question is, which low-water cutoff is the
 5. alarm tied to that causes a person to hit the alarm?
 6. In other words, the primary low-water cutoff is in
 7. the control circuit. Both of them have alarm
 8. circuits in it, but which one is the alarm hooked up
 9. to?
 10. MR. MUMMERT: I wouldn't know without
 11. going back and researching it.
 12. MR. BAUGHMAN: Okay. I'd just be
 13. interested, because what I've seen is the primary
 14. low-water cutoffs will shut the boiler down, the
 15. boiler goes into an alarm, if the alarm's hooked up
 16. to it.
 17. MR. MUMMERT: Correct.
 18. MR. BAUGHMAN: If it's hooked up to
 19. it, the boiler fills back up with water from
 20. whatever the deal is, the alarm goes away. The
 21. boiler's gone off an alarm, but it hasn't tripped a
 22. manual reset. And so what I'm wondering is, is just
 23. the capabilities of going back in, figuring these
 24. things out, but taking that a step further through
 25. discussions, I'm always interested in what alarms

1. are actually hooked up that dictate the manual
 2. reset, because some alarms don't.
 3. MR. MUMMERT: Right.
 4. MR. BAUGHMAN: And so if an alarm
 5. goes off, it's gone off there at the remote station
 6. and then the alarm goes away, I'm just wondering how
 7. the attendant would view that? If they would say,
 8. well, that was odd, or if they would go ahead and
 9. shut anything down or what have you.
 10. MR. MUMMERT: If it went off at the
 11. attendants station, it also went off on five
 12. telephones at the same time. Somebody better be
 13. calling, because I -- the first thing I do is call
 14. whoever's on call and say, did you check this?
 15. MR. BAUGHMAN: Even if it reset
 16. itself --
 17. MR. MUMMERT: Yes.
 18. MR. BAUGHMAN: -- without having
 19. to --
 20. MR. MUMMERT: I want to know why.
 21. MR. BAUGHMAN: Okay. Good. Exactly.
 22. Okay.
 23. MR. MUMMERT: Yeah. I'm scared of
 24. boilers, too.
 25. MR. BAUGHMAN: Okay.

1. MR. MUMMERT: I'm not an RT.
 2. MR. BAUGHMAN: Okay. That's good.
 3. Yeah.
 4. MR. BOWERS: So the question I
 5. have -- besides steam for sterilization -- which the
 6. only time you're going to use the steam for
 7. sterilization is probably during the day if you're
 8. going to -- because you're not going to have surgery
 9. at night.
 10. MR. MUMMERT: That's correct.
 11. MR. BOWERS: So you're going to have
 12. surgery -- so you're going to have technicians there
 13. during the day. So besides the steam for
 14. sterilization, what else are the boilers -- main
 15. function of the boiler -- what do they serve at the
 16. hospital?
 17. MR. MUMMERT: They have some patient
 18. heating coils and some that like PTAC units up there
 19. on the patient rooms. They also have dietary -- use
 20. them for, like, steam pots to cook in. That's
 21. pretty much it. Mostly, it's heat.
 22. MR. BOWERS: So if the boiler is shut
 23. down --
 24. MR. MUMMERT: It'd get cold.
 25. MR. BOWERS: It'd eventually get

1. cold.
 2. MR. MUMMERT: Uh-huh.
 3. MR. BOWERS: So that's the worst
 4. thing that's going to happen.
 5. MR. MUMMERT: Yes.
 6. MR. BAUGHMAN: Does Morgan &
 7. Thornburg perform the maintenance on the boilers?
 8. MR. MUMMERT: Yes.
 9. MR. BAUGHMAN: Okay. Including
 10. combustion?
 11. MR. MUMMERT: Yes.
 12. MR. BAUGHMAN: Very good.
 13. MR. MUMMERT: I do have a chemical
 14. guy that does the water side of it. That tests the
 15. water, treats the water.
 16. MR. BAUGHMAN: And so you get a
 17. service report on what it is that they've --
 18. MR. MUMMERT: Yes. That's correct.
 19. MR. BAUGHMAN: -- performed and keep
 20. that in a service record?
 21. MR. MUMMERT: I keep that in the log.
 22. Yeah.
 23. MR. BAUGHMAN: Super.
 24. MR. PISCHKE: If one of these remote
 25. alarms go off and an RT isn't there, would anyone

1. else know enough to shut it down?
2. MR. MUMMERT: We've got a sign with
3. an instruction on it, but the normal procedure is,
4. immediately call the RT, if it's after hours.
5. They'll need to call them and, at the same time, you
6. know, shut it down. If they can't, the RT will go
7. down and then see what caused it.
8. MR. PISCHKE: I mean, is that
9. alarm -- I guess --
10. MR. NEVILLE: Yeah. It emits a loud
11. alarm.
12. MR. PISCHKE: -- obvious enough that
13. anybody walking by would know to --
14. MR. MUMMERT: I've got an audible
15. alarm in the ER. There's an audible alarm on the
16. boiler room. Between the two, it's 192 feet. No
17. matter where you are on that first floor, you're
18. going to hear an alarm. It's loud.
19. MR. BAUGHMAN: Is the reset -- do you
20. have a reset capability off of the computer screen
21. itself?
22. MR. MUMMERT: No.
23. MR. BAUGHMAN: Okay. Everything's
24. hard --
25. MR. MUMMERT: You'd have to go down

1. to the boiler.
2. MR. BAUGHMAN: And at the nurses
3. station, how is that reset also, because they also
4. have to --
5. MR. MUMMERT: They have to flip a
6. switch -- the toggle switch will turn it back on,
7. but they cannot turn it on from there (verbatim).
8. That just gives them the power to go back -- because
9. when it goes down, if it's off, they have to call
10. maintenance in. There's no getting around that.
11. Whoever's on call will have to come in and start it
12. back up. They have to check it. They turn it back
13. on, but it has to be turned on in the ER before they
14. can even manually start it at the boiler itself.
15. MR. BAUGHMAN: So in that station,
16. you said, toggle switch. Is there one for each
17. boiler?
18. MR. MUMMERT: Yes.
19. MR. BAUGHMAN: But the E-stops kill
20. both boilers.
21. MR. MUMMERT: In the remote place,
22. they each have a single button. The boiler room has
23. one for both boilers.
24. MR. NEVILLE: At the exit.
25. MR. MUMMERT: The remote attendant

1. station has one, and it's labeled boiler one, boiler
2. two, and they have an indicator light which one's
3. on.
4. MR. BAUGHMAN: So the only places
5. we've got E-stops at are at the boiler room and
6. where else?
7. MR. MUMMERT: You've got one at each
8. exit in the boiler room, and they can kill them both
9. at the emergency room.
10. MR. BAUGHMAN: Okay. But the
11. emergency room --
12. MR. MUMMERT: Has one --
13. MR. BAUGHMAN: -- kills both boilers
14. or one for each boiler?
15. MR. MUMMERT: One for each boiler.
16. MR. BAILEY: Excuse me.
17. MR. BAUGHMAN: Yes, sir.
18. MR. BAILEY: Y'all try not to talk
19. over each other. Be considerate of the court
20. reporter. And plus, it makes a cleaner record.
21. MR. BAUGHMAN: Thank you, brother.
22. Sorry.
23. So what I'm getting at is a little
24. disparity on the shutoffs. In other words, if
25. there's an alarm at the remote station, i.e., the

1. nurses station, they're going to shut off or they
2. have the capabilities of shutting off either
3. boiler, but it's not going to shut off both
4. boilers.
5. MR. MUMMERT: Correct.
6. MR. BAUGHMAN: Okay. Is that how you
7. would like it?
8. MR. CHAPMAN: That's the way it is.
9. MR. BAUGHMAN: Okay.
10. MR. CHAPMAN: Yeah. And that the
11. egress for one E-stop at the door has got to kill
12. both boilers. But in the remote station, it could
13. be individual ones.
14. MR. BAUGHMAN: And why is that?
15. MR. CHAPMAN: Because normally, if
16. it's something that's happened, it's an individual
17. boiler.
18. MR. BAUGHMAN: Uh-huh.
19. MR. CHAPMAN: But if it's at the
20. boiler room, if something goes on, you want to kill
21. everything in it.
22. MR. BAUGHMAN: But yet, the
23. attendant, when he goes down, the boiler's off, is
24. he not also disabling, or does he hit the E-stop in
25. there in the boiler room or are we just only

1. disabling the one in the remote station?
 2. MR. CHAPMAN: Okay. For the remote
 3. station.
 4. MR. BAUGHMAN: Uh-huh.
 5. MR. CHAPMAN: Okay. That is set up
 6. for -- of course, they're just monitors or whatever
 7. name they're calling them.
 8. MR. BAUGHMAN: Okay.
 9. MR. CHAPMAN: Okay. It is for
 10. monitoring the boilers. You know. Normally, when
 11. they get an alarm, it's a certain boiler. So they
 12. can hit that button to isolate that boiler.
 13. MR. BAUGHMAN: Okay.
 14. MR. CHAPMAN: But at the -- from --
 15. the CSD-1 states that it must be at the door, one
 16. E-stop to kill all boilers.
 17. MR. BAUGHMAN: Okay.
 18. MR. CHAPMAN: Which is not part of
 19. the boiler variance.
 20. MR. BAUGHMAN: Okay. And CSD-1
 21. specifically -- and that's for another discussion, I
 22. guess. Thank you, Sam.
 23. MR. CHAPMAN: All right.
 24. MR. FOX: The monitoring station that
 25. they have is not, per se, Dave, an E-stop. The --

1. that boiler can be running and the nurse could flip
 2. that switch if they want to. That would not shut
 3. that boiler off unless that boiler goes out on alarm
 4. first and sends the signal. That's normally how
 5. that works.
 6. MR. MUMMERT: Yes.
 7. MR. FOX: Do you follow what I'm
 8. saying?
 9. MR. BAUGHMAN: I do.
 10. MR. BOWERS: And once they shut that
 11. off, it's pretty well locked out --
 12. MR. MUMMERT: Correct.
 13. MR. BOWERS: -- until you get there.
 14. MR. MUMMERT: Yes.
 15. MR. BOWERS: And once they hit that
 16. button, it's --
 17. MR. MUMMERT: It has to be somebody
 18. from maintenance.
 19. MR. BOWERS: To turn it back on.
 20. MR. PISCHKE: Do we have enough
 21. information and knowledge on their program? I guess
 22. I'd like to emphasize that this -- and correct me if
 23. I'm wrong. This is more or less a continuance of
 24. their old variance with the modification of the
 25. boilers and modifications to their program. It's --

1. is that correct? Is that what we're --
 2. MR. NEVILLE: That's what we're
 3. presenting. Yes.
 4. MR. PISCHKE: Presenting. So it's --
 5. MR. BAUGHMAN: Well, it states it's a
 6. new variance.
 7. MR. NEVILLE: Right. This -- I mean,
 8. this is -- they're new boilers, so it's considered a
 9. new variance.
 10. MR. PISCHKE: Okay.
 11. MR. NEVILLE: The history is that
 12. they've had a previous variance, but it -- I mean,
 13. it has to be classified as a new variance, because
 14. we're not tracking changes from an old variance.
 15. We're giving you new information.
 16. MR. ROBINSON: Yeah. We couldn't
 17. even find the original manual.
 18. MR. PISCHKE: But all of the players
 19. in this have been abiding by this --
 20. MR. NEVILLE: Yes.
 21. MR. PISCHKE: -- historic -- correct?
 22. That's the one thing that gives me mixed feelings
 23. about --
 24. MR. BAILEY: Did y'all answer his
 25. last question or did you just shake your head?

1. Because she needs a verbal answer. You had asked a
 2. question. I didn't hear an answer and then you went
 3. on. I thought they answered. I think they shook
 4. their head. Did you get the answer?
 5. THE REPORTER: I didn't get anything,
 6. no.
 7. MR. BAILEY: Okay.
 8. MR. MUMMERT: What was the question?
 9. MR. PISCHKE: Which -- yeah. Can you
 10. repeat the -- which question I was asking?
 11. THE REPORTER: I think you asked --
 12. hang on. I've got to look back. I think you said,
 13. but all the players in this have been abiding by
 14. this historically, correct?
 15. MR. MUMMERT: Yes.
 16. MR. PISCHKE: Okay. Any other
 17. discussions, questions?
 18. MR. BOWERS: I guess I'd motion to
 19. close discussion.
 20. MR. PISCHKE: The motion, I guess,
 21. would be to approve with -- I guess I'll entertain a
 22. motion to approve with the changes --
 23. MR. NEVILLE: With modifications.
 24. Right. One of the changes, I believe, needs to
 25. happen is to add the respiratory therapist as a

1. boiler attendant, as well. Not just the remote
 2. station, but as a boiler attendant. And, you know,
 3. with monitoring duties. So on page 7, I propose
 4. that we add the respiratory therapist there, because
 5. for those hours that they would be a boiler
 6. attendant, that would make page 8, number 5, you
 7. know, a boiler attendant should be on site at all
 8. times. That makes that statement accurate, as well.
 9. So I believe that's one of the
 10. changes that needs to be implemented for this to
 11. be accurate. Yes, sir.
 12. MR. BAUGHMAN: So James, what you're
 13. saying is that, not only for the purpose of the
 14. manual but also by Milan General Hospital, your
 15. hospital is going to need to make that change in the
 16. description. Not just the manual itself, but the
 17. hospital needs to --
 18. MR. NEVILLE: Right.
 19. MR. BAUGHMAN: -- be on board with
 20. that -- this is on page 7, boiler attendant
 21. procedures, personnel type.
 22. MR. NEVILLE: Right.
 23. MR. BAUGHMAN: So you'll need to get
 24. approval from the hospital itself that that's --
 25. MR. NEVILLE: And that was one of

1. your comments, I believe, on G-9 where you talked
 2. about the respiratory therapist and their job
 3. summary.
 4. MR. PISCHKE: Yeah. Right here.
 5. Yeah.
 6. MR. NEVILLE: And in order to do
 7. that, as far as -- we need to add them as a boiler
 8. attendant. They may only have monitoring duties,
 9. you know, every four hours, but --
 10. MR. PISCHKE: So that's there.
 11. MR. NEVILLE: -- their training needs
 12. to reflect that and their scope of responsibility.
 13. So that's what we're presenting.
 14. MR. PISCHKE: Any other specific
 15. revisions that we're going to call out to this?
 16. MR. NEVILLE: That's what we have
 17. right now. So --
 18. MR. PISCHKE: Okay. Do I have a
 19. motion to approve with the manual revisions that
 20. were stated?
 21. MR. BAUGHMAN: So moved.
 22. MR. PISCHKE: Do I have a second?
 23. MR. FOX: I'll second.
 24. MR. PISCHKE: Okay. All those in
 25. favor, say "aye."

1. MR. BOWERS: Aye.
 2. MR. BAUGHMAN: Aye.
 3. MR. PISCHKE: Aye.
 4. MR. FOX: Aye.
 5. MR. PISCHKE: No? Item passes for
 6. affirmative.
 7. MR. BAUGHMAN: Derrick, good job.
 8. MR. NEVILLE: Thank you.
 9. MR. MUMMERT: I feel like I just had
 10. a baby.
 11. MR. PISCHKE: You -- well, you did.
 12. You kind of did.
 13. MR. BAUGHMAN: Yeah. What are you
 14. going to name it?
 15. MR. MUMMERT: Thank you all. I
 16. appreciate your patience. And like I said, I've
 17. been trying to deal with this monster, and I hope to
 18. make everybody happy with the outcomes of it. And
 19. we'll put a good training together for everybody,
 20. not just --
 21. MR. PISCHKE: You've done a very
 22. good --
 23. MR. MUMMERT: So --
 24. MR. PISCHKE: -- at preparation and
 25. addressing our concerns.

1. MR. NEVILLE: Thank you.
 2. MR. MUMMERT: So thank you all.
 3. MR. PISCHKE: Thank you. Okay. The
 4. next item on the agenda is Item 17-14, Ergon
 5. Terminaling, Inc. Do we have representatives?
 6. MR. PASTOREK: Yes, sir.
 7. MR. PISCHKE: Please identify
 8. yourselves and present your case, please.
 9. MR. PASTOREK: Sure. Joel Pastorek
 10. with Ergon.
 11. MR. LAUDERDALE: Marc Lauderdale,
 12. Ergon.
 13. MR. PASTOREK: So good morning. I
 14. think all of you have a copy of the letter and
 15. attachments that we sent. We have sort of a unique
 16. situation, I guess, in that, we're not discussing a
 17. steam boiler today. We're talking about a thermal
 18. fluid heater.
 19. So Ergon operates a bulk storage
 20. facility in Chattanooga. We store products like
 21. asphalt, that require heat, in bulk storage tanks.
 22. So our method for heating is to use a thermal
 23. fluid heater. In this instance, we're discussing
 24. a Hopkins Volcanic Heater, which is -- was
 25. originally manufactured in 1977. When we --

1. MR. PISCHKE: Excuse me. I'm sorry.
 2. MR. PASTOREK: Uh-huh.
 3. MR. PISCHKE: I failed to ask if
 4. there was --
 5. MR. BAILEY: And I failed to remind
 6. you. So I share --
 7. MR. PISCHKE: If there are any
 8. conflicts in -- okay. Sorry about that.
 9. MR. PASTOREK: No worries.
 10. MR. PISCHKE: Please proceed.
 11. MR. PASTOREK: So Ergon --
 12. MR. PISCHKE: Thank you.
 13. MR. PASTOREK: -- constructed this
 14. facility in 1977. This unit was installed at that
 15. time. We have since replaced the pressure-retaining
 16. portion of the vessel in 2001. That unit is a
 17. 6 million BTU thermal fluid heater. It is -- the
 18. pressure tank portion was designed per ASME. It has
 19. an S stamp. It's rated for 150 PSI at 600 degrees
 20. Fahrenheit.
 21. We operate it below the temperature
 22. rating and pretty well below the pressure rating,
 23. as well. The deadhead pressure for the system is
 24. about -- a little less than 100 PSI. So we
 25. operate it below the pressure, below the

1. temperature.
 2. Generally, if you're familiar with a
 3. system like this, it's actually an open system.
 4. It's atmospheric. There's an expansion tank
 5. that's part of the system that allows for the oil
 6. to expand. All of the product that flows through
 7. the heater is in liquid state. It's not elevated
 8. in temperature above the boiling point and there's
 9. no vapor. So as I said, it's sort of an open
 10. system, open atmosphere and vented. So we
 11. circulate the oil through the heater.
 12. We were made aware -- I guess it's
 13. been inspected through the years by a third party.
 14. We have Hartford Steam Boiler, who performs our
 15. inspections. We were made aware last year that
 16. they were unable to locate a National Board Number
 17. on the unit. And so that kind of sent us into an
 18. inspection, just trying to verify whether or not
 19. it had fallen off or something like that, because
 20. we'd never been made aware of the issue before.
 21. As part of that inspection, we
 22. contacted the manufacturer, who confirmed that
 23. when it was constructed, that it was not -- there
 24. was no National Board registration. So we're in
 25. the interesting situation that we have a unit that

1. was designed and installed with an R stamp, per
 2. ASME code, but there was not a registration
 3. process for the National Board associated with it.
 4. So we are here today requesting that
 5. we use the manufacturer's number for the unit in
 6. lieu of a National Board Number for a Tennessee
 7. Special.
 8. MR. PISCHKE: Okay. Yes. I'd like a
 9. motion to discuss.
 10. MR. BAUGHMAN: So moved.
 11. MR. FOX: I'll second.
 12. MR. PISCHKE: Second? I went
 13. through -- I reviewed this, and I'm just trying to
 14. understand. The original vessel was registered with
 15. the State --
 16. MR. PASTOREK: No.
 17. MR. PISCHKE: -- was not -- was never
 18. registered with the State?
 19. MR. PASTOREK: No, sir.
 20. MR. LAUDERDALE: It's registered with
 21. the State, not registered with the National Board.
 22. MR. PISCHKE: I'm sorry.
 23. MR. LAUDERDALE: It's had a Tennessee
 24. Number.
 25. MR. PISCHKE: It's had a Tennessee

1. Number.
 2. MR. PASTOREK: Yes.
 3. MR. PISCHKE: Okay. So --
 4. MR. LAUDERDALE: There's an old
 5. Tennessee Number and a new Tennessee Number.
 6. MR. PASTOREK: Yeah.
 7. MR. PISCHKE: Okay. So the vessel
 8. had a Tennessee Number. The replacement part that
 9. was built under ASME Section 1 did not have a
 10. National Board Number associated with that either,
 11. right?
 12. MR. LAUDERDALE: Correct.
 13. MR. PASTOREK: That's correct. It
 14. does have a Tennessee Number --
 15. MR. PISCHKE: Okay.
 16. MR. PASTOREK: -- but it does not
 17. have a National Board Number.
 18. MR. PISCHKE: Okay. Okay.
 19. MR. ROBINSON: So the original vessel
 20. that you had did not have a National Board Number.
 21. MR. PASTOREK: That's correct.
 22. MR. ROBINSON: And then you replaced
 23. the internals with a coil, for the sake of
 24. discussion --
 25. MR. PASTOREK: Yes, sir.

1. MR. ROBINSON: -- with a like coil
 2. that also did not have a National Board Number.
 3. MR. PASTOREK: That's correct.
 4. MR. ROBINSON: But somewhere during
 5. that period when it was installed originally, it was
 6. given a Tennessee unique number, serial number, on
 7. the original installation.
 8. MR. LAUDERDALE: A Tennessee license
 9. number.
 10. MR. PISCHKE: Yeah.
 11. MR. ROBINSON: Yes. Okay. That's --
 12. okay.
 13. MR. PISCHKE: That's what I was
 14. trying to clarify. And was it always, I guess, a
 15. State Special, then or a --
 16. MR. CHAPMAN: No.
 17. MR. PASTOREK: That's something we
 18. haven't been able to show. We kind of went back and
 19. looked through our files to see if we could find
 20. anything or something from an inspection report that
 21. would indicate that, but we couldn't find anything
 22. to that effect. I'm not sure how it --
 23. MR. CHAPMAN: You know. I don't --
 24. I'm the chief. Normally, in that record that we
 25. looked at, it had a National Board Number on it of

1. 33. Okay? When they tried -- they were discussing
 2. with them that they could contact the National Board
 3. to get a data plate on it. Well, with that number
 4. that's on our record from -- I don't remember what
 5. the -- exactly year it was registered, but it had
 6. always had the National Board number of 33. I don't
 7. know who put that number on there, but there's --
 8. the National Board says, they don't have any record
 9. of it.
 10. So that's where we're at right now is
 11. it has a Tennessee Number with the National Board
 12. number of 33, but 33 is not a good number.
 13. MR. BOWERS: Do you think,
 14. mistakenly, it would have originally registered --
 15. it should have been registered as a Tennessee
 16. Special from day one?
 17. MR. CHAPMAN: I don't know, because
 18. that --
 19. MR. PISCHKE: You can't answer that.
 20. We can't answer that.
 21. MR. CHAPMAN: I can't answer that.
 22. MR. BOWERS: Do you think that maybe
 23. the original coil -- the coil is actually the
 24. pressure-containing object of the vessel, correct?
 25. MR. LAUDERDALE: That is correct.

1. MR. BOWERS: Do you think the
 2. original coil that was in there may have had a
 3. National Board Number?
 4. MR. PASTOREK: The manufacturer says
 5. that it did not.
 6. MR. BOWERS: It did not?
 7. MR. PISCHKE: Well, it would not
 8. normally have a separate National Board Number for
 9. that coil unless it's a replacement, right? I mean,
 10. the original vessel would have had a National Board
 11. Number for the entire vessel, correct? From the
 12. original manufacturing.
 13. MR. PASTOREK: No, sir. That's -- I
 14. mean, that's not what our understanding is from the
 15. manufacturer. From what they've told us is they
 16. manufacture these units, even today -- I guess
 17. different states have different requirements.
 18. MR. PISCHKE: Sure.
 19. MR. PASTOREK: And so they
 20. manufacture them even today without National Board
 21. Numbers. So they'll --
 22. MR. PISCHKE: Without a National
 23. Board Number.
 24. MR. PASTOREK: Yes, sir.
 25. MR. PISCHKE: Okay.

1. MR. BOWERS: It's registered as a
 2. P-4, so it's just a part of a boiler, basically. It
 3. wouldn't have a National Board Number, correct?
 4. MR. PISCHKE: Well, oftentimes, parts
 5. do have --
 6. MR. BOWERS: Oh, yeah.
 7. MR. PISCHKE: -- national Board
 8. Numbers.
 9. MR. ROBINSON: Yes, they do.
 10. MR. PISCHKE: But in this case,
 11. neither the parent vessel or the replacement part
 12. have a National Board Number that we know of.
 13. MR. CHAPMAN: That's true.
 14. MR. PISCHKE: Okay.
 15. MR. BOWERS: Yes.
 16. MR. PISCHKE: Okay. That's --
 17. MR. PASTOREK: We did try to see if
 18. we could retroactively get a National Board Number
 19. or something along those lines and that's not
 20. allowed, as you all probably well know.
 21. MR. PISCHKE: Yeah. And we --
 22. MR. ROBINSON: The original -- well,
 23. for the sake of discussion, the second manufacturer
 24. of the replacement coil, is he still in business or
 25. is he capable of providing you with a traveler?

1. MR. LAUDERDALE: He is no longer in
2. business.
3. MR. PASTOREK: They're not in
4. business. No.
5. MR. PISCHKE: Okay.
6. MR. BAUGHMAN: So Roessing Montgomery
7. Company is no longer in business?
8. MR. LAUDERDALE: That is my
9. understanding.
10. MR. BAUGHMAN: That's your
11. understanding. So it was manufactured by Roessing
12. Montgomery Company out of Pittsburgh for the
13. Volcanic Heater Company out of Alliance, Ohio. Ohio
14. being where our National Board --
15. MR. ROBINSON: Resides.
16. MR. BAUGHMAN: -- actually is
17. located. My concern is that it's gone through
18. installation, repair through the R stamp procedure
19. and this is just now coming into play.
20. I noticed through -- and we've got
21. two thermal fluid heaters. Is the other thermal
22. fluid heater under the same conditions or is it
23. just the one?
24. MR. PASTOREK: No. It's just the
25. one. We have a National Board Number for it.

1. MR. BAUGHMAN: Is the other heater
2. the same manufacturer?
3. MR. PASTOREK: It's not. It's a
4. different brand.
5. MR. BAUGHMAN: Got you. I notice
6. under the Certificate of Boiler Inspection, the
7. pressure allowed for this Boiler Number T10655 --
8. the pressure allowed is the 300, but on one
9. inspection where it expired in 2002, the safety
10. valve was set at 50, and the next go-around -- in a
11. word, expired on the next page in 2003, the safety
12. valve has been changed to 125. Being that we've got
13. an expansion tank, does that have a nitrogen blanket
14. on it?
15. MR. PASTOREK: No, sir.
16. MR. LAUDERDALE: No, it's not.
17. MR. BAUGHMAN: No. It's just to
18. atmosphere.
19. MR. PASTOREK: Yes, sir.
20. MR. BAUGHMAN: Okay. Have you had
21. any problems with oil degradation?
22. MR. PASTOREK: We have replaced the
23. oil. Yes. We experience that over time, but
24. it's -- it can go for pretty extended periods, 10,
25. 15 years, depending on the plant and the operation.

1. MR. BAUGHMAN: Are both these thermal
2. fluid heaters on the same system? In other words,
3. one being a back-up to the other.
4. MR. PASTOREK: They are part of the
5. same system. Yeah. They don't necessarily back
6. each other up, but they can flow through the same
7. network of piping.
8. MR. BAUGHMAN: They're on the same
9. manifold on circulation.
10. MR. PASTOREK: Yes.
11. MR. BAUGHMAN: And they both work off
12. the same expansion tank?
13. MR. PASTOREK: Yes.
14. MR. BAUGHMAN: Okay.
15. MR. PASTOREK: That's correct.
16. MR. ROBINSON: Same pressure.
17. MR. PASTOREK: Same pressure?
18. MR. ROBINSON: Pressures.
19. MR. PASTOREK: The pumps are set up
20. to where we have an orifice and they -- as far as
21. the 150-pound -- or is that what you're asking? The
22. rating of the unit or the operating pressure?
23. MR. ROBINSON: I'm verifying on two
24. manifold -- one manifold, two boilers. One boiler
25. higher than the other boiler, naturally, will push

1. through.
2. MR. PASTOREK: I understand.
3. MR. ROBINSON: Are you rating them at
4. the same pressure or --
5. MR. LAUDERDALE: The output pressure
6. has been balanced between the two units.
7. MR. ROBINSON: And protected with a
8. safety valve?
9. MR. LAUDERDALE: Yes, sir.
10. MR. BAUGHMAN: The Certificate of
11. Boiler Inspection shows a pressure allowed of 300
12. PSI.
13. MR. PASTOREK: I'm not sure why
14. they -- I noticed that. I noticed the inspector put
15. that. I'm not sure why they put it. I mean, it's
16. clearly stamped for 150 -- and we don't operate
17. anywhere near that but --
18. MR. BAUGHMAN: Well, not only is it
19. not operated at that, but what is it certified to?
20. What is the construction of that unit certified to?
21. MR. PASTOREK: I would have to go off
22. of the S stamp data plate and say 150 pounds at 600
23. PSI.
24. MR. PISCHKE: I had wrote it was at
25. 225. So --

1. MR. BAUGHMAN: Yes. So it would be a
 2. 150 rated --
 3. MR. PASTOREK: Yes, sir.
 4. MR. BAUGHMAN: -- unit. And so there
 5. needs to be a correction to our --
 6. MR. ROBINSON: Yeah. Absolutely.
 7. MR. BAUGHMAN: -- certificate.
 8. MR. PASTOREK: For the inspection.
 9. Okay.
 10. MR. BAUGHMAN: I'd be interested in
 11. the other unit, also, since they're both on the same
 12. manifold. And I know that it's not part of this
 13. discussion.
 14. MR. PASTOREK: Right.
 15. MR. BAUGHMAN: I just --
 16. MR. PASTOREK: Just to clarify
 17. something, though. It's a little different from
 18. a -- and you guys probably understand this
 19. completely. But it's a little different from a
 20. typical boiler situation when you can have the
 21. boilers actually fighting each other. In this case,
 22. you're pumping fluid through a coil. Ultimately,
 23. that goes to the heater. But in this particular
 24. case, we have the pumps set up to where they're
 25. identical with the orifices that are controlling the

1. flow. So they -- fighting each other would really
 2. just result in more flow going into the manifold.
 3. It's not a --
 4. MR. ROBINSON: Right.
 5. MR. PASTOREK: It's different. It's
 6. just a slightly different application. But --
 7. MR. ROBINSON: So what kind of valves
 8. do you have on the units?
 9. MR. PASTOREK: What kind of valves?
 10. MR. ROBINSON: Yeah. Safety valves.
 11. MR. PASTOREK: I don't know offhand.
 12. Do you?
 13. MR. LAUDERDALE: I don't know off
 14. hand.
 15. MR. ROBINSON: How often do you
 16. change them?
 17. MR. PASTOREK: How often do we --
 18. MR. ROBINSON: Change the valves.
 19. MR. PASTOREK: Change the valves. So
 20. the -- just so I'm clear, this is a --
 21. MR. ROBINSON: Oh, I'm -- the oil
 22. periodically will coagulate, and if it does, it has
 23. a tendency to shut the seat on the valve from
 24. opening. If that's the case, then the valve is
 25. inoperable.

1. MR. PASTOREK: I'm not familiar with
 2. the specific information about our valve. I mean,
 3. again, our system is an open system to where it's
 4. atmospheric. So if there is -- one, if there's a
 5. pressure buildup in the line, you're going to get
 6. a -- to where it prevents flow, then you're going to
 7. get a high temperature which is going to shut down
 8. the unit. And then if you don't, then you just have
 9. flow going through the system. And if there's any
 10. sort of upset condition, then you have atmospheric
 11. relief, which then allows it to just vent,
 12. basically.
 13. MR. ROBINSON: So it's vented? The
 14. system's vented to atmospheric?
 15. MR. PASTOREK: That is correct.
 16. That's correct. At the expansion tank. Yes, sir.
 17. MR. BAUGHMAN: It's a little
 18. different of a system.
 19. MR. CHAPMAN: Yeah.
 20. MR. ROBINSON: It's very unique.
 21. MR. BAUGHMAN: Yeah.
 22. MR. ROBINSON: That atmosphere.
 23. MR. BAUGHMAN: Typically, there's a
 24. blanket on the top to keep the oil -- if you get any
 25. water in the system, it gets nasty. When you

1. replace and put oil in the system, it'll puke.
 2. You'll get --
 3. MR. PASTOREK: Moisture.
 4. MR. BAUGHMAN: -- moisture and
 5. moisture in the thermal fluid. Of course, the
 6. thermal fluid operates at a higher temperature
 7. without pressure --
 8. MR. ROBINSON: Right.
 9. MR. BAUGHMAN: -- and the water gets
 10. to be an issue. But air is an issue on an
 11. atmospheric system, and that's where the oil can
 12. degrade over time. So some of these systems have a
 13. nitrogen blanket over the top of them.
 14. MR. ROBINSON: Thank you.
 15. MR. BAUGHMAN: You bet. One issue
 16. that I've got is it's gone through a repair, which
 17. has a National Board Repair stamp from the repair
 18. company, which was Boiler Heat Exchange Systems,
 19. which got bought out by Ivan Ware. And in that
 20. whole process of doing the repairs, we've got the
 21. data tag in here, but do we have the R-1 --
 22. MR. PISCHKE: I was going to ask
 23. that.
 24. MR. BAUGHMAN: -- in here?
 25. MR. LAUDERDALE: I do not have a copy

1. of the R-1.
2. MR. BAUGHMAN: Does anybody have a
3. copy of the R-1?
4. MR. LAUDERDALE: Unless I am aware,
5. we may have it.
6. MR. BAUGHMAN: Okay.
7. MR. LAUDERDALE: They may not. I
8. don't know.
9. MR. BAUGHMAN: Okay. So a code
10. repair has been performed. And we're looking at
11. this, evaluating it without that documentation being
12. here, which should be an integral part of what we're
13. looking at. And during that repair process, it
14. seems to me that the repair company would have made
15. some note at that time that there was not a NB
16. Number.
17. MR. PISCHKE: Would the State of
18. Tennessee have a record of this repair?
19. MR. CHAPMAN: I haven't found it.
20. MR. PISCHKE: Okay.
21. MR. CHAPMAN: Because like I was
22. looking up -- I was talking to a gentleman on it and
23. trying to find the information on it and I couldn't
24. find anything on it.
25. MR. PISCHKE: Okay.

1. MR. BOWERS: One note, the repair
2. that was done was done in '01, correct?
3. MR. PASTOREK: Yes, sir.
4. MR. BOWERS: The P-4 says that the
5. bundle -- new bundle was put in -- after that. So
6. the repair wouldn't have been on the
7. pressure-retaining object, anyhow. Correct? Am I
8. looking at it wrong. It was signed off in '03, so
9. that repair was probably -- if the coil is the
10. pressure-retaining object, the repair actually was
11. not done on this coil, correct? Because the stamp
12. says -- the tag says the repair was done in '01, so
13. it wasn't done on this coil. This coil wasn't made
14. until '03. So there wouldn't have been an R-1,
15. unless there's been a repair on this coil.
16. MR. BAUGHMAN: The coil that I show,
17. Harold, was 2001.
18. MR. ROBINSON: Yeah.
19. MR. BOWERS: Well, it says here,
20. May --
21. MR. ROBINSON: It could have been --
22. MR. BOWERS: Okay.
23. MR. ROBINSON: That could have been
24. assembly expires.
25. MR. BOWERS: '01. Okay. It could

1. have been that repair --
2. MR. PISCHKE: Yeah. That's the
3. expiration.
4. MR. BOWERS: Okay.
5. MR. ROBINSON: Other side.
6. MR. BOWERS: Okay.
7. MR. PISCHKE: Yeah. It's all --
8. MR. BOWERS: Sorry. Yeah. You're
9. right.
10. MR. ROBINSON: So 26, 26.
11. MR. BOWERS: So it was repaired as
12. soon as it was put in? Or was that part of the --
13. MR. ROBINSON: And I don't really --
14. MR. BAUGHMAN: Oh, no. The --
15. MR. ROBINSON: -- understand that.
16. If they repaired it, they build a part -- think of
17. it -- they build a part.
18. MR. BOWERS: Yeah.
19. MR. ROBINSON: Okay. The coil is
20. nothing more than a segment -- 4.5-inch tube.
21. MR. BOWERS: Yeah.
22. MR. ROBINSON: Okay. It's wrapped
23. around and then you literally insert it inside a big
24. gigantic shell.
25. MR. BOWERS: Yeah.

1. MR. ROBINSON: Okay. Then the only
2. thing that really could have been done in the field
3. was maybe they put flanges on it. But I don't think
4. they did that. I think that they -- and were you
5. able to see any of this?
6. MR. PASTOREK: I wasn't there at the
7. time, sir.
8. MR. ROBINSON: Sir?
9. MR. LAUDERDALE: I was not there at
10. the time.
11. MR. ROBINSON: So they inserted this
12. instead of bundle. Meanwhile, the only thing that's
13. left is a bolting for your flanges. Correct me if
14. I'm wrong.
15. MR. LAUDERDALE: That's correct.
16. MR. PASTOREK: That's correct.
17. MR. ROBINSON: So the guy gave you a
18. repair sticker or data plate, Chief, but he didn't
19. touch it with a torch.
20. MR. LAUDERDALE: Well, he made --
21. MR. ROBINSON: It was already made
22. under P-4.
23. MR. BAUGHMAN: Yeah.
24. MR. LAUDERDALE: It's possible that
25. he we welded the flanges on. I can't say that he

1. did. I can't say that he didn't.
 2. MR. ROBINSON: Well, let's look at
 3. the data report. See what it says. See if it says
 4. anything about flanges. Usually, they do. They
 5. used to. I don't know.
 6. MR. PASTOREK: Just thinking about
 7. it, I don't know the answer, either, but just
 8. thinking about it, you do have penetrations in the
 9. fired portion of the unit.
 10. MR. ROBINSON: Penetrations.
 11. MR. PASTOREK: And so it's likely
 12. that they did have to weld the nozzles on.
 13. MR. BAUGHMAN: Yeah.
 14. MR. ROBINSON: Okay. Okay. That
 15. makes sense, then.
 16. MR. BOWERS: Okay.
 17. MR. PISCHKE: Yeah. They don't list
 18. the flange on the data reports.
 19. MR. ROBINSON: So that's --
 20. MR. BAUGHMAN: Verdict.
 21. MR. ROBINSON: Okay. They do talk
 22. about (as read) the schedule of the four-inch
 23. piping. They talk about the seamless carbon steel.
 24. The coil, 60-inch diameter. They talk about the
 25. turns, 600 square feet through the elbow, 12-inch

1. pipe on the first wrap and having 14 groove weld.
 2. And they don't -- other parts -- they talk about the
 3. heating coil, and that's it.
 4. MR. PISCHKE: And that's it.
 5. MR. ROBINSON: So basically, the
 6. piping. You're right. They did not put the flanges
 7. on it. That's why the stamp is there.
 8. MR. PISCHKE: Yeah. They welded it
 9. on.
 10. MR. BAUGHMAN: Vertical or a
 11. horizontal unit?
 12. MR. PASTOREK: It's horizontal.
 13. MR. BAUGHMAN: Okay. Has -- Steve
 14. Alexander's still the current inspector with ARISE.
 15. Has he been contacted as far as having any possible
 16. data?
 17. MR. PASTOREK: We -- the only -- I'm
 18. trying to think of who we've spoken with related to
 19. that. But we've been dealing with a representative
 20. from Hartford Steam Boiler. And I think his name is
 21. Scott Brown (phonetic), and he did not have any
 22. record or copy or photos of an old -- he did provide
 23. inspection history since we installed the unit
 24. and the replacement coil. And there was no -- there
 25. were no references to it or attachments or anything

1. like that.
 2. MR. BAUGHMAN: And I know Scott is
 3. fairly new with Hartford, so I don't see any of
 4. his -- any communications on here from himself, even
 5. through any of the previous records. But I was just
 6. wondering if -- because Steve Alexander with ARISE,
 7. which was the insurance inspection -- there would
 8. have been an AI at that time with this R stamp
 9. repair, and I don't know who the AI was, but the AI
 10. may also have some documentation, because they're an
 11. intimate part of this repair equation.
 12. But we're lacking documentation on
 13. the repair, which is a concern. And we've got the
 14. P-4, which is a partial data report for the coil
 15. itself, but we're lacking the supporting
 16. documentation for the coil. And I'm just trying
 17. to think of how we can get it for analyzation.
 18. MR. ROBINSON: Did you try to go back
 19. to ARISE and ask them for documentation?
 20. MR. PASTOREK: We went back to Ivan
 21. and Son.
 22. MR. ROBINSON: Who?
 23. MR. PASTOREK: Ivan and Son was the
 24. company that --
 25. MR. ROBINSON: Did the installation.

1. MR. CHAPMAN: Where?
 2. MR. BAUGHMAN: That's where.
 3. MR. PASTOREK: Well, they --
 4. MR. ROBINSON: Where?
 5. MR. PASTOREK: -- I guess acquired or
 6. retained the ownership of -- I don't know how that
 7. worked but -- in access to the records -- but we did
 8. request the records from them and they did not
 9. provide them to us.
 10. MR. ROBINSON: What did they say?
 11. MR. PASTOREK: I think the company
 12. went out of business probably 10-plus years ago, and
 13. I think it was just a matter of probably new people,
 14. new -- you know, not familiar with it and they were
 15. just kind of like, we don't know. We're not even in
 16. that business anymore. We're not sure what the
 17. history of that is.
 18. MR. ROBINSON: And you --
 19. MR. PASTOREK: I mean, is that fair
 20. to --
 21. MR. ROBINSON: Go ahead, Harold.
 22. MR. BOWERS: You know, being that
 23. we've got P-4, you know, we know that the coil was
 24. made to ASME. I guess the only concern we have --
 25. Dave has brought up. We have this pressure vessel

1. built to code. The only thing we don't have is the
 2. R-1 that -- it was done three days -- I look at the
 3. days -- like, three days after the coil. So I guess
 4. that's the only question is -- but we know that --
 5. we've got the P-4 here, so we know this is a good
 6. coil. So we just don't know what's happen to it
 7. afterwards.
 8. MR. BAUGHMAN: What's the protocol --
 9. and I ask because I don't know. So when a code
 10. repair is done and there's a stamp put on the
 11. boiler --
 12. MR. CHAPMAN: Uh-huh.
 13. MR. BAUGHMAN: -- what's the protocol
 14. and where would that information be? Boiler Heat &
 15. Exchange got bought out by Ware. Ware took over
 16. those assets and should have retained the paperwork.
 17. But somewhere along the way, is there a travelers or
 18. is there any other paperwork that has been filed
 19. somewhere that may still be accessible.
 20. MR. CHAPMAN: Well, if it'd had a
 21. good National Board Number, it would have been sent
 22. up to the National Board. But by -- I don't know
 23. where the number came from for -- that was put on
 24. there for National Board Number. There's no way
 25. their link -- what is what? And I know that's kind

1. of a halfway answer, but that's the --
 2. MR. PISCHKE: And even the repair
 3. company -- they would only be required to maintain
 4. those records for five years.
 5. MR. CHAPMAN: Five years.
 6. MR. PISCHKE: Five years. So you
 7. know, nobody's obligated to maintain those records.
 8. MR. CHAPMAN: No.
 9. MR. PISCHKE: And so we're in a
 10. situation where we have an R stamp on a vessel. So
 11. we -- I guess we have to assume that it was
 12. performed in accordance with the rules of NBIC.
 13. MR. BAUGHMAN: We don't know.
 14. MR. PISCHKE: We don't know, but we
 15. can't audit backwards. And all we can go by is the
 16. objective evidence we have now.
 17. MR. CHAPMAN: Right.
 18. MR. PISCHKE: And that's one of the
 19. pieces. We don't have all the pieces. We'd love to
 20. have all the pieces. We don't have all the pieces.
 21. So we -- but we have some of them.
 22. MR. ROBINSON: Very good.
 23. MR. PISCHKE: So I guess we have to
 24. move on with what we have.
 25. MR. BAUGHMAN: How would we move

1. forward to recertify this vessel to have the repair
 2. analyzed and -- I don't feel comfortable taking an
 3. assumption that everything is like it's supposed to
 4. be. I just -- I don't feel comfortable in that.
 5. How would we move forward with taking
 6. this vessel -- and whether the SOP is to do an
 7. ultrasound, do a mag particle, doing whatever to
 8. recertify this repair. We know the vessel -- the
 9. unit itself is okay, or at least it was
 10. constructed okay. It's been there since 2001.
 11. It's been operating since 2001. So we've got 16
 12. years of operation on this, too.
 13. MR. PISCHKE: And we -- and it's been
 14. signed off by the State. So that's objective
 15. evidence --
 16. MR. ROBINSON: Yes.
 17. MR. PISCHKE: -- too, that everything
 18. was done in accordance with the, you know, NBIC and
 19. ASME. I mean -- so I don't think we need to argue
 20. that so much. Now, having said that, we're missing
 21. a few pieces of the puzzle.
 22. And to Dave's point, is there
 23. something that we can do to help us fill in those
 24. blanks? Perhaps, even, you know, an additional
 25. inspection of the unit that could give us

1. reassurance that it's still in good operating
 2. condition and not in unsafe degradation or
 3. anything like that? Is that kind of --
 4. MR. BAUGHMAN: Well, my end of it is,
 5. I make no assumptions. The certificates themselves
 6. are not proper showing that the pressure was 300
 7. PSI. That has been missed year after year after
 8. year. So just because somebody's signed off on it,
 9. obviously, we're looking at some equipment that
 10. there's been some things that have been overlooked.
 11. And moving forward, I think that we
 12. need to just -- and I've -- I don't have any
 13. qualms about it being right. I want to make sure
 14. that what everybody does is from the standpoint of
 15. covering everyone, from a liability standpoint.
 16. And so how do we attend to that? Because there
 17. have been some irregularities in some of the
 18. accounting, some of the pressures, and what have
 19. you. We know there's a repair that's been done
 20. that -- the paperwork's not accountable for, nor
 21. was there a mandate for it to even be in place
 22. over that period of time. It's just that, of
 23. course, it was never filed with the National
 24. Board.
 25. So we have no documentation to refer

1. to. So how can we confidently define this as a
2. Tennessee Special without having all the
3. information in place?
4. MR. ROBINSON: I've got a suggestion.
5. And I briefly brought it up to the Chief, just
6. briefly. And I haven't seen drawings, so I don't
7. know -- I don't have a luxury of knowing your
8. configuration, with the exception I could imagine --
9. do you have drawings?
10. MR. LAUDERDALE: I do not have a
11. drawing. You needed to have a sketch of the basic
12. configuration of the unit.
13. MR. ROBINSON: Well, for the flanges
14. and how they attach to that coil as it sticks out of
15. the vessel.
16. MR. PASTOREK: We don't have a
17. drawing of that.
18. MR. ROBINSON: If the wells are
19. accessible for just the coil section -- or I'm
20. sorry, for the attachment of the flanges to the
21. coil, I would suggest doing a PMI first to determine
22. that your material was adequate. Positive material
23. identification. And if possible, look in the weld
24. area, as well. See if that will show. If that's
25. successful, then go ahead and perform a radiography,

1. 100 percent of the welds. Now, we can't go back and
2. identify the welder.
3. MR. PISCHKE: Well, we have a P-4
4. form that documents the welds, correct?
5. MR. ROBINSON: For the coil.
6. MR. PISCHKE: For the elements.
7. MR. ROBINSON: For the coil.
8. MR. PISCHKE: But the welds --
9. MR. ROBINSON: For the flanges.
10. MR. PISCHKE: For flanges, depending
11. on the type of flange, they may not be able to be
12. x-rayed.
13. MR. ROBINSON: Absolutely. And
14. again, because I don't know the configuration,
15. slip-ons or butt-welded. If they're butt welded,
16. it's well within our rights that we could perform a
17. radiography inspection. And that'll tell us if the
18. welds are sound. The PMI will tell us if the
19. material meets or exceeds criteria of the code.
20. With that said, the other -- only
21. option -- the only other -- well, additive I would
22. make a mention to is, you're doing a 15-year oil
23. analysis, right? You said approximately 15 years?
24. MR. PASTOREK: Well, we test it more
25. often than that, and we really make a decision on

1. whether or not to replace it. We actually replaced
2. it two years ago. So we probably are not due to
3. replace it --
4. MR. ROBINSON: So you're verifying
5. it --
6. MR. PASTOREK: -- for a long time.
7. MR. ROBINSON: -- in accordance with
8. NBIC and looking for carbon content, as well. So
9. you've got a track record.
10. MR. PASTOREK: We check a number of
11. different things. Yes, sir.
12. MR. ROBINSON: And again, to validate
13. that, to make sure, and that's my two cents.
14. MR. BAUGHMAN: Will the unit have to
15. be disassembled in order to perform this --
16. MR. ROBINSON: The --
17. MR. BAUGHMAN: -- as far as
18. accessibility to those areas that we're wanting to
19. analyze?
20. MR. PASTOREK: I don't think so. I
21. think we can access the flanges without
22. disassembling it.
23. MR. BAUGHMAN: Will any visual need
24. to be made as far as for full penetration?
25. MR. ROBINSON: You -- if the nozzles

1. are accessible -- and that would require you to move
2. the manifold header. And there's a good possibility
3. you can do a visual on the internal of that
4. connection. Most of the ones I've seen, the nozzles
5. was approximately between 12 and 10 inches from the
6. face of the flange. By taking off the header
7. manifold, you would expose that entry point to that
8. piece of pipe.
9. MR. PASTOREK: Yes, sir.
10. MR. ROBINSON: And I've seen where
11. you've had double configurations. I don't -- again,
12. not having the drawings, I don't know.
13. MR. PASTOREK: It's one in and one
14. out. So it's two flanges. So you're suggesting
15. possibly breaking loose the connection and visually
16. inspecting inside of the pipe.
17. MR. PISCHKE: Yeah. Checking --
18. basically checking the welds and the flanges.
19. MR. ROBINSON: That's visual.
20. Radiography is biometric.
21. MR. PISCHKE: To -- and I guess what
22. we're trying to accomplish is to make sure that the
23. R stamp repair was done properly.
24. MR. ROBINSON: Yes, sir.
25. MR. PISCHKE: We know that the

1. component itself was built to ASME Section 1. I
 2. mean, we have the data report.
 3. MR. ROBINSON: Objective evidence.
 4. MR. PISCHKE: Yeah. We don't have
 5. the R-1 form. And so the purpose of this would be
 6. to verify that the requirements of that R stamp were
 7. met. Is that -- did I properly characterize that?
 8. MR. BOWERS: Yeah. But I would say,
 9. also, if you could dig in your files and find that
 10. R-1, it might save a lot of headaches.
 11. MR. PASTOREK: Sure. I mean,
 12. we'll --
 13. MR. PISCHKE: And ARISE might have
 14. that?
 15. MR. CHAPMAN: Yeah.
 16. MR. PISCHKE: So maybe that would be
 17. a good place to start.
 18. MR. BAUGHMAN: Would the National
 19. Board possibly assign an NB Number to this or not?
 20. MR. CHAPMAN: Not now. It's too much
 21. time.
 22. MR. PISCHKE: Not now.
 23. MR. BAUGHMAN: Not now. Okay.
 24. MR. ROBINSON: And because the cart's
 25. before the horse. You don't have welder

1. qualification; you don't have material,
 2. authenticity. There's a lot of things that are
 3. unknown.
 4. MR. PISCHKE: Yeah.
 5. MR. PASTOREK: When you talk about a
 6. visual inspection, who would conduct that? Is that
 7. something the State would do or is that --
 8. MR. ROBINSON: You could get a third
 9. party.
 10. MR. PISCHKE: AI. An authorized
 11. inspector.
 12. MR. ROBINSON: You could have a third
 13. party perform your radiographic testing that has to
 14. be certified in accordance with Section 5. You can
 15. get a third party to perform your PMI. A PMI --
 16. forgive me, positive material identification.
 17. MR. LAUDERDALE: Oh, you're talking
 18. about --
 19. MR. ROBINSON: They'll have to
 20. generate a procedure. Normally, there's a
 21. procedure. Some people will have a procedure. Go
 22. ahead.
 23. MR. PISCHKE: The testing -- the
 24. third party testing company would normally have
 25. their qualifications to perform that --

1. MR. ROBINSON: Testing.
 2. MR. PISCHKE: -- positive material
 3. identification in accordance with -- Section 5 even
 4. has -- ASME Section 5 has requirements for that.
 5. And so you can do that.
 6. Now, PMI is intended to verify what
 7. we believe we already know from documentation and
 8. history and things like that. It's not a
 9. fundamental process that you can take a piece of
 10. material and from not knowing anything about it,
 11. have a definite --
 12. MR. ROBINSON: Identification.
 13. MR. PISCHKE: -- conclusion. And the
 14. reason is it will not detect carbon content. And
 15. so -- it'll detect everything else, but it will not
 16. detect carbon. So -- but it's a good tool. It's --
 17. to verify what we already believe we know.
 18. MR. BAUGHMAN: In looking down the
 19. road, if this unit has to have a coil replaced
 20. again, then what do we do? Get a manufacturer
 21. that's got an NB Number?
 22. MR. PASTOREK: I would think that we
 23. learned a good lesson --
 24. MR. BAUGHMAN: Okay.
 25. MR. PASTOREK: -- in this situation.

1. So yes --
 2. MR. PISCHKE: I think --
 3. MR. PASTOREK: -- it was actually
 4. something we -- I was exchanging some e-mails with
 5. our engineering manager earlier today about this
 6. very same thing that we've got to take a lesson
 7. learned from this and try to apply it.
 8. MR. BAUGHMAN: Good.
 9. MR. BOWERS: Well, there were a lot
 10. of mistakes that's not really your fault. It's --
 11. other people have made that put you in this
 12. situation.
 13. MR. PISCHKE: No. It sounds like you
 14. inherited --
 15. MR. BAUGHMAN: So does that mean
 16. that, in looking at this, that we get that
 17. accomplished first and then re-review this? Or does
 18. that mean that we're approving it upon this
 19. happening, or what the point moving forward, then?
 20. MR. CHAPMAN: Well, me, personally, I
 21. think that as -- what they should go ahead and get
 22. all that done and then bring it back.
 23. MR. BOWERS: Okay.
 24. MR. CHAPMAN: All of that, because
 25. then we'll have more pieces to the puzzle, as they

1. say.
 2. MR. BAUGHMAN: So can they operate
 3. presently under the conditions that they have?
 4. MR. ROBINSON: At some point, they're
 5. going to have to turn it off to --
 6. MR. CHAPMAN: To do --
 7. MR. ROBINSON: -- do the testing.
 8. MR. CHAPMAN: Yeah.
 9. MR. BAUGHMAN: Well, I understand.
 10. But it's operating now --
 11. MR. CHAPMAN: Exactly.
 12. MR. BAUGHMAN: -- without a Tennessee
 13. Special, without an NB Number. It's been operating
 14. for a number of years --
 15. MR. CHAPMAN: Yeah.
 16. MR. BAUGHMAN: -- safely, but what
 17. I'm saying is, is that what's the protocol for
 18. operating without these numbers in place?
 19. MR. PISCHKE: Can we provide a
 20. temporary provision for operation?
 21. MR. CHAPMAN: I believe it is, but I
 22. will have to make -- check and make sure on that.
 23. MR. BAILEY: Can I interject
 24. something? I just want to make sure, when you're
 25. talking about Tennessee Special that -- I just want

1. to read the rule to you on a Tennessee Special of
 2. boilers and pressure vessels.
 3. MR. PISCHKE: Could you turn on your
 4. mic?
 5. MR. BAILEY: I did.
 6. MR. PISCHKE: Oh, you did? Oh.
 7. MR. BAILEY: Talk louder?
 8. MR. PISCHKE: Talk louder.
 9. MR. BAILEY: Tennessee Special:
 10. Boilers and Pressure Vessels. If a boiler or
 11. pressure vessel is of special design, comma, or one
 12. that cannot bear an ASME and NB stamping, comma,
 13. details of the proposed construction, parentheses,
 14. (including shop drawings), shall be submitted to the
 15. Chief Inspector or Chief Inspector's designee.
 16. Approval for construction and installation as a,
 17. quote, "Tennessee Special" boiler or pressure vessel
 18. must be obtained from the Board before construction
 19. is started.
 20. That's all it says.
 21. MR. BAUGHMAN: Okay.
 22. MR. BAILEY: So with that definition,
 23. I guess you've got to determine, does this fit that
 24. definition?
 25. MR. PASTOREK: If I could -- just one

1. question. If I understand what we talked about a
 2. minute ago, if that was what was required of us; the
 3. PMI assessment, x-ray 100 percent of the welds, and
 4. visual inspection of the internal of the nozzle --
 5. or nozzles by a third-party AI. If there were a
 6. time period granted to us to perform that -- I mean,
 7. I -- we're going to call, like, this afternoon to
 8. just try to begin the wheels, the gears turning on
 9. this.
 10. But if we could have some reasonable
 11. time frame where we can schedule a shutdown, do
 12. the disconnecting piping, because that's going to
 13. be a pretty significant effort on our part, then
 14. we can conduct that within that period, bring the
 15. results back to you. But I guess, what I'm
 16. requesting is consideration of continuing to
 17. operate the unit as it's operated for the past 16
 18. years. We want to do what's right and we'll do it
 19. quickly, but it will take us a little --
 20. preferably, if we had time, we would like to be
 21. able to schedule it safely.
 22. MR. PISCHKE: I would like to clarify
 23. something in those requirements.
 24. MR. ROBINSON: Yes. Please do.
 25. MR. PISCHKE: The RT would be

1. necessary if the flange is a weld neck flange, and
 2. it has the circumferential weld. That's when the RT
 3. would be required. We aren't asking you to x-ray
 4. the welds that were produced using the ASME code
 5. stamp --
 6. MR. PASTOREK: Right.
 7. MR. PISCHKE: -- in the shop.
 8. MR. PASTOREK: Just the flange?
 9. MR. PISCHKE: Just the flange that
 10. was performed under the R stamp work, if it's a --
 11. if it is a weld neck flange. If it is a slip-on
 12. flange, which you cannot perform an x-ray, then we
 13. would ask for the visual examination inside and out,
 14. because that has two fillet welds on it. And
 15. that --
 16. MR. PASTOREK: Okay. Okay. That
 17. makes sense.
 18. MR. PISCHKE: So --
 19. MR. ROBINSON: Yes.
 20. MR. PISCHKE: So is that --
 21. MR. ROBINSON: That would be ideal.
 22. MR. PASTOREK: So it's either/or.
 23. You either have it or --
 24. MR. PISCHKE: Either/or.
 25. MR. PASTOREK: Yeah. Okay. I

1. understand.

2. MR. PISCHKE: Yeah.

3. MR. PASTOREK: Not both.

4. MR. ROBINSON: And --

5. MR. PISCHKE: And PMI --

6. MR. PASTOREK: Plus the PMI.

7. MR. ROBINSON: Technically, you don't

8. need an AI. What you need is a nondestructive

9. testing organization.

10. MR. PASTOREK: Okay.

11. MR. LAUDERDALE: So a level 3

12. inspector.

13. MR. PISCHKE: Yeah. A level -- well,

14. it would be performed by a level 2 examiner.

15. MR. LAUDERDALE: Sure.

16. MR. ROBINSON: Yes. Yes, sir.

17. MR. PISCHKE: In accordance with

18. their program. Normally, ASNT-TC-1A is --

19. MR. ROBINSON: And you could point

20. out to them that it's -- just keep it proper. You

21. could point out to them that it's a Section 1

22. pressure vessel and it's stamped in accordance with

23. that. And what he should be able to give to you is

24. an ASME Section 1 procedure for performing those

25. examinations. Okay?

1. MR. BAUGHMAN: One other item that

2. Mr. Bailey described in that definition of the

3. Tennessee Special is the shop drawing. And so we're

4. going to have to have the shop drawing itself on the

5. unit. Is that correct, through that wording?

6. MR. BAILEY: That's what it says.

7. MR. PASTOREK: We requested that, and

8. we're not able to get copies of it.

9. MR. LAUDERDALE: Well --

10. MR. ROBINSON: At least something so

11. we could identify it.

12. MR. CHAPMAN: Identify it. Yeah. Be

13. able to identify it.

14. MR. ROBINSON: And keep in mind --

15. well, with regards to possibly two different

16. variations of flanges, that's what we're -- the butt

17. welds are made for the coil. And in reality, the

18. flanges are what we're seeking answers to. Up for

19. discussion, Mike.

20. MR. PISCHKE: That's correct. What

21. is at the focal point of this is the repair work and

22. not the Section 1 new part, correct?

23. MR. ROBINSON: Yes, sir.

24. MR. BAUGHMAN: Well, I'll add to

25. that, in as much as we've got a P-4. But a P-4 is

1. not a shop drawing.

2. MR. ROBINSON: No.

3. MR. PISCHKE: No.

4. MR. BAUGHMAN: The Code specifically

5. says "shop drawing." So if we're not going to have

6. a shop drawing, then we're changing and not adhering

7. to what's in the Code itself. So we've got the P-4

8. and we're talking about the weld repair or the weld

9. that was done for this, which is fine. That's kind

10. of its own separate entity. But the coil itself is

11. also this Tennessee Special. And from what I'm

12. understanding, the shop drawing is an integral part

13. of that.

14. MR. ROBINSON: And you --

15. MR. BAUGHMAN: So --

16. MR. ROBINSON: Is there any latitude

17. in that verbiage, Dan?

18. MR. BAILEY: I'll read it again. If

19. a boiler or pressure vessel is of special design,

20. comma, or one that cannot bear the ASME and NB

21. stamping, comma, details of the proposed

22. construction, parentheses, including shop

23. drawings -- that's in parentheses -- shall be

24. submitted to the chief inspector or chief

25. inspector's designee.

1. MR. PASTOREK: Before construction.

2. MR. BAILEY: Well, it just -- yeah.

3. It says, approval for construction and installation

4. as a, quote, "Tennessee Special," boiler, or

5. pressure vessel, must be obtained from the Board

6. before construction has started.

7. MR. PISCHKE: Now, that's if it

8. cannot be stamped with an ASME --

9. MR. BOWERS: Right. This was --

10. MR. PISCHKE: It can be and was.

11. MR. BOWERS: This can be.

12. MR. PISCHKE: This can be and was

13. stamped, because there's an ASME --

14. MR. BOWERS: Because there are P-4s

15. that have --

16. MR. BAILEY: That's why I read the

17. rule, because I've never heard in the discussion

18. that, you know, that it was impossible to stamp

19. this --

20. MR. PISCHKE: No. It was stamped.

21. MR. BAILEY: -- vessel.

22. MR. PISCHKE: So --

23. MR. BAILEY: So I don't know if it

24. even qualifies.

25. MR. PISCHKE: So we don't need those

1. drawings if it's ASME code stamped.
2. MR. BOWERS: Right.
3. MR. PISCHKE: That's the way I
4. understand it.
5. MR. BAUGHMAN: Excuse me, just a
6. second. Is that -- there's a word in there, though,
7. that says "ASME and --
8. MR. BAILEY: Yeah.
9. MR. BAUGHMAN: -- National Board."
10. It doesn't say either/or.
11. MR. BAILEY: No. It comes between
12. two parentheses. So it's -- you know, it says, if a
13. boiler or pressure vessel is of special design,
14. comma, or one that cannot bear the ASME and NB
15. stamping, comma -- so we're talking about two
16. different situations there.
17. MR. PISCHKE: Yeah.
18. MR. BAILEY: And this -- and there's
19. is the second situation, one that cannot bear the
20. ASME --
21. MR. PISCHKE: It can.
22. MR. BAILEY: -- and NB stamping, or
23. at least that's what I was hearing to begin with.
24. But I never heard why it cannot be stamped.
25. MR. PISCHKE: Oh, it can.

1. MR. BAUGHMAN: It can.
2. MR. BOWERS: Yes.
3. MR. BAILEY: It hasn't been, so --
4. MR. PISCHKE: There's -- it can.
5. MR. BAILEY: So does that even
6. qualify or does it come under the definition of a
7. Tennessee Special?
8. MR. PISCHKE: It's my
9. understanding -- and I'm -- I can be corrected on
10. this. The only thing this is missing is National
11. Board --
12. MR. CHAPMAN: Number.
13. MR. BAILEY: The NB Board.
14. MR. PISCHKE: Yeah. Registration.
15. MR. BOWERS: Yeah.
16. MR. PISCHKE: It's not a special
17. design. It's not one that we --
18. MR. ROBINSON: Disallowed.
19. MR. PISCHKE: -- we disallow. It
20. meets the requirements of ASME as of vessel design
21. and everything. That's my understanding. Is that
22. correct?
23. MR. CHAPMAN: That's what I'm
24. understanding, too.
25. MR. PISCHKE: So --

1. MR. BAUGHMAN: For me, it's just not
2. meeting the total verbage of what's in the Code. I
3. don't disagree. It just says that it's got to have
4. an ASME and National Board and that the shop
5. drawings were to be included and --
6. MR. BAILEY: Well, the shop drawings
7. would be included if it's going to try to seek the
8. status of Tennessee Special.
9. MR. BAUGHMAN: If it can't meet --
10. MR. BAILEY: Right.
11. MR. BOWERS: Right.
12. MR. PISCHKE: -- ASME --
13. MR. BOWERS: Yeah.
14. MR. BAUGHMAN: And --
15. MR. PISCHKE: -- requirements.
16. MR. BAILEY: Right.
17. MR. BAUGHMAN: Okay.
18. MR. BAILEY: Exactly.
19. MR. BAUGHMAN: Where does that word
20. "and" follow, because is "and" and "shall" virtually
21. the same thing, where it says --
22. MR. PISCHKE: Because all vessels in
23. Tennessee are -- they don't meet -- they don't
24. necessarily meet National Board requirements other
25. than registration.

1. MR. ROBINSON: Right.
2. MR. PISCHKE: Because it's not
3. applicable to a brand new vessel.
4. MR. BOWERS: And it would have --
5. again, its ASME paperwork --
6. MR. BAUGHMAN: One that can bear ASME
7. and National Board stamping.
8. MR. PISCHKE: So it's saying that it
9. can't. This one can. It may not, but it can.
10. MR. BOWERS: Yes.
11. MR. PISCHKE: There's nothing
12. stopping it from bearing -- it already bears the
13. ASME.
14. MR. BAUGHMAN: Right. And --
15. MR. ROBINSON: Now, we have approved
16. a Tennessee Special enforcing the China units that
17. have a --
18. MR. PISCHKE: Yeah.
19. MR. ROBINSON: For the paper rolling
20. operation. And --
21. MR. PISCHKE: That's correct.
22. MR. ROBINSON: -- the pieces of
23. equipment have been made. And in this case, they
24. had a dossier. And it had -- they had put together
25. the information and brought it to the Board for the

1. Board's consideration as a Tennessee Special. And I
 2. think we performed -- we elected to perform some
 3. additional testing to authenticate or to objectively
 4. identify that the welding was correct and the welds
 5. were sufficient. And we granted the Tennessee
 6. Special.
 7. MR. BAUGHMAN: Those units also had
 8. shop drawings that we evaluated.
 9. MR. ROBINSON: Yes, they did.
 10. Absolutely. They had a complete dossier.
 11. MR. PISCHKE: They were fairly new,
 12. also.
 13. MR. ROBINSON: They had a complete
 14. dossier.
 15. MR. BOWERS: Well, the situation we
 16. are in now and what the -- I guess, what they're
 17. wanting to know is they have to have a certain
 18. amount of stuff they're going to have to do, but
 19. they want to operate this device, I guess until the
 20. next board meeting, correct? I guess they won't be
 21. able to present anything until the next Board
 22. meeting. So they need to operate this equipment --
 23. they're going to need a time period to get this
 24. stuff done.
 25. MR. CHAPMAN: Right.

1. MR. BOWERS: And they want to operate
 2. until they get it done. So they won't present it
 3. till the next Board meeting. So they're wanting our
 4. consideration to see if they can operate until the
 5. next Board meeting.
 6. MR. ROBINSON: The gentleman was
 7. give -- he had given us -- you had given us your
 8. plans as far as what you planned on doing after you
 9. left here if we decided to go a certain way. You
 10. want to restate what you just mentioned?
 11. MR. PASTOREK: Yes, sir. I guess one
 12. question I have before I run through that, if I
 13. could, is just a question about how often the Board
 14. meets and when the next meetings would be?
 15. MR. PISCHKE: It's December.
 16. MS. JEFFERSON: Yes. It's going to
 17. be --
 18. MR. PISCHKE: December 13th.
 19. MS. JEFFERSON: -- December the 13th.
 20. MR. PASTOREK: And so in that case,
 21. would we need to -- 45 days before that meeting,
 22. have objective information to provide to the Board?
 23. MR. CHAPMAN: The criteria is 45
 24. days.
 25. MR. PASTOREK: So --

1. MR. PISCHKE: Anybody who's quick,
 2. fast with math.
 3. MR. PASTOREK: November 1st-ish.
 4. MR. BAILEY: Around Halloween.
 5. MR. PASTOREK: Around -- yeah. End
 6. of October, late October.
 7. MR. BAILEY: You could dress it up.
 8. MR. ROBINSON: Put a sticker on it.
 9. MR. PASTOREK: I'm going to turn to
 10. look at my plant manager and see if that's -- does
 11. that seem reasonable to you? Late October? I mean,
 12. I know -- I mean, just being transparent, I mean,
 13. this is probably the busiest time of year for us for
 14. asphalt business. And so --
 15. MR. PISCHKE: Six weeks.
 16. MR. PASTOREK: Yeah. And we'll get
 17. back and be able to tell whether or not if it's a
 18. slip-on or a butt weld. And that'll -- if it's not,
 19. then we can very easily schedule it and have it
 20. ready by that time. But if we have to disconnect
 21. piping and drain the system, do all that, that's --
 22. I mean, we could be down for a couple weeks,
 23. probably.
 24. MR. PISCHKE: I'd also like to, I
 25. guess, emphasize that, you know, this is an ASME

1. Code vessel that is operating using a fluid and not
 2. gas, correct?
 3. MR. PASTOREK: That's correct.
 4. MR. PISCHKE: It's not steam. It
 5. doesn't possess a large amount of stored energy like
 6. steam. It's an incompressible fluid under pressure.
 7. MR. BAUGHMAN: That does have a
 8. flashpoint.
 9. MR. PISCHKE: Sure.
 10. MR. PASTOREK: Sure.
 11. MR. PISCHKE: Yeah.
 12. MS. JEFFERSON: Is it an alternative
 13. for them to request a variance, instead, for them to
 14. continue to operate? Is that appropriate? And then
 15. to come to the March meeting with all of the
 16. approvals? That would probably provide additional
 17. time.
 18. MR. BAILEY: Basically, a temporary
 19. variance --
 20. MR. PISCHKE: A temporary variance.
 21. MR. BAILEY: -- to keep running until
 22. March.
 23. MR. PASTOREK: That would be -- if
 24. that was something that we -- could be considered,
 25. that would be preferable.

1. MR. BOWERS: It'd be six months,
 2. basically.
 3. MR. BAUGHMAN: Well, and that doesn't
 4. set a precedent, then, in the future. Where it set
 5. a precedent for us to evaluate a variance rather
 6. than stepping forward and just saying, you can run.
 7. I think the variance is a good idea.
 8. MR. ROBINSON: Yeah, it is. Very
 9. good.
 10. MR. BAUGHMAN: So how do we word the
 11. variance?
 12. MR. BAILEY: Well, basically, that
 13. what they're requesting is they be permitted to
 14. continue to operate as they've been operating, which
 15. varies from the Code or the rules. And I don't know
 16. all the exact -- you know, all -- every exact thing
 17. that's different, but whatever the differences are,
 18. they're asking that you all grant a variance for --
 19. until the March Board meeting for them to come back
 20. and respond to some of the questions.
 21. And even then, I still question
 22. whether this is a Tennessee Special. It may be
 23. that you grant a permanent variance for them to
 24. operate at that time. I mean, I think -- what I
 25. was a little afraid of is granting this a

1. Tennessee Special, calling it that, when it really
 2. isn't that. You know. And that kind of sets a
 3. precedent that you don't want to do. You know.
 4. So this would be a temporary variance
 5. for them, basically, to continue operating as they
 6. have been operating. Now, you can qualify that.
 7. If there are certain things you think they're
 8. doing now that you'd rather see them do it this
 9. way until March, you can certainly do it that way.
 10. I mean, that's up to y'all as far as how you word
 11. your motion.
 12. MR. PISCHKE: I tend to agree with
 13. that assessment that it should be a variance rather
 14. than a State Special.
 15. MR. BOWERS: Okay.
 16. MR. PISCHKE: Is that --
 17. MR. BAUGHMAN: I agree.
 18. MR. BOWERS: Yeah.
 19. MR. BAUGHMAN: It's just the wording
 20. of it.
 21. MR. PISCHKE: Okay. Well, you know,
 22. perhaps we can refine the wording between now and
 23. March of a permanent variance.
 24. But for now, I guess the motion is a
 25. temporary variance to operate until March under

1. the same operating conditions that you have been
 2. now or have now. Also in March -- by March, we
 3. will have the deliverables of the nondestructive
 4. examination and the material verification, all of
 5. those requirements that we spelled out earlier.
 6. Is that correct?
 7. MR. BAUGHMAN: Yeah.
 8. MR. PISCHKE: Am I --
 9. MR. PASTOREK: Can I ask one
 10. clarification? The shop drawings.
 11. MR. BOWERS: You won't need the shop
 12. drawings if we do the variance.
 13. MR. PASTOREK: Okay.
 14. MR. BOWERS: Correct?
 15. MR. PISCHKE: Correct.
 16. MR. PASTOREK: We requested -- just
 17. for your own information, we did try to request
 18. those from the manufacturer and they did not provide
 19. those to us.
 20. MR. PISCHKE: Just as good practice,
 21. I would try to continue to find that.
 22. MR. PASTOREK: To try to pursue it?
 23. Okay.
 24. MR. PISCHKE: Pursue that. Perhaps
 25. even do some reverse drawings.

1. MR. BAUGHMAN: Can I interject?
 2. MR. PISCHKE: Go ahead.
 3. MR. BAUGHMAN: The manufacturer --
 4. the coil is no longer manufactured, but Volcanic
 5. themselves out of Alliance, Ohio, is still a
 6. manufacturer.
 7. MR. PASTOREK: Yes, sir. That's
 8. correct.
 9. MR. BAUGHMAN: And they themselves
 10. cannot provide a shop drawing for this unit, even
 11. a --
 12. MR. PASTOREK: They haven't.
 13. MR. LAUDERDALE: So far, they have
 14. not. We have requested it repeatedly. We will
 15. continue to hound them and see what happens.
 16. MR. BAUGHMAN: It seems if they're a
 17. current manufacturer that they, especially wanting
 18. to do business with a company like Ergon, that they
 19. would be forthcoming in that. But --
 20. MR. PISCHKE: Sometimes they can't.
 21. I mean --
 22. MR. BAUGHMAN: Yeah. Well, they're
 23. still building units and they have the dimensionals,
 24. so coming up with the dimensional shop drawings
 25. shouldn't be a huge issue for this manufacturer.

1. But there again, I'm not working there, so I don't
 2. know.
 3. MR. PISCHKE: Yeah.
 4. MR. BAUGHMAN: But regardless, we're
 5. looking at this not from the possibility of a
 6. Tennessee State Special, as we are an operational
 7. variance now, at this point. Jesse's got something.
 8. MR. PASTOREK: So the --
 9. MR. SMITH: I'm confused about the
 10. term -- oh, Jesse Smith, State boiler inspector.
 11. I'm confused about the term
 12. "operational variance." We've got two types of
 13. variances listed in our boiler rules. One's the
 14. attendance variance and the other one's a variance
 15. from meeting the annual internal inspection data
 16. of a high pressure boiler with data provided --
 17. instances be met. But I'm not familiar with the
 18. operational variance that you're describing.
 19. MR. BAILEY: I think in the
 20. statute -- and this is T.C.A. 68-122-1109(g): The
 21. Board may also, in its discretion, grant other
 22. variances where the Board deems it necessary in
 23. order to protect the health, safety, and welfare of
 24. the public. All requests for variances shall be
 25. submitted to the chief inspector or the chief

1. inspector's designee no less than 45 days prior to
 2. the next regularly scheduled or called meeting of
 3. the Board.
 4. That's pretty broad.
 5. MR. PISCHKE: Does that help?
 6. MR. SMITH: Yeah. If that satisfies
 7. you, that satisfies me. I just didn't know the
 8. existence. So thank you.
 9. MR. BAUGHMAN: Does that fall within
 10. those --
 11. MR. BAILEY: I think so.
 12. MR. BAUGHMAN: -- terminology?
 13. MR. BAILEY: Yes, sir.
 14. MR. BAUGHMAN: Good.
 15. MR. BOWERS: Okay.
 16. MR. BAUGHMAN: If he's good with
 17. it --
 18. MR. PISCHKE: He's good.
 19. MR. BAUGHMAN: -- I'm good with it.
 20. MR. PISCHKE: I was going to say the
 21. same thing.
 22. MR. PASTOREK: So not to beat a dead
 23. horse, but to make sure that we give you guys the
 24. right deliverables when we come back -- or prior to
 25. us coming back. So depending on the flange type,

1. we're going to provide two things. We're either
 2. going to provide PMI and a visual inspection or PMI
 3. and a 100-percent x-ray of the flange welds.
 4. MR. PISCHKE: That's correct. Yeah.
 5. MR. PASTOREK: Results of that.
 6. MR. PISCHKE: Yeah.
 7. MR. BOWERS: Or the R-1.
 8. MR. PASTOREK: Sir?
 9. MR. BOWERS: Or the R-1.
 10. MR. PASTOREK: Yes, sir.
 11. MR. PISCHKE: Yeah. If you can
 12. contact ARISE and somehow get their records and
 13. perhaps track down the R-1, that would be good.
 14. MR. PASTOREK: Okay. Thank you.
 15. MR. PISCHKE: I would also suggest --
 16. and we aren't making this mandatory, as I understand
 17. it, but if you can come up with some drawings
 18. somehow?
 19. MR. LAUDERDALE: We could at least
 20. come up with drawings of the external piping.
 21. MR. PISCHKE: Okay.
 22. MR. BOWERS: Sound good?
 23. MR. ROBINSON: You going to take a
 24. vote?
 25. MR. BAUGHMAN: I would make a motion

1. that we continue their operation until the next
 2. Board meeting in March.
 3. MR. PISCHKE: Okay.
 4. MR. BOWERS: I second.
 5. MR. PISCHKE: Second? We have a
 6. motion and a second. All those in favor, signify by
 7. saying "aye."
 8. MR. FOX: Aye.
 9. MR. BAUGHMAN: Aye.
 10. MR. BOWERS: Aye.
 11. MR. PISCHKE: Aye. Opposed? Item
 12. passes unanimously.
 13. MR. PASTOREK: Thank you.
 14. MR. BAUGHMAN: Good job guys.
 15. MR. PISCHKE: Thank you.
 16. MR. BAUGHMAN: Thank you.
 17. MR. BAILEY: Mr. Chairman, could we
 18. at least have a five-minute break?
 19. MR. BOWERS: Yes.
 20. MR. PISCHKE: I don't know. Yeah.
 21. Sure.
 22. (Recess observed.)
 23. MR. PISCHKE: Okay. We'll get back
 24. in session. The next item on the agenda is 17-15.
 25. BASF Amnicola. Can you introduce yourselves and --

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1. MR. BOWERS: Ask about --
2. MR. BAUGHMAN: Conflicts?
3. MR. PISCHKE: Oh, I'm sorry. Thank
4. you.
5. MR. FOX: Conflicts.
6. MR. PISCHKE: Anyone have a conflict
7. of interest on this item? Okay. Not hearing any.
8. MR. HAYS: I'm Chris Hays, BASF
9. Corporation. This is Brittany Davis, also with
10. BASF.
11. We are -- BASF is requesting a
12. variance for two boilers located at the 32 Lost
13. Mound Drive plant in Chattanooga. The boilers are
14. part of a chemical manufacturing process. We
15. produce styrene-butadiene polymers, as far as it's
16. for using adhesives and foams on the asphalt.
17. In addition to these boilers, we
18. operate 123 other pressure vessels, including
19. eight 5,500 gallon reactors. Our processes are
20. governed by OSHA PSM and EPA RMP standards.
21. And a little background on the
22. facility. It's divided into six production units.
23. So the six units make up a continuous process from
24. raw material to finished goods. And a utilities
25. area, 1600, is where the boilers, deaerator, air

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1. compressors, cooling towers of the utilities are
2. located.
3. We have a main control room that's
4. centrally located in the plant. Our main control
5. room is attended 24/7 by either a team leader or
6. one or more of the other operators on shift. It's
7. a common operating area for the plant. Operators
8. that make adjustments to the process are either
9. from the field or from the control room DCS
10. consoles.
11. The remote monitoring station for the
12. boilers is located in the main control room. It's
13. around 300 feet from the boiler control room. So
14. in our case, the remote monitoring personnel will
15. be either fellow operators and team leaders that
16. are assigned to a shift or maybe the actual boiler
17. operator, at the time.
18. So the way that works in the control
19. room, it may be attended by -- the team leader may
20. leave and it could be the boiler operator, reactor
21. operator, any of the other team that's actually
22. attending the room.
23. And also, all our operators carry
24. two-way radios for direct communication. We
25. communicate through a repeater under normal

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1. circumstances. We have direct radio-to-radio
2. capability for power outages. We have a
3. plant-wide intercom system in case of -- somebody
4. has a radio turned off, the battery dies, that
5. sort of thing.
6. Also, we have examples -- the Board
7. has asked a lot of questions about training for
8. operators and the -- today, so we've brought
9. examples of what our training documentation looks
10. like and -- both for our on-the-job sign-offs and
11. things like that as well as training on
12. procedures.
13. So our plan would be, if a variance
14. is approved, we would initiate our management of
15. change process and get these procedures that are
16. drafts that we presented to you actually in
17. service in the plant and training started on all
18. of those approved by site management, engineering,
19. and EHS. And then we would include in the
20. maintenance plans for the area to have the
21. variance renewed at the proper time.
22. MR. PISCHKE: Okay.
23. MR. HAYS: If you have any
24. questions --
25. MR. PISCHKE: Okay. I'd like a

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1. motion to discuss.
2. (No verbal response.)
3. MR. BOWERS: I'll second.
4. MR. PISCHKE: Okay.
5. MR. BAILEY: Before we go, just let
6. the record show that Ms. Jefferson and Mr. Robinson
7. had to leave the meeting to go to Capitol Hill.
8. That was already planned.
9. MR. PISCHKE: Thank you.
10. MR. BAUGHMAN: Let's go through that
11. again, the motion.
12. MR. PISCHKE: Okay. A motion to
13. discuss.
14. MR. BOWERS: Second.
15. MR. BAUGHMAN: Well, there needs to
16. be a motion.
17. MR. BOWERS: Okay. Motion to
18. discuss.
19. MR. PISCHKE: And second?
20. MR. BAUGHMAN: Second.
21. MR. PISCHKE: Okay. Thank you. Go
22. ahead.
23. MR. BOWERS: Okay. I'm looking at
24. your packet here, and the only thing I can see about
25. the boilers is two Babcock & Wilcox boilers.

1. There's no Tennessee Number, National Board Number,
2. anything about the boilers in your packet.
3. MR. HAYS: Right.
4. MR. BOWERS: I mean, you're asking
5. for a variance for these boilers, right?
6. MR. HAYS: Yes.
7. MR. BOWERS: So there should be
8. something about the boilers in the packet, right?
9. MR. HAYS: Well --
10. MR. BOWERS: Don't you agree?
11. MR. HAYS: If that's a requirement,
12. then yes. We don't have the National Board Number.
13. Would you like that in -- you would want that
14. included in the -- in our remote monitoring
15. procedure, just for the Board's information?
16. MR. BOWERS: Yeah. You need that,
17. right, Sam? You need the Tennessee Numbers and --
18. MR. CHAPMAN: Yeah.
19. MR. BOWERS: -- everything else for
20. the packets to --
21. MR. CHAPMAN: Like on --
22. MR. BAUGHMAN: Actually, part of the
23. requirement of the --
24. MR. CHAPMAN: Yeah. On the check
25. list.

1. MR. PISCHKE: The check list. Yeah.
2. MR. BAUGHMAN: It's under Systems
3. Operating Manual, Number 4. Does the manual clearly
4. describe the boiler system that is being remotely
5. monitored?
6. MR. HAYS: Okay.
7. MR. BAUGHMAN: And to expand upon
8. that, since we have only that these are two B&W
9. boilers, what year are the boilers?
10. MR. HAYS: They are -- in this case,
11. they are original to the plant, 1971.
12. MR. BAUGHMAN: Two 1971 B&Ws. And
13. what size are they?
14. MR. HAYS: They are in our -- let me
15. get my correct procedure pulled up here. In our
16. Normal Operation Procedure that's UCM-W1603 in the
17. overview of the steam generation system, it's
18. Section 6.1, they are 30,000 pounds per hour on
19. their name plate.
20. MR. BAUGHMAN: At what PSI are they
21. rated? Not what they operate, but what are they
22. rated?
23. MR. HAYS: They have -- I can give
24. you relief valve settings off the top of my head,
25. but that's --

1. MR. BAUGHMAN: It's okay.
2. MR. HAYS: That's all I could give
3. you.
4. MR. PISCHKE: What are they set at?
5. MR. HAYS: There's one right off the
6. drum or right off the header that's 175 and then we
7. have a 195 and then also a 200 on the steam drum.
8. And we also -- I believe we -- did we supply them
9. with the P&IDs?
10. MS. DAVIS: We -- I don't believe we
11. put the P&IDs in your packet, but we do have a copy
12. of some supplemental materials that we can pass
13. around. So if you would like to see the P&IDs, we
14. have a copy.
15. MR. BAUGHMAN: I guess at my point
16. where I'm at is that I've got nothing to refer to,
17. as far as the boilers go. I've got -- we're
18. approving -- we're being asked to discuss and
19. approve and a variance upon equipment that we can't
20. ask about or even have identified other than the
21. manufacturer in writing.
22. MS. DAVIS: Would you like to see a
23. P&ID?
24. MR. HAYS: Are you saying that we
25. should have included the -- a U-1 form with the --

1. MR. BAUGHMAN: No. Not necessarily
2. the manufacturer data report. A U-1 would be for an
3. unfired vessel, so this would be a P-2 manufacturer
4. data report.
5. MR. PISCHKE: P-3.
6. MR. BAUGHMAN: P-3. For the
7. high-pressure boiler?
8. MR. PISCHKE: Yeah. For
9. high-pressure.
10. MR. BAUGHMAN: And S stamp's a P-2.
11. Particularly, regardless, we don't have any -- we
12. don't have anything identifying what it is that
13. we're looking at. We've got the control system
14. identified through here and valves that are opening
15. and closing and the procedures, but it doesn't
16. identify the equipment itself. So I just -- I don't
17. have anything to really analyze.
18. MR. BOWERS: Yeah. It'd be more like
19. a fact sheet. Basically, your Tennessee Number,
20. your --
21. MR. PISCHKE: Your spec sheet.
22. MR. BOWERS: Yeah. Your National
23. Board Number, your MAWP of your boiler, your safety
24. valve settings, a fact sheet of that boiler. It'd
25. be something that you would put together. It

1. doesn't have to be something from the manufacturer.
 2. But all that data that relates to that boiler, like
 3. the -- now, you do have down 30,000 pounds an hour,
 4. but, you know, what's the manufacturer -- the MAWP
 5. of that boiler --
 6. MR. HAYS: Right.
 7. MR. BOWERS: -- in which your safety
 8. valves are set. You know. A little more data to
 9. let us go by. And I even tried to look it up under
 10. the database, and I didn't even see these boilers in
 11. there even to find the National Board -- the
 12. Tennessee Numbers on these. And you're the --
 13. MR. HAYS: Well, as far as the --
 14. Yeah. As far as the name plate information and
 15. anything that our inspector --
 16. MR. BOWERS: Yes.
 17. MR. HAYS: -- would see and that sort
 18. of thing, we -- well, we didn't include it in our
 19. operating procedures or monitoring procedures. And
 20. then also, I guess, we should have set -- just given
 21. you that as a separate fact sheet.
 22. MR. BOWERS: And maybe a copy of
 23. the -- one of the State certificates, you know, with
 24. that. Your latest State certificate would help.
 25. MR. BAUGHMAN: Chris and Brittany, if

1. you could direct me to where the placard is in the
 2. manual that would be posted at the monitoring
 3. station?
 4. MR. HAYS: We don't have a placard in
 5. the manual for that. We -- normally, for any of our
 6. operating procedures, we keep them, in this case, in
 7. books for every area next to the control console.
 8. Our plan was to use the control system work station
 9. that is designated for monomer storage and utilities
 10. use, those alarms from those areas are all routed
 11. through that one station, and through that one
 12. station's alarm annunciator.
 13. In that case, we had planned to use
 14. radio communication to talk to a nearby boiler
 15. operator, which in our case would be most likely
 16. within 300 feet of the boiler, anyway, or possibly
 17. in the control room at the time. We had hoped to
 18. stick with our -- if it would be allowed, to stick
 19. with our normal method of storing procedures,
 20. accessing procedures, and that sort of thing, if
 21. it would be allowed.
 22. MR. BAUGHMAN: Have these boilers
 23. ever operated under a variance?
 24. MR. HAYS: I can't -- I don't believe
 25. so. I don't believe so on these. For our other

1. plant, we did find some evidence that they had in
 2. the past, but in our case, no, at Amnicola.
 3. MR. BOWERS: And basically, how
 4. you're operating now is you have full-time operators
 5. 24-7 --
 6. MR. HAYS: Yes, sir.
 7. MR. BOWERS: -- based in the control
 8. room.
 9. MR. HAYS: Yes, sir.
 10. MR. BOWERS: So you're doing --
 11. you're complying with the 20-minute rule --
 12. MR. HAYS: Yes.
 13. MR. BOWERS: -- by full-time
 14. operators.
 15. MR. HAYS: Yes. We have a -- for the
 16. six operating areas, a full shift would be 18
 17. members.
 18. MR. BOWERS: Yeah.
 19. MR. HAYS: One of them being an
 20. operator, a boiler operator that's qualified.
 21. MS. DAVIS: There may be several
 22. operators on that shift that are qualified in that
 23. area, but only one should be assigned that day.
 24. So --
 25. MR. BOWERS: And what is the purpose

1. of going from the system that you've got to -- going
 2. to a four-hour system? What's the benefits to
 3. your -- is the operator still going to be there or
 4. he's going to be doing different things now?
 5. MR. HAYS: Yes. The operator will
 6. still be there. Actually, for this plant, we had
 7. not planned on going to four-hour checks. We were
 8. going to just continue with -- most of the areas
 9. have hourly rounds, anyway. So the purpose of this
 10. would be for, really, flexibility, because the
 11. operator that runs the utility area also unloads raw
 12. materials at times, which are flammables. And they
 13. also, during certain parts of their operation,
 14. require constant attendance. So it's -- in a case
 15. where we have possibly one boiler operator on shift,
 16. he's got to kind of leave one spot possibly or shut
 17. down an unloading operation, go check a boiler, and
 18. start up another unloading operation.
 19. And some shifts where they may have
 20. more than one boiler operator, you know, they may
 21. have to call somebody to leave, possibly the
 22. reactor area, to go check the boilers and that
 23. sort of thing. So this would just really allow a
 24. normal hourly round of checks.
 25. MR. BOWERS: So it's not going to

1. change much from what you're operating right now.
2. MR. HAYS: It doesn't add or subtract
3. any personnel from the area.
4. MR. BOWERS: Okay.
5. MR. BAUGHMAN: So on Number 33 of our
6. form for the checklist, for attendant variance
7. request, Number 33 says, does the manual include a
8. training log that contains the date, name,
9. instructor signature and remarks. And it's marked
10. "not applicable" with the comment to the side of
11. 6.3.3.2. And as I go back to look for 6.3.3.2, I
12. cannot find that, unless I'm just overlooking it.
13. But it goes from 6.3.2.4.
14. MS. DAVIS: So this is part of our
15. supplemental material.
16. MR. BAUGHMAN: That all of us have?
17. MS. DAVIS: You don't have that. We
18. didn't realize that we needed to include it in your
19. original packet, but we brought it with us. So we
20. have some samples of training records, our
21. on-the-job training records.
22. MR. BAUGHMAN: Okay.
23. MS. DAVIS: They're initialed each by
24. a team leader, and then they all say, I verify that
25. I reviewed and I understand and I can do this job.

1. It's signed by the operator, it's signed by a
2. trainer, a senior evaluator, and team leader and a
3. backup.
4. MR. BAUGHMAN: So would that, then,
5. be that 6.3.3.2 or is --
6. MS. DAVIS: That's a description of
7. how we train and our training standards and our
8. training procedure. And this is, I guess, the
9. physical training records.
10. MR. BAUGHMAN: Okay. So what does --
11. MR. HAYS: The 6.3.3.2 mentions the
12. learning management system and site support
13. specialist. And through the learning management
14. system and site support specialist, that's where we
15. got that log. So it's -- our --
16. MR. BAUGHMAN: Oh, so it's not
17. actually in here.
18. MR. HAYS: Our records are maintained
19. electronically in a database, along with -- well,
20. all the operator training and records.
21. MR. BAUGHMAN: Super. Thank you. So
22. what I was just getting at was that's what I
23. couldn't find, was as I was looking for it --
24. MR. HAYS: Yeah.
25. MR. BAUGHMAN: -- there's references

1. to materials that we don't have --
2. MR. HAYS: Right.
3. MR. BAUGHMAN: -- that are integral
4. to the manual. Okay.
5. MR. HAYS: We understood that this
6. may cause some heartburn when we met with the Board
7. and we were hoping that we could bring enough
8. information to show that we satisfied --
9. MR. BAUGHMAN: Okay. It's --
10. MR. PISCHKE: Oh, we found it.
11. MR. BAUGHMAN: We got it.
12. MR. HAYS: -- the requirements.
13. MR. BAUGHMAN: Yeah. Thank you.
14. MS. DAVIS: In summary, basically
15. what happens is, somebody will be qualified for an
16. area, so they go through training, and those are the
17. on-the-job training forms that I left right there.
18. And then every year or every time a procedure is
19. updated, we use our learning management system and
20. the training is re-sent out. And then that's the
21. electronic records beside you for every operator and
22. every procedure that they've been trained on. So
23. they're trained annually and when a procedure's
24. updated that they're qualified in that area.
25. MR. BAUGHMAN: So these are samples?

1. MS. DAVIS: Yes. We have --
2. MR. BAUGHMAN: Or they're not -- I'm
3. sorry.
4. MS. DAVIS: -- a stack this thick.
5. MR. BAUGHMAN: Got you. So they're
6. not the actual up-to-date records. They're just --
7. MS. DAVIS: So we have on-the-job
8. training for initial training. So those are actual,
9. real-life samples of the first time that somebody
10. was trained in that area, and then we go to the
11. annual training on the learning management system.
12. So they are up to date, but they're only trained on
13. the on-the-job training form once.
14. MR. BAUGHMAN: What I would suggest
15. is that instead of having vetting and unloading and
16. styrene and all the different training, is probably
17. making it specific to the boiler, for our own
18. analyzation. Because I'm looking through a training
19. manual off hand or training records and --
20. MR. HAYS: If I could explain the way
21. that works, there's a package of training and
22. procedures and equipment and -- you know, that goes
23. with the equipment in the area that each operator --
24. if I was going to train, say, to be a monomer
25. storage utilities operator and go through this, then

1. really, I can't run, you know, monomer storage and
2. not the boilers or boiler and not monomer storage.
3. So that's why you see all that together. It's -- it
4. is one guy's responsibility.

5. MR. BAUGHMAN: I'm just thinking, as
6. far as for our own review, if in presentation you
7. can condense all of this pages and pages of training
8. down to specifically --

9. MR. HAYS: Okay. Yeah.

10. MR. BAUGHMAN: -- down to boiler.

11. MS. DAVIS: We can do that, but since
12. these are the on -- original on-the-job training
13. records, they won't have initials. I mean, it would
14. just be a list that we've put together.

15. MR. HAYS: Yeah.

16. MS. DAVIS: Because these -- I mean,
17. it is part of a package, like Chris said. So it
18. won't be initialed by anybody; it won't be signed;
19. it'll just be a Word document, basically, that says,
20. here's who's trained.

21. MR. BAUGHMAN: And we're looking for
22. current personnel, as it is. So whether they were a
23. previous hire of 2006 or 2012, what we're looking
24. for is the training, because this is a new
25. variance --

1. MR. HAYS: Right.

2. MR. BAUGHMAN: -- and there's going
3. to have to be new training to the variance --

4. MS. DAVIS: Right.

5. MR. BAUGHMAN: -- itself. So there's
6. going to be a whole new set of training to this
7. manual, as it is.

8. MR. HAYS: Exactly. That was one
9. thing that I was going to explain earlier. Our --
10. within the document numbers that -- you see the
11. remote monitoring of boiler systems carries a
12. UCM-W10 number, and then the other boiler procedures
13. are a 16 number. So 1600 would be the utilities
14. area.

15. And according to the group or family
16. of procedures that you install this in, that's how
17. the training is dealt out by the learning
18. management system. So in the case of the remote
19. monitoring system, that's not necessarily
20. utilities. It's a plant general that all
21. operating personnel would get the training on the
22. remote monitoring --

23. MS. DAVIS: And that will actually
24. happen with our management of change process. So
25. when we go -- if we were to receive a variance, we

1. would initiate a management of change, train all
2. operators on this procedure and the tasks involved,
3. and that's how we would take care of training. And
4. then it would be annual from there, unless that
5. procedure were to change.

6. MR. HAYS: Our change procedures, the
7. way it starts out is it has a description, reason
8. for changes, and then you kind of start with, here's
9. what we would like to do and why, and then we'd go
10. through engineering and management approval. And
11. then there are different tabs. It's a Lotus Notes
12. database type things. There's different tabs for
13. items to be updated, action items, pre-startup
14. safety review with a walkdown with the HS folks, and
15. that sort of the thing, and then approval of the
16. change and startup approval before it's an official
17. procedure. And training would be part of that where
18. we would actually have a training roster that an
19. operator would need to sign.

20. MR. BAUGHMAN: So under that 6.3.3.2,
21. which they found for me, it does say, training is
22. administered by the Chattanooga site support
23. specialist and the production supervisor. Do we
24. have who that is, or is that just identifying the
25. position?

1. MR. HAYS: The position? Yes, sir.

2. MR. BAUGHMAN: Okay.

3. MS. DAVIS: We try not to be too
4. specific in case we do have changes in personnel,
5. because then we have to remember exactly whose name
6. is referenced in every procedure. So we try to list
7. general titles in case that role were to change
8. people.

9. MR. HAYS: We kind of have -- we have
10. a published organizational structure and we try to
11. stick with that. If one person gets promoted, it
12. may look like, in 30 or 50 procedures, that they're
13. responsible for something that they're not.

14. MR. BAUGHMAN: So to take that to a
15. further extent on Number 31 of our checklist, it
16. says, does the manual include an organizational
17. chart showing clear lines of authority?

18. MR. HAYS: In that case, rather than
19. using a chart, we really wanted to keep it very
20. simple, a little bit different than, say -- and if
21. we had our security guard or somebody like that
22. doing the remote monitoring, they would need the --
23. they would need peoples' phone numbers and cell
24. phone numbers and certain things like that. We
25. really wanted to give the folks in the plant, on

1. site, on that shift -- they're in charge of all the
 2. processes. So they have the authority.
 3. So in this case, we said, in 6.4.1.5,
 4. that the team leader or process technician has the
 5. authority to place the boiler in a safe state by
 6. activating a master fuel trip until a condition
 7. can be corrected. So --
 8. MR. BAUGHMAN: Because just under
 9. 6.4.1 is what's on the checklist. That refers to
 10. the warm startup, warm system startup procedure that
 11. I'm showing under operations.
 12. MR. HAYS: For the -- yeah. This is
 13. 6.4 and the remote monitoring of the boiler systems
 14. procedure is remote boiler monitor personnel duties
 15. and responsibility.
 16. MR. BAUGHMAN: Got you. I'm looking
 17. under the wrong 6.4.1.
 18. MS. DAVIS: We apologize for
 19. confusion and the format, but we tried to be
 20. consistent with all of our other procedures. So we
 21. understand that it might be a little difficult to
 22. navigate. But we tried to be --
 23. MR. HAYS: Yeah. For a reactor
 24. operator, he knows every one of his procedures -- or
 25. she knows every one of those procedures. 8.01 is an

1. emergency shutdown procedure, for instance. So they
 2. always know where to go.
 3. MR. BAUGHMAN: Thank you.
 4. MR. HAYS: Again, we were afraid that
 5. our format may cause some heartburn and seem more
 6. difficult to folks outside the company to navigate.
 7. MR. PISCHKE: Well, it -- yeah.
 8. MR. HAYS: But this is --
 9. MR. BOWERS: It's a huge amount of
 10. data there. It's just a huge amount of data. Then
 11. you're trying siffle through it where it pertains to
 12. the variance.
 13. MR. HAYS: We considered -- another
 14. option that we had considered at one point was to
 15. make a standard manual that would be easier for you
 16. guys to navigate, but we would have to just have it
 17. as an attachment to a standard procedure, because
 18. that's the only way we're allowed to construct a
 19. procedure. So we were kind of torn with that one.
 20. MR. PISCHKE: And I can appreciate
 21. that. As a quality manager, I certainly can
 22. appreciate that.
 23. What may have helped would be, you
 24. know, taking that checklist one step further and
 25. maybe -- you know, highlighted those exact

1. paragraphs (verbatim). I know you did identify
 2. them and you identified the paragraphs.
 3. Unfortunately, sometimes the document numbers,
 4. because there were so many different document
 5. numbers, that kind of confuses us. I'm easily
 6. confused.
 7. MR. BOWERS: I went through --
 8. there's a lot of data here to siffle through it, try
 9. to go back and forth. You know, maybe if you all
 10. would have kind of just made a synopsis on some of
 11. this stuff, you know, break it down, not as part of
 12. your documentation but just given us a, kind of,
 13. flip-through shorter version of it --
 14. MR. HAYS: Yeah. We realize that
 15. possibly if we'd have hired an outside firm or, you
 16. know, a local boiler company or somebody that offers
 17. this as a service, that they would probably have a
 18. template for this sort of thing. You can paste in
 19. it from our procedures. So we apologize for any
 20. confusion that we caused with our standard format.
 21. MR. BAILEY: Sounds like a case of
 22. TMI.
 23. MS. DAVIS: We also just wanted to
 24. state that we take safety very seriously. This is
 25. not to, you know, downplay safety in any means. Our

1. Amnicola site has actually gone over 2,000 days
 2. since our last recordable injury. It's -- like
 3. Chris said, just to have a little more flexibility.
 4. It's not going to change manpower or anything. All
 5. of our remote monitors are familiar with the DCS.
 6. They're familiar with the plant, the operation. So
 7. it's not, you know, affecting safety in any way, we
 8. believe.
 9. MR. PISCHKE: And just from what I've
 10. read through this, it shows that you have an
 11. attention for detail in this operation. I think we
 12. are missing or we -- there's some key elements of
 13. the requirements that we need a little more
 14. information on. Would you say that, Dave?
 15. MR. BAUGHMAN: Yes. I would say
 16. that's a fair statement.
 17. MR. PISCHKE: You know. And some of
 18. what you have here is more than we need, of course.
 19. MR. BAUGHMAN: Let me just --
 20. MR. PISCHKE: Go ahead.
 21. MR. BAUGHMAN: -- ask, who is your
 22. boiler inspector?
 23. MR. HAYS: Steve Alexander --
 24. MR. BAUGHMAN: With ARISE.
 25. MR. HAYS: -- with ARISE is our

1. normal insurance inspector.
2. MR. PISCHKE: Do we have a State
3. inspector who looks at these?
4. MR. CHAPMAN: I don't. Normally, if
5. there's an insurance company involved, the State
6. won't go out --
7. MR. PISCHKE: Oh, okay.
8. MR. CHAPMAN: -- unless it goes over
9. to the delinquent list.
10. MR. PISCHKE: Oh, okay. Okay.
11. MR. BAUGHMAN: Was the boiler room
12. itself in here?
13. MR. PISCHKE: Yeah. Was there an
14. outline of the boiler room? I know there was a
15. site --
16. MR. HAYS: The -- yeah. We just have
17. the plot plan. What this looks like -- originally,
18. these boilers were out in the open, had no -- they
19. were not under a roof when the plant was originally
20. constructed. A Canadian company built the plant,
21. and they had -- they seemed to have had a lot more
22. faith than they should have had that they wouldn't
23. have freezing problems here in the South.
24. So much of that plan is
25. constructed -- equipments' outdoors, out in the

1. open. In possibly the 1980s, somewhere along in
2. there, a roof was placed over both of them with
3. the stacks penetrating through. So that's what
4. you have. In original construction, there was a
5. small room, if you want to call it that. They
6. called it the boiler shack, you know, that had a
7. control panel in it. And that had been -- has
8. been expanded as part of this under-roof section.
9. It is an actual room that has a plant DCS console
10. in there.
11. So there are two workstations in
12. there that the boiler operators can use. We have
13. two in case of a failure of one of the stations,
14. that they would be able to operate and see all the
15. controls, manipulate them.
16. MR. BAUGHMAN: If you'd be so kind,
17. on the site drawing, as just to point me in the
18. direction of where the boilers are located? Never
19. mind. I see them right here where it says,
20. "boilers."
21. MR. HAYS: That comes across --
22. MR. PISCHKE: That was our first
23. clue.
24. MR. HAYS: -- a little easier on a
25. large drawing.

1. MR. BAUGHMAN: So --
2. MR. HAYS: 24 by 36 or something.
3. MR. BAUGHMAN: -- one other piece of
4. information that'd be good, since these boilers
5. have -- I'm anticipating a DA that's feeding them.
6. MR. HAYS: Yes, sir.
7. MR. BAUGHMAN: Is having the
8. information on the deaerators. Deaerator or --
9. MR. HAYS: Along with all the --
10. yeah. With the same type of information that we
11. would be providing for the boilers?
12. MR. BOWERS: Yes.
13. MR. HAYS: Now, so we're clear --
14. well, I think maybe we should include it in the --
15. maybe we should include that in the remote
16. monitoring procedure. That way, it always shows up
17. with somebody from BASF when we renew the variance,
18. I guess. That would be a good idea.
19. MR. BAUGHMAN: It's not a requirement
20. to have the DA, but being that we've had a rather
21. significant DA catastrophic incident --
22. MR. HAYS: Right.
23. MR. BAUGHMAN: -- it may be up for
24. review in the future, but it's an integral part and
25. it's a pressure vessel that's integral to the boiler

1. system.
2. MR. HAYS: Right.
3. MR. BAUGHMAN: So it's always good to
4. have that as review. And part of your -- it's
5. already being monitored, as it is, in some form or
6. fashion, correct?
7. MR. HAYS: Yeah. Yes. Yes.
8. MR. BAUGHMAN: So even though it's
9. not mandated that it be in the variance, it's good
10. to have that equipment information described along
11. with the boilers.
12. MR. HAYS: Okay. Yeah.
13. MR. BAUGHMAN: Is that a fair
14. statement, Sam?
15. MR. HAYS: Possibly some --
16. MR. CHAPMAN: Yes.
17. MR. HAYS: You guys asked about a
18. feed water system earlier, possibly some pump
19. information, pressures or horsepower, that type of
20. thing?
21. MR. BAUGHMAN: The NB Number, the
22. Tennessee Number, the capacity, the safety relief
23. valves --
24. MR. HAYS: Okay.
25. MR. BAUGHMAN: -- construction, PSI,

1. set points of the relief valves, and so forth.
 2. MR. HAYS: We can -- we should easily
 3. be able to put our hands on that information.
 4. MR. CHAPMAN: Yes.
 5. MR. HAYS: That should be no problem
 6. at all.
 7. MR. PISCHKE: Do we have a
 8. comprehensive list of things that we would like them
 9. to add to this?
 10. MS. DAVIS: I have a few things
 11. written down that -- you want a spec sheet for the
 12. boilers, also some info on the deaerator, a training
 13. roster that's a little more concise, and then just
 14. to kind of revise our procedure so it's more
 15. navigable for you?
 16. MR. PISCHKE: The navigable is not a
 17. requirement. But one thing that is a requirement is
 18. an organizational chart showing who reports into
 19. whom. So what was another requirement that we
 20. identified?
 21. MR. BAUGHMAN: Well, for one, we've
 22. got to have -- she mentioned the spec sheet.
 23. MR. PISCHKE: Yeah. Is there
 24. anything --
 25. MR. BAUGHMAN: Yeah.

1. MR. PISCHKE: -- any more that we're
 2. missing?
 3. MR. HAYS: In the case of the
 4. organizational chart --
 5. MR. PISCHKE: It needs to be.
 6. MR. HAYS: How far does that need to
 7. go? For example, there are eight people to a crew.
 8. If it's after 6:00 o'clock, that's night shift, and
 9. the authority on site is the team leader. It's the
 10. team leader and everybody underneath. And that's,
 11. rather than a chart, is why we just did it with an
 12. underlined statement that said that the team leader
 13. or process technician had the authority to shut down
 14. the boiler. Would you want the organizational chart
 15. for the site management to be included?
 16. MR. PISCHKE: Well --
 17. MR. HAYS: We wouldn't include them
 18. in the decision making for shutting down a boiler --
 19. MR. PISCHKE: No.
 20. MR. HAYS: -- for certain.
 21. MR. PISCHKE: Go ahead.
 22. MR. BAUGHMAN: I would do a
 23. simplistic flow chart just showing those personnel
 24. and who they report to.
 25. MR. HAYS: Three blocks. Remote

1. monitoring operator, boiler operator, team lead.
 2. MR. BAUGHMAN: And have under that
 3. block, whoever might be within that block --
 4. MR. HAYS: Right.
 5. MR. BAUGHMAN: -- but I would make it
 6. simplistic and not necessarily go into, you know,
 7. what shift, who's working, and details and what have
 8. you. It's just who reports to you.
 9. MR. HAYS: Yeah. If we went into,
 10. yeah, too much detail, our procedure would always be
 11. incorrect, you know --
 12. MR. PISCHKE: Yeah.
 13. MR. HAYS: -- for operators.
 14. MR. PISCHKE: Yeah. Make it as
 15. simplistic as you can but with the key information
 16. of who's responsible -- or, you know, for
 17. implementing that procedure.
 18. MR. BAUGHMAN: There's --
 19. MR. HAYS: Three blocks will do it
 20. for us. Yeah. So --
 21. MR. BAUGHMAN: I know in the manual,
 22. it asks -- or in the checklist, it asks for the
 23. phone numbers. Are the personnel listed? Yeah.
 24. So -- and I understand that we're dealing with
 25. something a bit out of the, maybe out of the norm.

1. There again, is there a placard showing emergency
 2. procedures prominently displayed at the remote
 3. monitoring station, and it's marked. Not
 4. applicable, but it's under the 4.2.2, you're saying
 5. that it's kept --
 6. MR. HAYS: We -- yeah, with the.
 7. MS. DAVIS: It's in the control room.
 8. MR. BAUGHMAN: Yeah. It's in the --
 9. MR. HAYS: From the remote monitoring
 10. station, the operator can put their hands on any
 11. site procedure in the binders on the spot, plus any
 12. BASF personnel, they have access to business network
 13. connected computers, and they have access to all the
 14. procedures electronically, also.
 15. So when we do procedure updates,
 16. there's a checklist and a -- well, there's a
 17. procedure for procedures for us. And we have to
 18. list that we put these in certain binders in
 19. certain locations and then also in the folder, and
 20. there's a database for that.
 21. MS. DAVIS: Part of that checklist
 22. is, has it been sent out for training? You cannot
 23. issue a procedure without sending it out for
 24. training.
 25. MR. PISCHKE: Okay. That's very

1. good. I mean, that's good practice. Absolutely.
 2. MR. BAUGHMAN: One thing that I'm
 3. just -- one other technical thing that comes up,
 4. because in the State of Tennessee, all these
 5. electronics, apertures, and so forth are to be UL
 6. labeled, and in the manual, it asks for a complete
 7. description of the computer remote monitoring
 8. system. I've got down that it's a monomer storage
 9. utilities DCS work station, will function as the
 10. computerized remote monitoring system.
 11. MR. HAYS: Yes. So you would like
 12. more detail as to a brand, that --
 13. MR. BAUGHMAN: Well, it's a
 14. requirement. We've got to have a detail on the
 15. computer monitoring system as it is, more than just
 16. a generic. We're required also that this be a UL
 17. labeled system, and I don't have anything to be able
 18. to go through and analyze in that respect.
 19. MR. HAYS: Okay.
 20. MS. DAVIS: So Section 6.2 in our
 21. procedure is all about the computerized remote
 22. monitoring system.
 23. MR. BAUGHMAN: Okay.
 24. MS. DAVIS: I don't know if you've
 25. seen that yet.

1. MR. HAYS: There's not a statement in
 2. there about UL listing. But yeah, the 6.2 that
 3. Brittany mentioned is where we just say that it's
 4. remotely monitored via the monomer storage utility
 5. dedicated work station, and that operators --
 6. displays, in this case, alarm indications are
 7. duplicated between the work stations that are
 8. actually in the area, remotely in the area, and what
 9. is located in the control room.
 10. We also -- there was something in the
 11. checklist about -- is the system self-dynamic,
 12. self-checking, and that sort of thing, and these
 13. are -- these computer work stations that are part
 14. of the plant control system have dual network
 15. interface cards. So they're dual fiber networked,
 16. and each station is part of a group that alarms as
 17. a system. If one system fails to communicate or
 18. one channel fails to communicate, the alarm will
 19. be displayed on another station. So you wouldn't
 20. be trying to alarm, obviously, on the station that
 21. failed.
 22. MR. BAUGHMAN: Is this station -- is
 23. this web-based or hardwired?
 24. MR. HAYS: Well, the construction of
 25. the system is such that it's a -- it has its own

1. network, its own fiber network for PC to PC or
 2. server to server. Through -- there again, it's
 3. redundant fibers, dual network switches, all that.
 4. That system that actually controls handles -- the
 5. portion of the system that handles the burn
 6. management functions and controls and that sort of
 7. thing, we -- our burn management designer -- we were
 8. speaking with Chief about this earlier.
 9. We had some committee members
 10. actually that were on the NFPA 85 committee for
 11. single-burn boilers that worked for Foxboro, which
 12. is our control system vendor. We had them design
 13. that portion, segregate the system into different
 14. control processors for each boiler. All that
 15. stuff is segregated in a way that's --
 16. MR. BAUGHMAN: Can anything be
 17. monitored off-site?
 18. MR. HAYS: No, sir.
 19. MR. BAUGHMAN: Okay.
 20. MR. HAYS: Not at this time. I will
 21. say, with our -- some planned upgrades, a DCS
 22. migration that we have coming up, the only way we
 23. would monitor anything would be through a PIMS
 24. information management system where there would a
 25. standard BASF firewall set up that actually prevents

1. connection from the Internet, from the outside world
 2. directly to our control system. So there's a
 3. dual -- there will be a dual firewall there. And
 4. BASF computers, business computers, can have a
 5. client for that that lives on their machine where a
 6. process engineer, like Brittany, might set up her
 7. own charts or trends, and that sort of thing, to
 8. keep an eye on everything, but not to use just for
 9. data analysis, not for operating anything.
 10. MR. BAUGHMAN: Well, as we know in
 11. this day and age, when we -- that's why I ask is --
 12. Equifax, Sony, HBO, they're all in the news with --
 13. MR. HAYS: Yes, sir.
 14. MR. BAUGHMAN: -- their
 15. sophistication, and that's something that we want to
 16. keep up to date on --
 17. MR. HAYS: Yeah.
 18. MR. BAUGHMAN: -- moving forward in
 19. this industry.
 20. MR. HAYS: The way this works for
 21. us -- and we're in the middle of this now -- if you
 22. want to have any kind of an PIN system to pull these
 23. tags off of your control system, there has to be a
 24. firewall between your control system and what is
 25. called the IDMZ network, which is the demilitarized

1. zone in the middle, another firewall that it has to
2. go through to get to the business network, and then
3. business network firewalls to get to the outside
4. world.

5. There is a server that sits in the
6. middle, and information only goes one way, not in
7. to manipulate the control system, but out through
8. predefined tags to a server on the DMZ to be dealt
9. out to the clients. And BASF firewall team has to
10. configure those and we have to order it through
11. our experts. So they won't let people like us do
12. that sort of thing. That's how that goes.

13. MR. PISCHKE: Another requirement
14. that Sam brought up is the highlighted emergency
15. procedure sheet that looks something like that.
16. That needs to be included in this.

17. MR. HAYS: We had a discussion --
18. yes, sir. We had a discussion with Chief about that
19. at one point in time, because we -- I think we
20. printed them in color. We took the highlighted
21. section to mean that the text was highlighted.

22. MR. PISCHKE: Oh, okay. Okay. Yeah.

23. MR. HAYS: We didn't understand that
24. we needed to have --

25. MR. PISCHKE: Okay. I see.

1. shutdown in every single procedure on site. So in
2. the event of an emergency, they would open the
3. procedure and know exactly what section to flip to.
4. It's just a general format that we use.

5. MR. PISCHKE: Any other guidance --

6. MR. HAYS: We can certainly make a
7. sign if it doesn't meet the requirement.

8. MR. PISCHKE: -- that we're missing?

9. MR. BAUGHMAN: Not that I can think
10. of.

11. MR. PISCHKE: Sam? So what are we --
12. how do we want to handle these --

13. MR. BAUGHMAN: Well, I don't know.
14. I've got my own personal thoughts on it.

15. MR. PISCHKE: Okay.

16. MR. BAUGHMAN: But whether that's how
17. we handle it or not is another thing.

18. MR. PISCHKE: Well, let me hear those
19. personal --

20. MR. BAUGHMAN: Well, my end of it is,
21. is it still goes back to if we approved a variance,
22. we're approving a variance without any boiler info
23. to approve it on other than two B&W boilers with a
24. particular capacity. We've got no identification to
25. them. So that would be up to the rest of the Board

1. MR. HAYS: -- yellow paper
2. necessarily.

3. MS. DAVIS: Right.

4. MR. BAUGHMAN: That's what we were
5. speaking of earlier with the placard, because you
6. were saying, this is going to be, actually, in a
7. binder. Not necessary on the wall but in a binder
8. to be accessed, correct?

9. MR. HAYS: Right. So, you know, if
10. we -- for instance, if we were using the security
11. guard and they have their security monitoring
12. equipment and cameras and this, that, and the other,
13. I certainly see where that's very useful for that
14. sort of thing, where they're not necessarily boiler
15. operators or part of the crew that's operating the
16. plant.

17. In this case, we were hoping that we
18. could keep the procedures presented to the
19. operators in the same way that they would find
20. reactor procedures, reactor emergency procedures,
21. site emergency response plan, or anything else.
22. That's the way they go to them. If the Board
23. approves, then that's what we would like to do.
24. But obviously --

25. MS. DAVIS: Section 8.0 is emergency

1. to discuss whether or not that that's proper to
2. follow suit. But we've got no identifying criteria
3. other than that. And so I'd like to get the input
4. from the rest to discuss that.

5. MR. BOWERS: Well, I kind of agree
6. with you, Dave. There's not, to me, enough data
7. here. There's a lot of data here, but not enough
8. correct data for us to move forward. That's my
9. opinion.

10. MR. PISCHKE: What's the urgency of
11. this? You're obviously running -- you know --

12. MR. HAYS: Yeah. Is this
13. something -- could we -- well, I guess you're saying
14. you don't -- you can't say one way or another
15. without some pressure vessel specs.

16. MR. PISCHKE: We'd like some more
17. information to make a decision.

18. MR. HAYS: We were concentrating when
19. we were putting this together --

20. MR. PISCHKE: On the procedure?

21. MR. HAYS: When we called the --
22. yeah. We were concentrating on the procedure, and
23. then we called the Chief about this and discussed it
24. over the phone and understood that we -- at the time
25. we called, to get everything submitted in a 45-day

1. time frame, that we would need to move along pretty
 2. quickly at the time.
 3. We didn't understand, you know, that
 4. maybe that you wouldn't have that information.
 5. You know. We know during a phone call with the
 6. Chief, he understood that we didn't have a
 7. variance pretty quick, but I didn't know, you
 8. know, that we were going to have -- that we would
 9. need this.
 10. MR. BOWERS: It's hard to get your
 11. tags on your car without your VIN number. You know.
 12. MR. HAYS: Right.
 13. MR. BOWERS: That's what you're doing
 14. to us. You said, well, we've got these two boilers,
 15. but what's the National Board Number? Well --
 16. MS. DAVIS: Is this something that I
 17. might -- can make a five-minute phone call and
 18. provide you with the information?
 19. MR. BOWERS: No. You probably need
 20. to go back to the drawing board.
 21. MS. DAVIS: It's very easily
 22. accessible. We just didn't know that we needed to
 23. include it.
 24. MR. BAUGHMAN: Well, having the
 25. information on the boiler itself, setting up some of

1. sound accurate?
 2. MR. BAUGHMAN: The best I can tell.
 3. I mean, that sounds like an accurate description.
 4. MR. BOWERS: To wait three months is
 5. not going to really inconvenience you that much, is
 6. it?
 7. MR. HAYS: Well, it --
 8. MS. DAVIS: The operators are already
 9. doing regular round checks. It's, you know, how
 10. they we express that -- when they have to check on
 11. it every 20 minutes, that we may have to stop an
 12. operation, go check the boiler, and then go back.
 13. We do have plenty of manpower to operate the plant
 14. safely, but just freeing up more of that time, it
 15. would really be valuable to our operators.
 16. And they're -- like I said, they're
 17. already doing regular round checks, usually on
 18. hour intervals. It's just every 20 minutes --
 19. it's every time they turn around, they're having
 20. to stop what they're doing -- if they're in the
 21. middle of working on something, stop, put that
 22. down, go check the boiler, write down that
 23. they're, you know, and then go back to it. It's
 24. just -- it's an inconvenience, really. You know.
 25. It would just provide us more flexibility with

1. these other things that we've asked to clean up
 2. isn't horrible. But how are you operating
 3. presently? You've already got people that are
 4. operating within the context of checking the
 5. boilers, so forth. So Mike asked the urgency and
 6. didn't quite get the follow-up to that.
 7. MR. HAYS: Well, we're -- oh. Well,
 8. certainly, we're not going to, you know -- we're not
 9. going to shut down the plant if the Board says no.
 10. You know. We're going to show up with a full team
 11. and operate the plant like we have been. This was
 12. a -- you know, this was providing some flexibility
 13. for this operator that does have some ground to
 14. cover in either plant, either of our plants. The
 15. next variance that we would be asking for is a
 16. similar situation where the monomer storage
 17. utilities operator is responsible for -- he's the
 18. boiler operator and main unloader on material.
 19. So we would --
 20. MR. PISCHKE: It sounds to me like
 21. you have the personnel on site to do the work or
 22. to -- you know, you have the expertise. It's not
 23. that you aren't relying on people that don't have
 24. the expertise, it's just that you need a little
 25. variance in how you're applying this. Does that

1. operating the rest of the plant.
 2. MR. HAYS: We want the right guy
 3. operating the boiler and we -- you know.
 4. MS. DAVIS: Right.
 5. MR. HAYS: And the same guy is
 6. possibly the monomer unloader.
 7. MS. DAVIS: Right.
 8. MR. HAYS: You know. We want the
 9. right person on that, too. So there again, that's
 10. easier on some shifts than others. Some -- you have
 11. operators that are trained in multiple areas. The
 12. shift that's on this evening may have only have one
 13. qualified boiler operator. So that's tougher for
 14. them. If it was possible to get through this with a
 15. contingent approval, we could put our hands on
 16. everything you need. As soon as we left here, we
 17. could have it in an e-mail to someone pretty
 18. quickly, as far as that goes. It would be a next
 19. day type of thing if you could work with us on that.
 20. MS. DAVIS: I'm actually hoping to
 21. make a phone call prior to our next -- and, you
 22. know, provide this information so we're not in the
 23. same situation.
 24. MR. PISCHKE: What do you think, Dan,
 25. as far as what options --

1. MR. BAILEY: Well, you've certainly
 2. got -- I mean, you've got the option to -- if you
 3. don't feel like you have enough information to make
 4. a decision to approve the variance, you could move
 5. to hold it in abeyance until your next meeting and
 6. then they come back with the info that you need.
 7. You know. They talked about, you know, providing
 8. the information with a phone call, but at the same
 9. time, it's -- you know, it's not in the manual that
 10. you're approving, basically.
 11. I mean, I don't guess that would be
 12. absolutely improper, but I guess I don't know how
 13. proper it would be. You know. So I mean, that's
 14. kind of your call on that, or you could vote to
 15. disapprove and make -- you know, they just have to
 16. come back.
 17. But I think if you're holding up just
 18. on, there's just not enough pertinent information
 19. that we need to see, then, you know, probably
 20. holding it into -- moving to hold it into abeyance
 21. until the December meeting is probably a better
 22. thing to do.
 23. MR. PISCHKE: Would that allow them
 24. to continue as they are right now --
 25. MR. BAILEY: Yes.

1. MR. PISCHKE: -- until December?
 2. MR. BAILEY: Yes. They would have to
 3. continue as they are right now until December.
 4. MR. BAUGHMAN: Yeah. And the
 5. information -- there again, the boiler information,
 6. the inspection certificates, as you saw or listened
 7. to earlier in the meeting, when Ergon made their
 8. presentation on the thermal fluid system, the
 9. certificates didn't match up to the equipment from a
 10. PSI standpoint. And so by having all this data, it
 11. allows us to make an evaluation to look at things
 12. just to go over everything as it is.
 13. Whether you look -- or hire somebody
 14. else to look at it and put it in some format or
 15. whether you come back and make the presentation,
 16. we talked about even the system, because whether
 17. Foxboro or somebody else put this together, there
 18. again, looking at the UL listing and whether or
 19. not that that falls within UL or NFPA or whatever
 20. that may be. But making sure that our system
 21. actually has the ratings that it's supposed to.
 22. And all this information that you're
 23. going to present back to us allows us, then, to
 24. have that discussion and --
 25. MR. HAYS: Right.

1. MR. BAUGHMAN: -- moving forward.
 2. MR. HAYS: Well, and what -- you
 3. know, we didn't understand it in the way that --
 4. it's almost like that we're asking permission to
 5. operate the boilers in the first place. We kind of
 6. thought that that portion of it was way past, you
 7. know, and we were just asking for the 20-minute rule
 8. variance. You know. So we didn't include that. We
 9. concentrated on the procedures.
 10. It is a shame, considering that we
 11. just have all that information on site. It could
 12. have been easily -- that specific -- numbers
 13. pressures, relief valve information, relief valve
 14. studies, we have all of it. We have all of it. I
 15. have a -- if I had --
 16. MR. PISCHKE: Is there anything
 17. that --
 18. MR. HAYS: If I had a Wi-Fi password
 19. for this room, I could probably get to it with my --
 20. MR. PISCHKE: And is there anything
 21. that we can do better in the future, I guess,
 22. that's -- of communicating our needs and --
 23. MR. BAUGHMAN: Something to discuss.
 24. MR. BAILEY: Was all that covered on
 25. the checklist?

1. MR. CHAPMAN: Yes.
 2. MR. BAILEY: Yeah. Pretty much, Sam?
 3. MR. CHAPMAN: Yes.
 4. MS. DAVIS: It's a general statement
 5. that says, does the manual clearly describe the
 6. boiler system that is being remotely monitored? So
 7. we, you know, it doesn't say, please provide PSV
 8. calculations and this and that and -- you know. We
 9. just figured we provided a general overview of this
 10. boiler that we were operating and that satisfied the
 11. questions.
 12. MR. HAYS: Yeah. We're --
 13. MR. BAILEY: So you think saying that
 14. they were two, what, B&W boilers made in 1971 was
 15. enough to satisfy that question?
 16. MR. HAYS: We have had in our
 17. procedures in the past -- we put a little more
 18. detail about -- you know, one plant having
 19. water-tube boilers and one having fire-tube boilers.
 20. That type of thing in there, but we didn't include
 21. any more information than we felt like our operators
 22. would need. You know. That's what the problem was.
 23. MR. PISCHKE: They do provide some
 24. detailed information on, you know, the boilers and
 25. what they're like and --

1. MR. HAYS: Water circulation and that
 2. sort of thing.
 3. MR. BOWERS: That's pretty generic,
 4. though, I think.
 5. MR. PISCHKE: It is. It's not the
 6. operating data that we would --
 7. MR. HAYS: As far as what our
 8. operators -- the information on the system --
 9. obviously, the National Board Numbers or anything
 10. like that would not normally be a concern to the
 11. operators, but for our normal operating procedures,
 12. pressures and things like that are mentioned in that
 13. same procedure that you just had. Our normal
 14. operation potential -- normal operating range and
 15. potential deviations give some steam pressure, water
 16. level information, chemicals associated with water
 17. treatment, O2 airflow, and that type of information
 18. that the operator would use.
 19. MR. BOWERS: The information I would
 20. like to see is, one, the National Board number,
 21. number two, the Tennessee Number, manufacturer, the
 22. model of the boiler, date built, maximum -- the
 23. output of the boiler, the MAWP of the boiler, the
 24. fuel, what type of fuel the boiler uses, operating
 25. pressure, and safety valve capacities and safety

1. valve settings. Is there anything else?
 2. MR. HAYS: So we need -- yeah. We
 3. need -- yeah. You're wanting to see relief valve
 4. studies and --
 5. MR. BOWERS: Yes.
 6. MR. HAYS: And things like that.
 7. MR. BAUGHMAN: Well, not so much
 8. studies --
 9. MR. PISCHKE: Not studies --
 10. MR. BAUGHMAN: I'm sorry.
 11. MR. PISCHKE: Go ahead.
 12. MR. BAUGHMAN: Not studies, but the
 13. data. The manufacturer, the model number, and the
 14. capacity.
 15. MR. HAYS: Yeah.
 16. MR. BAUGHMAN: There's no --
 17. MR. HAYS: That's where we're --
 18. well, that's the way we store that information.
 19. MR. BAUGHMAN: Got you.
 20. MR. HAYS: It's in a --
 21. MR. BAUGHMAN: Okay.
 22. MR. HAYS: It's part of a study that
 23. has a -- not only the serial number, model number,
 24. orifice size, that sort of thing --
 25. MR. BAUGHMAN: Got you.

1. MR. HAYS: -- of the relief valve.
 2. MR. BAUGHMAN: Okay. Yeah. The
 3. terminology was just --
 4. MR. HAYS: Yeah. That's --
 5. MR. BAUGHMAN: -- a little bit -- but
 6. yeah, just --
 7. MR. HAYS: That's where we would get
 8. that from. Now, in that case, we may want to put
 9. this in a separate -- I don't know. We can put it
 10. in a separate document. You might want to see
 11. better evidence of it than taking our word from a
 12. Word document --
 13. MR. BOWERS: Oh, we'll take --
 14. MR. HAYS: -- too. You know.
 15. MR. BOWERS: Yeah. We'll take your
 16. word for it.
 17. MR. BAUGHMAN: Yeah.
 18. MR. PISCHKE: Yeah.
 19. MR. BOWERS: Just a fact sheet.
 20. Yeah. We wouldn't know if we were talking about a
 21. little boiler, a 50-horsepower boiler, or a
 22. 800-pound boiler. You know.
 23. MR. PISCHKE: Yeah. One the size of
 24. this room.
 25. MR. BOWERS: A 800-PSI boiler. We'd

1. just like to know what we're looking at. You know?
 2. MR. PISCHKE: Yeah.
 3. MR. HAYS: Yeah. And that's -- all
 4. we have was a -- you know, the --
 5. MR. BOWERS: Yeah.
 6. MR. HAYS: And the next variance
 7. coming up, it would -- they were horsepower-rated,
 8. so they were --
 9. MR. BAILEY: Well, I was going to
 10. suggest --
 11. MR. HAYS: We have the horsepower on
 12. them.
 13. MR. BAILEY: -- if you have the same
 14. issue with the next variance --
 15. MR. HAYS: Oh, yeah. I wish -- yeah.
 16. MR. BAILEY: -- instead of going
 17. through all of it, you know --
 18. MR. HAYS: Yeah.
 19. MR. BOWERS: If it's the same
 20. thing --
 21. MR. HAYS: If we could have -- well,
 22. if -- yeah. If we could have -- certainly, if we
 23. knew this before lunch and had taken lunch, we'd
 24. have had it for you. It's that -- it's just that
 25. easy to get our hands on that information. So --

1. MR. BAUGHMAN: Can you also get that
2. information on the computerized remote monitoring
3. station, as far as the UL listing and so forth?
4. MR. HAYS: Well, it's a Foxboro I/A
5. system, so data sheets are available on the
6. Internet. You know. That type of thing.
7. MR. BAUGHMAN: If you could produce
8. that instead of me going on the Internet, that would
9. be --
10. MR. HAYS: Yeah. That's a --
11. MR. BAUGHMAN: -- perfect.
12. MR. HAYS: That's a -- that's
13. something that we can get.
14. MR. BAUGHMAN: Thank you.
15. MR. HAYS: For sure. It would be
16. data sheets for all the -- for a lot of components,
17. but --
18. MR. BAUGHMAN: Well, the system
19. itself -- not so much the components, but the system
20. itself should be a UL packaged unit, instead of
21. identifying every component that's in that system.
22. So when they produce the system, that system itself
23. should be UL listed. And they'll know exactly what
24. to produce as far as documentation in that respect.
25. So like, with your Fireye components,

1. if you had a Fireye monitoring, which --
2. MR. HAYS: We --
3. MR. BAUGHMAN: They would have that
4. in itself. But the computer monitoring system
5. itself, because it's integral to the monitoring and
6. the operation of the boiler, needs to have a
7. labeling to it. So Foxboro, if they're the ones
8. that developed it, they would be able to have that
9. and produce it.
10. MR. HAYS: Right.
11. MR. PISCHKE: Have we given them
12. enough information?
13. MR. BAUGHMAN: I'd say I think
14. Brittany's written down a pretty good checklist.
15. MS. DAVIS: Yeah.
16. MR. BAUGHMAN: And Chris is --
17. MR. PISCHKE: Do you feel like you
18. understand what we're looking for now?
19. MR. HAYS: Yes. We feel like we do,
20. or I do. Do you want it as a -- do you just want it
21. as a separate document? Do you want that
22. information as a separate document, just to put
23. together? Since it's not useful information to our
24. operators. You just want documents and references
25. in a list.

1. MR. BAUGHMAN: Just like any of the
2. other manuals, when they'd send in a document, the
3. information that we've got, just to look at what we
4. had previously, would list the boiler, the equipment
5. description. Same thing with the --
6. MR. CHAPMAN: A-1.
7. MR. BAUGHMAN: Thank you. Same thing
8. with the equipment description. Any of it is going
9. to be just separate within the binder itself. So it
10. would all be --
11. MR. PISCHKE: And it can just be an
12. appendix.
13. MS. DAVIS: One thing that would be
14. very helpful is an example for us. I mean, all we
15. had was this checklist, and some of the questions
16. are pretty vague, so like, for example, we thought
17. we answered some questions and we really didn't. So
18. if there's an example we could use to go by or, you
19. know, just to kind of get a feel of how much
20. information or how little information you want,
21. because I think we overshot a lot and we undershot a
22. lot. But without an example, we have no idea what
23. you're looking for.
24. MR. BAUGHMAN: And there may be a
25. company willing to do that, or Sam, you might have

1. some examples of --
2. MR. CHAPMAN: I don't -- everything
3. that I have is in a manual, onto that. But as far
4. as -- there's companies out there that does them.
5. They'll help or however they do them. But I can't
6. say a company --
7. MR. BAUGHMAN: Sure.
8. MR. CHAPMAN: Yeah.
9. MR. BAUGHMAN: Is there anything out
10. of a manual without stating anybody's particular
11. name and company and so forth. Because a lot of
12. this, as we know, is cut and paste -- that they
13. might be able to review?
14. MR. CHAPMAN: I haven't seen anything
15. as an example on it.
16. MR. BAUGHMAN: Okay.
17. MR. CHAPMAN: You know. The only
18. thing everybody has been doing is just off the
19. checklist, and they go from that. And some of the
20. times, they'll ask questions and we can answer the
21. questions that they're asking. And that kind of
22. makes sense on that, somewhat.
23. MR. HAYS: That does make sense.
24. We -- and I think most of the folks that are
25. applying for these successfully probably do hire

1. somebody. I think we feel like we may have come to
 2. court without a lawyer.
 3. MR. BOWERS: Well, what you've
 4. done --
 5. MR. BAILEY: If you've never been
 6. here before, that's true.
 7. MR. BOWERS: Yeah. On your own,
 8. you've done a good job. I think you just don't have
 9. a lot of information, but you've put together a lot
 10. of information for your first time here. Yeah.
 11. MR. HAYS: Yeah. That's the shame of
 12. it all. I mean, it was so much harder to get some
 13. of this information that we -- to put together what
 14. we did get, and we could just -- you know, a call to
 15. the maintenance managers at each plant gets us all
 16. this other stuff packaged together. I mean, it
 17. was --
 18. MR. BAUGHMAN: Who do you work -- who
 19. services you down there in Chattanooga?
 20. MR. HAYS: Who maintains the boilers?
 21. MR. BAUGHMAN: Yeah.
 22. MR. HAYS: So mechanically, it
 23. would -- IB&M services the boilers mechanically.
 24. MR. BAUGHMAN: Randy should be able
 25. to be of help.

1. MR. CHAPMAN: Yeah.
 2. MR. HAYS: Well, those guys don't
 3. keep the -- well, they may keep the information, but
 4. I know we have it. We have it in our maintenance
 5. records. We have to have that.
 6. MR. BAUGHMAN: Yeah. I'm just saying
 7. as far as being able to give a template to --
 8. MR. HAYS: Oh, and give a template.
 9. MR. BAUGHMAN: Yeah. IB&M,
 10. Combustion & Controls, WARE, all --
 11. MR. HAYS: Yeah.
 12. MR. BAUGHMAN: -- of those companies
 13. that are down there --
 14. MR. HAYS: Yeah.
 15. MR. BAUGHMAN: -- would be -- could
 16. be a help to you.
 17. MR. HAYS: I know one of the folks
 18. that we work with -- I had spoken to Steve Slatten
 19. (phonetic) --
 20. MR. BAUGHMAN: At IB&M.
 21. MR. HAYS: -- at IB&M about how --
 22. you know, how these different companies are doing
 23. it, because we live inside one fence and we don't
 24. know how -- you know, not being a boiler company --
 25. or boiler company representatives, we don't see it

1. done 100 different ways.
 2. MR. BOWERS: And your --
 3. MR. HAYS: So --
 4. MR. BOWERS: And your boiler
 5. inspector might be able to help you.
 6. MR. HAYS: Yeah. Well, yeah. I
 7. think he thought -- we did speak to him about it.
 8. Of course, he can't give us specific advice. I
 9. think he thought we would have an easier time than
 10. we did. So -- considering that he sees how we
 11. operate. But there again --
 12. MR. BOWERS: Yeah. It's not that
 13. you're not --
 14. MR. HAYS: We didn't -- you know, we
 15. didn't a get a, if you don't show up with this,
 16. they're throwing -- you know, they're throwing your
 17. case away, and that type of information. But --
 18. MR. BOWERS: Yeah.
 19. MR. BAUGHMAN: Well, I feel like
 20. you're on top of the game. I think it's --
 21. everything's going to head the right direction. I
 22. just -- we've had the motion to discuss and we've
 23. pretty well discussed. I just feel like we're at a
 24. point where we need to get it revised so that we can
 25. come in and have some further discussion and then

1. put it to bed.
 2. MR. PISCHKE: Do we need a motion or
 3. can we --
 4. MR. BAILEY: I think --
 5. MR. PISCHKE: -- move to table it?
 6. MR. BAILEY: I think if you want to
 7. kick it down the road, you need a motion either to
 8. table it or hold it in abeyance until the December
 9. meeting. And if you're saying that you've got the
 10. same issue on the very next item coming up, you
 11. could probably do both of them in one motion.
 12. MR. BOWERS: Yeah.
 13. MS. DAVIS: Well, is it possible,
 14. during our next break -- I mean, we can provide the
 15. model, the date built, the maximum output, the MAWP,
 16. the fuel, the operating pressure, and some of the
 17. safety valve -- we can provide that in a five- to
 18. ten-minute phone call for the next, you know,
 19. variance. And if that's going to be enough that we
 20. can keep moving, then we would like to, you know,
 21. look at the second one. But if -- you know, if
 22. it's -- if a written piece of paper on my end and we
 23. just tell you these things is not appropriate,
 24. then -- you know --
 25. MR. BAUGHMAN: Will you have the

1. Foxboro information that I'd asked for within a
 2. phone call?
 3. MR. HAYS: We can -- not -- you know,
 4. not as a system, but yeah, all the parts and
 5. components of a -- you know, of a Foxboro system.
 6. There are optional ways that you can -- that they
 7. construct these things. So as far as control
 8. processors, I/O modules, and that sort of the
 9. thing --
 10. MR. BAUGHMAN: The question was about
 11. getting the UL labeling --
 12. MR. HAYS: Yeah.
 13. MR. BAUGHMAN: -- making sure that
 14. it's a UL listed system, not all the individual
 15. components.
 16. MR. HAYS: Right.
 17. MR. BAUGHMAN: So I hope I didn't
 18. miscommunicate, but just that the system is a UL
 19. listed system.
 20. MR. HAYS: Yeah. And that would
 21. be -- there's not, like a -- there's not a Foxboro,
 22. you know, boiler control box, so to speak. There's
 23. not this animal that's a boiler control box. It was
 24. constructed -- NFPA 85 mentions, you know, the way
 25. that we should have our control system arrangement

1. if we use DCS. Or gives options for safety
 2. instruments and systems and using -- you know if you
 3. do a PHA and that type of thing. So we just went to
 4. the folks on the committee and thought that we were
 5. going to the right place.
 6. MR. BAUGHMAN: For me, that's the
 7. additional description that I'm looking for, because
 8. right now, I've just got a computer remote
 9. monitoring system that's using this monomer, what
 10. have you.
 11. MR. HAYS: Yeah.
 12. MR. BAUGHMAN: It doesn't explain.
 13. It doesn't give me any source of evaluation on its
 14. construction, on anything. It describes it --
 15. MR. HAYS: Right.
 16. MR. BAUGHMAN: -- but it doesn't let
 17. me go through and make any analyzation at all from a
 18. technical standpoint. And being a boiler guy,
 19. that's what I do.
 20. MR. HAYS: Yeah. We should -- so for
 21. things like that, we -- would a general -- would a
 22. description, such as, components made up of such and
 23. such pieces designed by this person, professional
 24. engineer, NFPA Committee member, is that --
 25. MR. BAUGHMAN: It'd be a big help.

1. MR. HAYS: Is that good enough?
 2. Yeah. Is that good enough?
 3. MR. BAUGHMAN: Sure. And then --
 4. well, just looking at -- one of the previous
 5. variances we were looking at was the control system
 6. description, and it gives the description of the
 7. flame monitoring system, the system itself that is
 8. integrated back in to the computer system. So it
 9. gives us this technical information --
 10. MR. HAYS: Yeah.
 11. MR. BAUGHMAN: -- on what we're
 12. looking at. And so to further that, I would put
 13. this additional data that's needed into a revised
 14. manual, and there again, asking for direction.
 15. Because you're not reinventing the wheel by any
 16. stretch. You've come into this without really
 17. knowing what all we were looking for.
 18. So if you can go back in and possibly
 19. pick up a sample or get advice from Steve or
 20. anybody that's been involved with these things,
 21. you should be able to get some guidance on that.
 22. MR. HAYS: I have a -- so from the
 23. folks that provided the burn management system for
 24. this plant, for sure, I do have a -- I have an NFPA
 25. review from them where we had them come on site and

1. say, hey, where are we deficient? What instruments
 2. do we need to add, or what, you know, wiring changes
 3. do we need to make, and this that and the other, to
 4. our system and how we need to meet the requirements
 5. of the code. And they gave us a description -- or
 6. we're going to get -- we're going to sell you,
 7. basically, a compliance system.
 8. So I have those -- yeah, I have that
 9. in a project file from them. For the -- and I
 10. know this is a different subject, but we would run
 11. right into this on the next one, also. That might
 12. be -- I'm not sure what -- I need to look at the
 13. books from IB&M for the other plant, because they
 14. gave us a complete turnkey package for them. So
 15. they're --
 16. MR. PISCHKE: And one of the other
 17. items that we're still missing is the org chart and
 18. the procedure relating to who's responsible for
 19. what. So that's another thing missing. I just
 20. wanted to --
 21. MR. BAUGHMAN: Just the flow chart.
 22. MR. PISCHKE: Yeah. The flow chart.
 23. MR. HAYS: And this is only for the
 24. responsible people that are operating the boilers?
 25. And that's where we got --

1. MR. PISCHKE: For the variance.
 2. MR. HAYS: Yeah.
 3. MS. DAVIS: The remote operator, the
 4. boiler operator, and the team leader.
 5. MR. HAYS: Yeah. Yeah. Yeah, we
 6. just -- in that case, we just made a statement. We
 7. didn't make a chart. We made a statement that these
 8. two positions have the authority.
 9. Because we were kind of thinking in a
 10. case where it's a little different -- you know, in
 11. a case of a security personnel or something like
 12. that, when they knock a boiler offline and are
 13. going to shut a plant down and that sort of thing,
 14. that they're not part of the operation or --
 15. MR. BOWERS: Yeah.
 16. MR. HAYS: -- you know, in these
 17. cases, these guys, they would -- if they shut it
 18. down, they would be the ones to start it back up.
 19. So they understand the hazards, the effects on the
 20. rest of the plant, and the processes.
 21. MR. PISCHKE: I think from a
 22. practical standpoint here, you're doing the right
 23. things operationally. It's just describing it is
 24. the key.
 25. MR. BOWERS: Do you want to move this

1. to the December meeting?
 2. MR. BAUGHMAN: It's up to you to make
 3. a motion.
 4. MR. BOWERS: Okay. I make a motion
 5. we move this -- both locations to the December
 6. meeting and bring back the data that we requested.
 7. MR. FOX: I'll second that motion.
 8. MR. PISCHKE: I'll call -- any more
 9. discussion? Questions? I'll call for the question,
 10. and all those in favor, say, "aye."
 11. MR. FOX: Aye.
 12. MR. BOWERS: Aye.
 13. MR. BAUGHMAN: Aye.
 14. MR. PISCHKE: Opposed? Not voting?
 15. Okay. Sorry. I apologize.
 16. MR. HAYS: All right.
 17. MR. PISCHKE: Okay. This moves us to
 18. part nine of the agenda of open discussion items.
 19. And the first one is the status of the 2017
 20. Tennessee Boiler Safety Conference. Deborah?
 21. MS. RHONE: Thank you. Deborah
 22. Rhone. Just wanted to let everyone know, as far as
 23. the boiler safety conference, what we've done this
 24. year is we're actually holding a conference for our
 25. State inspectors. We're conducting it this week.

1. It started on Monday the 18th and will conclude on
 2. Friday the 22nd.
 3. We've got an agenda that's packed
 4. with National Board as well as some State
 5. presentations being conducted. And we anticipate,
 6. in 2018, that we will have a fall safety
 7. conference that will include the special
 8. inspectors as well as the deputy inspectors. And
 9. that's something, of course, that will be up for
 10. discussion once again at our future board meeting.
 11. Thank you.
 12. MR. PISCHKE: Thank you. Okay. I
 13. think we covered some of this, but Sam, the update
 14. on the National Board Commission Exam.
 15. MR. CHAPMAN: Yes, we did. Like we
 16. said that three -- the three candidates that took
 17. their exam on September the 6th, all three of them
 18. passed. We have one that's at the National Board in
 19. Columbus, Ohio, and he will take the National Board
 20. Exam next Friday, and we'll know if we've got four
 21. new inspectors.
 22. MR. PISCHKE: Very good.
 23. MR. CHAPMAN: So that's where we're
 24. at right now on the Commission Exam.
 25. MR. PISCHKE: Very good.

1. MR. CHAPMAN: Okay.
 2. MR. PISCHKE: Thank you.
 3. MR. CHAPMAN: Uh-huh.
 4. MR. PISCHKE: The next item is -- is
 5. there someone here from Rinnai that would -- if you
 6. gentlemen would like to come forward and be heard.
 7. Please identify yourself.
 8. MR. SILER: Jason Siler.
 9. MR. DORROUGH: Kelsey Dorrough.
 10. MR. SCAFE: And Rohan Scafe.
 11. MR. PISCHKE: Thank you. Okay. Go
 12. ahead.
 13. MR. SCAFE: All right. I first want
 14. to thank everyone for giving us the opportunity to
 15. speak with you today.
 16. THE REPORTER: Could you state your
 17. name again, please?
 18. MR. SCAFE: My name is Rohan Scafe.
 19. THE REPORTER: Thank you.
 20. MR. SCAFE: I am the assistant design
 21. engineering manager for Rinnai. And to my left is
 22. Jason Siler, director of engineering solutions. And
 23. Kelsey Dorrough; he's our engineering lab manager --
 24. engineering lab and product certification manager.
 25. And the -- just to give you a brief

1. background about Rinnai, we are a water
 2. heating/space heating products manufacturer. The
 3. core of our business is a tankless water heater,
 4. and that is what I want to speak to today. And I
 5. do want to speak objectively for the tankless
 6. industry, in general, and not in particular to
 7. Rinnai.

8. And the reason we are here is to
 9. share a code concern as it relates to the
 10. inspection clearance for tankless water heaters.
 11. I do want to point out that the tankless water
 12. heater is not a boiler; it is not certified as a
 13. boiler. But I believe the State of Tennessee is
 14. using a code clearance that is intended for a
 15. boiler to tankless.

16. And the clearance that's in question
 17. is the 18-inch separation that is required,
 18. according to the code, between the water heaters,
 19. or on the -- off the side of the water heaters for
 20. the purpose of inspection, and that's provided.
 21. The water heater -- a tankless water heater is
 22. above 100,000 BTU or higher -- 100,000 BTU --
 23. yes -- or higher.

24. I would like to speak to the concern
 25. and the installation challenges that we're seeing

1. Now, the concern is, you know, I
 2. size, I design, I quote a lot of commercial
 3. systems around the country, mostly major
 4. renovation or new construction. And what we're
 5. seeing is a timing of the mechanical space. And
 6. what we're also seeing is the mechanical equipment
 7. spec, because -- based on the space constraints or
 8. the space that they want to maintain to the
 9. building. And so they're calling out products
 10. around the footprint, if you will, to fit in a
 11. very tight mechanical space.

12. In commercial, you know, we see
 13. major, major technical -- technological
 14. advancements in mechanical equipment, water
 15. heaters, included. They're getting smaller and
 16. smaller. If you think about it, a boiler of today
 17. is not the same size as one 20, 50, or even five
 18. years ago. They're much smaller, much more
 19. efficient. And that's what's driving the
 20. mechanical space change in commercial
 21. establishments today.

22. And what customers or owners or
 23. businesses are looking for is to maximize that
 24. space so they can grow their business. It creates
 25. a reduction in construction of material and cost,

1. in the field and offer a proposal for
 2. consideration to make a change to the existing
 3. code. If you turn to the third page, I've got a
 4. few graphics there. The one on the left shows --
 5. the unit on the extreme left shows a mockup
 6. installation drawing, if you will, or image, if
 7. you will, showing the required 18-inch separation.
 8. And this is specific to Tennessee only. This is a
 9. wall mount version. And on the right, there is a
 10. free-standing version of that. Again, showing the
 11. separation in between units in a back-to-back
 12. configuration.

13. The standard installation is to your
 14. far right of each side there. So for a two-unit
 15. wall rack, for example, that is exactly what we
 16. typically do outside the State of Tennessee. The
 17. same for the image on the far -- on the second
 18. side, excuse me, on the far right.

19. With this code, what it's doing,
 20. essentially, is increasing the mechanical space up
 21. to 60 percent in most cases. I'll give you an
 22. example. So a six-unit installation normally
 23. would take up about 12 feet of wall space. With
 24. the code today, and because we have to maintain
 25. the separation, that takes up, roughly, 20 feet.

1. as well. And it's got significant environmental
 2. that benefits, as well.
 3. So the disadvantage to the industry,
 4. in general -- and I won't say any names. And if
 5. you noticed, there's no name on the presentation
 6. that I printed out here today -- is it requires
 7. much, much larger mechanical spaces. I've
 8. mentioned earlier up to 60 percent, in most cases,
 9. or even more. It puts us in a position where we
 10. won't be able to compete, because we wouldn't be
 11. cost effective to an owner. We wouldn't be able
 12. to sell our products, unfortunately.

13. Our solution would be limited to
 14. extremely small applications. In most cases,
 15. single units, maybe at most, two units. Outside
 16. of that, it's got to be on the outside. And even
 17. on the outside, we still have to maintain the
 18. mechanical -- the spacing. Our competition here
 19. would be very limited. And I just want to point
 20. out, too, that Tennessee's actually the only state
 21. in the union where I have personally seen this
 22. code. I don't see it anywhere else at all.

23. MR. CHAPMAN: Ohio.

24. MR. SSAFE: We do business in the
 25. U.S. and Canada, as well, and even outside of North

1. America. And essentially, what this code is
 2. allowing is for the code to dictate the product that
 3. goes into the mechanical space.
 4. And I do understand, in speaking with
 5. you, Mr. Chapman, that the core focus of Code, the
 6. Tennessee Code, is to -- is safety. And I do get
 7. that and I understand that fully. And that's why
 8. I've asked the gentleman on my left here, both
 9. gentlemen on my left here, to come in and speak to
 10. the safety of our product.
 11. Kelsey has a extended background in
 12. certifying water heating products, not only for
 13. our Rinnai but for the tank guys, as well. He has
 14. a vast experience in data collection, testing the
 15. key points, temperature, et cetera. And also,
 16. vast experience in certification of water heating
 17. products and boiler products, as well.
 18. So with that, I will let Jason and
 19. Kelsey speak to the testing and the data, if you
 20. will.
 21. MR. BAILEY: I have a question. When
 22. this handout was made, I believe you're citing the
 23. rules as they were prior to the rules being revised
 24. in 2016, because some of the rules you're
 25. referencing, like 0800-03-03-.04(13)(a), we don't

1. even have that. That's not even in the rules
 2. anymore. It's been rearranged. That same language
 3. is somewhere else.
 4. MR. SCAFE: Well, that's the other
 5. concern that we were having. I have read
 6. extensively through the Boiler Code, the 0800-03-03,
 7. and there's nothing in that code about tankless or
 8. instantaneous water heaters. This -- that code is
 9. specific to boilers. This is really the only
 10. document that I could find through the State of
 11. Tennessee that applies a clearance to tankless.
 12. MR. BAILEY: Okay. But my only point
 13. is, is that the rules you're referencing in -- I
 14. just wanted the Board to know that the rules that
 15. are being referenced in here is prior to them being
 16. revised. So if you try to find a particular
 17. paragraph based on what is written here, it's
 18. probably in a different part of the rules than when
 19. it was when this was created.
 20. MR. SILER: You said it was done in
 21. 2016?
 22. MR. BAILEY: '16.
 23. MR. CHAPMAN: 2016.
 24. MR. BAILEY: Was when they were
 25. revised, yes.

1. MR. CHAPMAN: And they are on our
 2. website.
 3. MR. BAILEY: Yes.
 4. MR. SILER: Okay.
 5. MR. BAILEY: And I just wanted you
 6. guys --
 7. MR. SCAFE: Right.
 8. MR. BAILEY: -- to know that, as
 9. well.
 10. MR. SILER: Yeah. Thank you.
 11. MR. BAILEY: Yeah.
 12. MR. SCAFE: But that clearance, as
 13. you know it today still applies, correct? The
 14. 18-inch.
 15. MR. BAILEY: Yeah. The --
 16. MR. SCAFE: Two boilers.
 17. MR. BAILEY: Yeah. That -- yeah. I
 18. don't think the language came out, it was just --
 19. MR. SCAFE: Okay.
 20. MR. BAILEY: -- rearranged.
 21. MR. SCAFE: Okay.
 22. MR. BAILEY: The rules are rearranged
 23. to make them, hopefully, easier to read. So -- I'm
 24. not saying that language is no longer in the rules,
 25. it's just not where you're say it's at --

1. MR. SCAFE: I understand.
 2. MR. BAILEY: -- in this publication.
 3. MR. SILER: Okay. I'm going to walk
 4. through, as Rohan mentioned, some of the safety
 5. standards and testing, as they pertain to the water
 6. heating category that we sell products under. And
 7. all the tankless that we sell, they're all above
 8. 75,000 BTUs so that they have to be certified to the
 9. ANSI Z21.10.3 safety standard. This is an industry
 10. consensus safety standard, you know, with specific
 11. focus on the construction of the product to ensure
 12. safety requirements for instructions to come with
 13. the product so the product is properly installed to
 14. ensure safety. Safety labels that have to be
 15. applied to the product.
 16. And some of the safety testing
 17. examples -- and these are not inclusive of
 18. everything that's in the standard, but some of the
 19. ones that we wanted to bring up and bring some
 20. examples to display here are establishing minimum
 21. clearances to combustibles, combustion testing,
 22. burner and ignition characteristics, and burn
 23. hazard. Go to the next page.
 24. This page shows a typical setup for
 25. determining minimum clearance to combustibles.

1. And we refer to it as -- and the test -- and it
 2. refers to it as the wall, floor, and ceiling test,
 3. per the ANSI Z21.1.3 standard. So I'll let Kelsey
 4. talk a little bit more about the actual test and
 5. the setup.

6. MR. DORROUGH: So the test requires
 7. that we run a maximum vent length as we test and do
 8. that through our design and development. We require
 9. a maximum vent length through testing. That maximum
 10. vent length is installed on the water heater, and we
 11. are required to set that to the maximum set point to
 12. obtain the maximum out-of-the-water temperature and
 13. therefore, heat the water heater up to its maximum
 14. condition in a closet, closed up.

15. And what we do -- we will -- as you
 16. see it in there, we'll box this up to zero
 17. clearance. We're actually touching the water
 18. heater all the way around. There are thermal
 19. couples -- the dots on the walls indicate thermal
 20. couples there. They're placed six inches apart
 21. vertically and horizontally. And then the floor
 22. beneath that, they're spaced three inches apart.

23. We monitor those for a period of --
 24. well, we reach equilibrium, and once we reach
 25. equilibrium, then we'll record those temperatures.

1. The requirements for the walls that -- the walls,
 2. the ceiling, and the floor in contact or adjacent
 3. to is 117 degrees plus room; that's the allowable.
 4. And the floor under the water heater is 90 degrees
 5. above room.

6. And so on the other -- the next page
 7. over, we've given you an example of actual test
 8. data on one of our products showing our maximum
 9. temperatures under these conditions on the left,
 10. back, and right walls.

11. MR. SILER: So -- and all this was
 12. based on one of our largest tankless models of
 13. 199,000 BTUs. And each segment, if you start off on
 14. your left, this is actually showing the left wall
 15. temperature, the back wall temperature, and the
 16. right wall temperature. And each one of those that
 17. we actually had callouts shows what the maximum
 18. temperature that was read during the wall, floor,
 19. ceiling test of, you know, 79 degrees on the max
 20. left wall, 106 degrees on the back and 89 degrees on
 21. the right wall.

22. Go to the next page. This was
 23. another test that we wanted to talk further about.
 24. It is the burn hazard test. So we -- this test,
 25. we actually have to apply a grid to the water

1. heater, so we literally -- our lab guys will
 2. actually take a permanent marker and grid off the
 3. water heater into two-by-two grids. And if you
 4. see the -- in figure seven on the right-hand side,
 5. this is actually the measuring and -- measuring
 6. probe that's placed into each grid, and you take
 7. the measurements. And then you see table 13, this
 8. tells you what the maximum surface temperature
 9. that's allowed.

10. If we go to the next page, this one
 11. actually shows the result data that was captured
 12. from the probe, you know, the left side, the top
 13. of the unit, the right side. So these are each in
 14. the two-by-two grids. So the maximum allowed,
 15. based on the room temperature that we're testing,
 16. is 146 degrees. The maximum surface temperature
 17. that was actually recorded was only 112 degrees,
 18. so we're well below the maximum allowable
 19. temperature.

20. MR. SCAFE: Per the standard?
 21. MR. SILER: Per the standard. Yes.
 22. Thank you, Rohan.

23. MR. DORROUGH: These are just a few
 24. of the temperature-related tests that we're required
 25. to do. Not -- while we're set up in the closet,

1. there are other temperature-related tests that we
 2. do, such as components -- ignition components, burn
 3. components, burn -- flame spreader temperatures. So
 4. it's not limited to just the cabinet and the walls
 5. and surrounding -- the area that surrounds it, but
 6. it's also internally.

7. We also will measure the internal
 8. components, as well, to ensure the safety of that,
 9. even the electrical wiring. We get down to that
 10. to make sure that, under the conditions of a fire
 11. hazard condition, that the installation on the
 12. wiring does not soften to the point to where it
 13. arcs against something in the -- a metal -- or
 14. wire to wire, or something to that nature.

15. MR. SILER: On the final slide here,
 16. we wanted to just discuss further and understand
 17. what the proper protocol and process to formalize a
 18. request for the -- a rule amendment. Our request is
 19. to, you know, eliminate the arbitrary 18-inch
 20. requirement -- required clearance that's currently
 21. in the code.

22. Our request is to replace this
 23. clearance with the manufacturers' minimum required
 24. clearances, which is determined based on the ANSI
 25. testing, plus any required clearances for

1. serviceability, if that is necessary. And we
 2. provided an example on the right-hand side from
 3. one of our operation and installation manuals that
 4. shows all the clearances to combustibles,
 5. non-combustibles, you know, top, front, back,
 6. side, ground, and the vent.
 7. MR. SCAFE: So in closing, we're
 8. hoping that you will consider a change to the
 9. current code to accommodate what Mr. Siler has just
 10. mentioned. And with that, I'll open to questions.
 11. MR. PISCHKE: All right. Yeah. I
 12. have a couple questions myself.
 13. MR. BOWERS: Open discussion?
 14. MR. PISCHKE: Yeah.
 15. MR. BAUGHMAN: It's open discussion.
 16. MR. PISCHKE: Well, we aren't voting
 17. on this. Do we need a motion?
 18. MR. BAUGHMAN: Uh-uh.
 19. MR. BOWERS: Okay.
 20. MR. BAUGHMAN: No. This is open
 21. discussion.
 22. MR. PISCHKE: Right now, this is open
 23. discussion.
 24. I guess I'd like to understand the
 25. history of the 18-inch --

1. MR. SMITH: If I can interject,
 2. Jesse Smith, State boiler inspector. The clearances
 3. they're talking about isn't a consideration of
 4. safety or combustibility. It stems from the
 5. National Board Inspection Code Requirement that we
 6. have three feet of inspection clearance around every
 7. item we inspect. And you can see where that would
 8. get a little cumbersome.
 9. So the State of Tennessee, sometime
 10. back -- I believe it was probably '98, or '98 --
 11. there was a Boiler Board determination that we
 12. could get by with 18 inches on water heaters and
 13. some boilers. Of course, you've got bigger
 14. boilers that require overhead and clearances. But
 15. for what you're dealing with here, it's -- 18
 16. inches was determined. And I guess it is kind of
 17. arbitrary, but it's still based on the ability to
 18. get in and inspect adequately around it.
 19. Now, as the technology's changed and
 20. equipment's become more efficient and less
 21. combustible -- want to be put in a more compact
 22. area, then the 18 inches may seem excessive. And
 23. the only reason you're falling into that category
 24. is because Tennessee's also unique in the fact
 25. that it inspects non-ASME code water heaters,

1. which is primarily what we inspect and what's
 2. overseen by the National Board Inspection Code.
 3. We inspect them as non-ASME code water heater, but
 4. they have to conform to all of the other
 5. inspection requirements.
 6. MR. SILER: So is that the same -- so
 7. if I have a 199,000 BTU 100-gallon tank water
 8. heaters, it's subject to the same 18-inch clearance?
 9. MR. SMITH: Yes. Because it's over
 10. 100,000 BTUs.
 11. MR. SILER: If it's over -- okay.
 12. MR. SMITH: So -- and then, you know,
 13. the only exception would be if you guys make any
 14. water heaters that are -- over 200,000, then they're
 15. no longer to that ANSI standard. They're built to
 16. ASME code.
 17. MR. SILER: ASME. Understand.
 18. MR. SMITH: But that's what the 18
 19. inches is based on. It's actually us seeing that
 20. three feet was kind of ludicrous and that 18 inches
 21. was a compromise. This would be a good time to
 22. introduce, due to the newer technologies, that if --
 23. even if this were an instantaneous water heater, you
 24. know, they may consider a smaller clearance.
 25. Basically, what we're -- the

1. information we're trying to achieve is the serial
 2. number, the manufacturer, which is usually on one
 3. of the side panels, and then, obviously, you've
 4. got to access the safety valve. The front of it
 5. is where all of your access to any of the internal
 6. components are. So --
 7. MR. SCAFE: And if we're able to
 8. relocate that rating plate, will we have to fit --
 9. still fall in that --
 10. MR. SMITH: That was just kind of my
 11. recommendation for --
 12. MR. CHAPMAN: Don't answer that.
 13. Don't answer that.
 14. MR. SMITH: I was just kind of trying
 15. to tell you criteria --
 16. MR. SILER: No. That's --
 17. MR. SCAFE: As you said, I thought --
 18. in our discussion in the past, I believe the focus
 19. was more focused on safety, being able to inspect
 20. around the unit.
 21. MR. CHAPMAN: Around it, but you
 22. also --
 23. MR. SCAFE: And not the rating plate.
 24. MR. CHAPMAN: -- need to be able to
 25. get -- sorry about that. But you also need to be

1. able to get to the information on it. You know.
 2. You might have, as Rinnai, might have it on the
 3. front. You've got A.O. Smith, you've got Norton,
 4. you've got Bock. Where are they putting theirs? So
 5. will they -- will we be able to get to their
 6. information?
 7. MR. SCAFE: Right. I understand
 8. that.
 9. MR. CHAPMAN: Yeah.
 10. MR. BOWERS: I think on the Rinnai,
 11. it's on the side, isn't it?
 12. MR. SCAFE: It is on the side.
 13. MR. CHAPMAN: It is on the side.
 14. MR. SCAFE: But we can relocate it --
 15. the rating plate anywhere.
 16. MR. CHAPMAN: Yeah. But see,
 17. that's -- you guys can. But what about the rest of
 18. the companies? Because, like, we have to think as a
 19. whole --
 20. MR. SCAFE: Right.
 21. MR. CHAPMAN: -- not just one
 22. company. We have to do it as a whole. Am I right
 23. on that, Mr. Bailey?
 24. MR. BAILEY: Yes.
 25. MR. PISCHKE: Sure. I mean, yeah.

1. MR. CHAPMAN: Yeah.
 2. MR. PISCHKE: We had another
 3. question.
 4. MR. HOLT: Yeah. I was going to say
 5. that.
 6. MR. PISCHKE: Stand up and --
 7. MR. HOLT: Oh, Tim Holt, State
 8. inspector. 200,000 and greater, which you make
 9. some, I believe. They don't --
 10. MR. SCAFE: Not on the tankless.
 11. MR. SILER: Not on the water heaters.
 12. MR. HOLT: That must be -- yeah.
 13. MR. SCAFE: There's some other
 14. guys -- yeah.
 15. MR. DORROUGH: Not anymore. We used
 16. to --
 17. MR. HOLT: They have a National Board
 18. Number, and all that information is on the front
 19. behind the cover on the plaque right on the tubes.
 20. You know. And that's part of the main thing is
 21. being able to -- if you -- I've gone in where you've
 22. had -- they've had Rinnais right next to each other.
 23. I can't get the information. I can't see it. I
 24. can't -- anything. And it has to have that to be
 25. able to register. Like, it's -- you know. And

1. there's nothing inside, either. I've taken the
 2. front off. There's nothing inside.
 3. MR. SILER: So the information that
 4. you need is rating plate info.
 5. MR. HOLT: Yeah. The serial
 6. number --
 7. MR. SILER: That's what you guys are
 8. looking for.
 9. MR. HOLT: -- the BTUs, all this --
 10. and it's all on the side.
 11. MR. SILER: Right.
 12. MR. HOLT: It needs to be able to be
 13. accessed as well as being able to get around it and
 14. check all the -- so the -- and the clearances of 18
 15. inches is any vessel, water heater, boiler,
 16. anything, 100,000, 200- and 400,000. It can be a
 17. water heater that's a six feet by three feet; they
 18. have to have 18 inches also. And so, you know, it's
 19. just not tankless.
 20. MR. BAUGHMAN: So I've got a question
 21. that you guys can probably answer.
 22. MR. CHAPMAN: Okay.
 23. MR. BAUGHMAN: When these units are
 24. manifolded, is, then, the output considered a total
 25. of all manifolded units?

1. MR. CHAPMAN: No.
 2. MR. BAUGHMAN: Okay.
 3. MR. CHAPMAN: Because they -- a lot
 4. of them have a marginal grain on them that only
 5. operates -- and if it needs more, it'll kick in the
 6. second one. But as far as adding them together, no.
 7. MR. BAUGHMAN: Okay.
 8. MR. SILER: Yeah. Each --
 9. MR. CHAPMAN: So you've got 199 and
 10. 199, it's not 398.
 11. MR. BAUGHMAN: Okay. Each --
 12. MR. SILER: Yeah. Because each unit
 13. has its own safety, each pressure relief valve,
 14. each -- safety features --
 15. MR. BAUGHMAN: Got you.
 16. MR. SILER: -- are all built in with
 17. each one. So --
 18. MR. PISCHKE: That's no different
 19. than any other --
 20. MR. CHAPMAN: Yeah.
 21. MR. PISCHKE: -- water heater.
 22. MR. SILER: Right. If I put four
 23. 199, 100s together, what is -- there's no
 24. difference.
 25. MR. BAUGHMAN: So the same criteria

1. holds true for propane versus natural gas?
 2. MR. CHAPMAN: Yes.
 3. MR. SCAFE: Correct. Yes, sir.
 4. MR. SILER: Correct.
 5. MR. BAUGHMAN: Okay. Any differences
 6. or any testing been done at elevation?
 7. MR. DORROUGH: We test up to --
 8. MR. SCAFE: We have --
 9. MR. DORROUGH: Yeah. We test up to
 10. 10,000 feet. We actually take our product out to
 11. Colorado and we'll test up to -- we test at three
 12. different levels at 5,500, 7,700, and 10,000, too.
 13. MR. BAUGHMAN: When you get there,
 14. how's your input? Having to change or are you just
 15. adding modules instead, because our input's going to
 16. change.
 17. MR. DORROUGH: It derates and we test
 18. at that derated value. There is a natural derate
 19. that manufacturers can opt to take. It's -- I
 20. believe it's 4,000 per 1,000 feet, I believe, of
 21. elevation. I don't know right off the top of my
 22. head.
 23. MR. SCAFE: It's around three and a
 24. half percent --
 25. MR. DORROUGH: Yeah.

1. specifically for these.
 2. MR. BAUGHMAN: Okay.
 3. MR. SILER: I don't think so.
 4. MR. SCAFE: I don't think -- not that
 5. I'm aware of.
 6. MR. BAUGHMAN: Okay. Well, it's like
 7. with the boilers, you know, boilers have gotten
 8. smaller, but what hasn't gotten smaller is the
 9. clearance requirements. And even though they're
 10. more efficient and so forth, we still have the same
 11. requirements. So everything has naturally
 12. progressed down, you're just in a competitive market
 13. where you're wanting to compress even farther.
 14. From the service standpoint, we've
 15. got to deal with it, going out and working on the
 16. boilers, and so many people are compacting
 17. everything in there, but they're not necessarily
 18. the ones that are going out and working on it.
 19. And the guy that goes out and works on it is
 20. cussing the guy that designed it, and so forth,
 21. just having to try to service it.
 22. So I understand the whole footprint
 23. and, you know, that footprint is money and you
 24. want to put in as many BTUs in this small amount
 25. of space as possible. But there again, you've got

1. MR. SCAFE: -- per 1,000 feet above
 2. 5,000. Well, that's what --
 3. MR. DORROUGH: We choose not to do
 4. that, because we want to go up -- we will test our
 5. products so that we can optimize our systems at
 6. elevation.
 7. MR. BAUGHMAN: Sure.
 8. MR. SILER: So we actually have
 9. switches inside the product that says -- you know,
 10. when you look at the instructions, it says, if
 11. you're at 5,500 feet, if you flip this DIP switch,
 12. you're at 10,000 feet if you flip this DIP switch.
 13. So it'll take the natural --
 14. MR. SCAFE: Correct.
 15. MR. SILER: -- natural derate. So --
 16. MR. SCAFE: And deration is factored
 17. into our calculations for sizing, as well, at --
 18. elevation.
 19. MR. BAUGHMAN: Very good. Is there
 20. an NBIC reference to installation clearances for
 21. these?
 22. MR. CHAPMAN: Not for --
 23. MR. PISCHKE: Not specifically.
 24. MR. BAUGHMAN: Do you all know?
 25. MR. PISCHKE: I don't think

1. to take a conscientious approach to it of
 2. understanding that there's both service,
 3. maintenance, and inspection that has to be
 4. accomplished.
 5. MR. SCAFE: And to that point, there
 6. is an industry-required clearance for service, which
 7. is 24 inches.
 8. MR. BAUGHMAN: Twenty-four inches.
 9. On the front.
 10. MR. SCAFE: We require that.
 11. Correct. Off the front of the unit. That is in our
 12. manuals. And it's in most, if not all, of our
 13. competition's manuals, as well. We require that
 14. just on the front.
 15. MR. PISCHKE: If we understand what
 16. the end need is, the end requirement for servicing,
 17. shouldn't our rules address that, address those
 18. needs for servicing and for, you know, looking at
 19. nameplates and not necessarily just have a blanket
 20. number? You know. I don't know if you understand
 21. what I'm trying to communicate.
 22. But instead of just having a blanket
 23. number, everything has to be 18 inches, which some
 24. of us may not fit into; we have a requirement that
 25. things that need to be accessible are always

1. accessible, and things that are not accessible, or
2. do not need to be accessible, have different, you
3. know, requirements for, you know, thermal
4. consideration or whatever it is.
5. I'm just posing that as a question as
6. a point of discussion. Could our rules be a
7. little more -- a little more finesse instead of
8. brute force? Just throwing that out there.
9. MR. BAILEY: The only caveat, I'd
10. say, on that is that at least it's subject to
11. interpretation as to what is enough clearance. You
12. know.
13. MR. PISCHKE: Well, I was thinking
14. more of directing it rather than clearance, other
15. than the temperature issue. But the end
16. requirement, we must see -- be able to, you know,
17. read the nameplate. We must be able to service
18. certain things. We must -- you know, there is
19. absolutes that we can --
20. MR. BAILEY: Right.
21. MR. PISCHKE: -- specify without
22. having a, you know, broad -- I'm just wondering.
23. MR. SILER: Yeah. Could something be
24. put into the code that says there must be a certain
25. X distance for serviceability? I mean, because

1. we've heard stories that we have tankless units and
2. there's a riser pipe that goes beside one of the
3. units that say, well, you've got to have 18 inches
4. over to that riser pipe, and they're -- they have to
5. move the whole system down. I mean, what that riser
6. pipe didn't -- I mean, not posing any serviceability
7. issues. You still can take the front cover off.
8. You still could take the whole unit off. If I can
9. get to everything, I can still read everything on
10. the side of it.
11. MR. PISCHKE: Any other comments,
12. questions?
13. MR. BAILEY: Well, I mean, as to your
14. comment, yeah, I mean, you could -- as the Board,
15. y'all can revise the rules, you know, however you
16. see fit. Of course, you know that's a process.
17. MR. PISCHKE: Yeah.
18. MR. BAILEY: And we just, you know
19. went through it not too long ago. But I mean, if
20. that's an area that, as a Board, you think there
21. needs to be some, you know, flexibility -- some
22. areas there's no flexibility, some areas there's
23. some flexibility. Yeah. You can do that through
24. rulemaking for sure.
25. MR. PISCHKE: Yeah. I'm just

1. wondering are we keeping up with the technology
2. and --
3. MR. BAILEY: Probably not. It's hard
4. to keep up with.
5. MR. PISCHKE: It is hard to keep up.
6. MR. HOLT: I think what we have is a
7. good mixture, because if you get it to where you
8. drop it down for some reason, that applies to all
9. boilers and all water heaters no matter what
10. configuration they are from 299 down to 100,000.
11. That means stand water heaters, whatever, and you
12. start getting them closer, they can't be inspected
13. because we can't get our bodies through there to
14. inspect them. We're talking about --
15. MR. CHAPMAN: Yeah.
16. MR. PISCHKE: Sure.
17. MR. HOLT: -- one type, which is a,
18. you know --
19. MR. PISCHKE: Yeah.
20. MR. HOLT: -- a tankless and then now
21. that's got to apply to the stand types, that's got
22. to apply to the boilers, and they're going to start
23. cramming them in the corner. We can't inspect them.
24. MR. PISCHKE: I'm not so sure that we
25. can't -- to your point, Dan, about revising the

1. rules, that we could not revise them in such a way
2. that we're specific about certain types. You know.
3. Instead of having one requirement for all different
4. types, we become more specific. You know. To meet
5. the requirements of serviceability and inspection.
6. I mean, that's the goal, right? That's -- the goal
7. is to ensure --
8. MR. CHAPMAN: Safety.
9. MR. PISCHKE: -- serviceability and
10. inspection.
11. MR. CHAPMAN: Excuse me.
12. MR. SILER: Is there --
13. MR. PISCHKE: And -- yeah.
14. MR. SILER: When I hear the reference
15. of inspection, is there somewhere that we can see
16. what -- is there, like, a checklist of what an
17. inspector goes out -- when he looks at one, what
18. does he look for and look at? Is that in the --
19. specifically in the code or how is that -- if an
20. inspector goes out to a job to look at six tankless
21. water heaters, what is he inspecting? Just trying
22. to understand that.
23. MR. CHAPMAN: Well, first, he starts
24. out with the clearance.
25. MR. SILER: Okay.

1. MR. CHAPMAN: I'll tell you that
2. much. Then he goes through and he checks on
3. different criteria, like safety valves. Okay?
4. Serial -- does it have a temperature gauge on it?
5. You know. As far as A, B, C, D, no, there's
6. nothing.
7. MR. SILER: Okay.
8. MR. CHAPMAN: Because one person
9. might start at the top and work down. One might
10. start at the bottom and go up. It's -- they still
11. have the end product as inspecting the whole unit,
12. not just parts of it all, little checklists.
13. MR. SILER: So there's not a
14. checklist.
15. MR. CHAPMAN: No.
16. MR. SILER: Okay.
17. MR. HOLT: There's a report that we
18. have that --
19. MR. PISCHKE: It's a report.
20. MR. CHAPMAN: It's a report.
21. MR. SILER: It's a report. Okay.
22. MR. CHAPMAN: But it's not a
23. checklist.
24. MR. SILER: Well, but there's -- so
25. there's a defined --

1. MR. PISCHKE: Criteria.
2. MR. SILER: -- yeah, criteria.
3. That's what I --
4. MR. CHAPMAN: On the report.
5. MR. SILER: On the report. Okay.
6. That's what -- okay.
7. MR. BOWERS: And on the initial
8. inspection, which the State does, they have to get
9. that data off that -- on that plate.
10. MR. SCAFE: Yeah.
11. MR. SILER: Right.
12. MR. BOWERS: And if you've got those
13. heaters next to each other, there's no way the State
14. inspectors are going to be able to get that
15. information out.
16. MR. SILER: Right.
17. MR. SCAFE: And we as a
18. manufacturer -- even as an industry. I can safely
19. speak for the industry, that we can make provisions
20. to accommodate accessibility off that rating plate.
21. We can.
22. MR. BOWERS: And maybe that needs to
23. be in the discussion there is that the -- on the
24. instantaneous hot water heaters, look at -- the
25. clearance has to do with the inspector. You can get

1. the proper information out there. It may not have
2. to be a set amount of clearance on there, but if an
3. inspector can't get the information off there, he
4. should maybe not approve installation.
5. He -- I mean, he can't really approve
6. installation, because he's got to have that
7. information to do his --
8. MR. SCAFE: Right.
9. MR. BOWERS: Put that information in
10. there to even get there. And that may be something
11. we could consider.
12. MR. PISCHKE: I was wondering if
13. one -- does this group clearly want -- would like to
14. see a change, how would they initiate a formal
15. request?
16. MR. BAILEY: Well, I mean, this can
17. be considered a formal request right now. What
18. they're doing today is that they're basically
19. bringing to our attention that they feel like our
20. rules don't meet the technology for these tankless
21. water heaters. And that'd be a thing that the Board
22. would have to discuss -- have as a discussion item
23. for the Board to discuss whether or not -- should we
24. revise the rules, and if so, which rules, and if so,
25. how -- you know, how should that be revised as to --

1. what should the language say?
2. I mean, when we just went through the
3. rules it, I mean, it was -- that was a, what, two,
4. three-year process. Of course, we redid the whole
5. thing.
6. MR. ROBINSON: Yes, sir.
7. MR. BAILEY: This would not take
8. that. I mean, you'd have to identify what areas are
9. pertinent to this type of situation, and then what
10. language would we have to have that are requirements
11. and what language could be loosened up to
12. accommodate them? And then the Board would have to
13. agree, this is the kind of language we want, and
14. then have to -- we'd have to go through the
15. rulemaking process.
16. So it would take a while before you'd
17. ever actually see a rule change. But I mean, I
18. think their request today can generate that
19. discussion amongst the Board, if y'all want to
20. explore it.
21. MR. PISCHKE: So should we put this
22. on the December agenda?
23. MR. BAUGHMAN: Yeah. We could --
24. MR. BOWERS: Yeah.
25. MR. BAUGHMAN: -- have it for further

1. discussion. Sure. Danny.
 2. MR. PETERS: I have a question.
 3. Danny Peters. If we're the only state that's
 4. inspecting instantaneous water heaters, how do the
 5. other states inspect them?
 6. MR. SILER: How do they inspect --
 7. MR. HOLT: When they can't see the
 8. information.
 9. MR. PETERS: Yeah. You made the
 10. question of the other -- this state's the only state
 11. in the union that inspects for clearance. How do
 12. the other states inspect water heaters?
 13. MR. SCAFE: Well, they're not -- to
 14. my knowledge, when the product is installed, the
 15. contractor collects all the serial numbers for each
 16. model and that information is submitted to the code
 17. bodies within the local jurisdiction. It's also
 18. submitted to us, as well.
 19. We also do rack systems. So, you
 20. know, there's a dedicated skew for a rack system
 21. and all the associated serial numbers to that rack
 22. system is also supplied with the rack for
 23. inspection, if you will. If that's the
 24. information -- sort of information you need to
 25. inspect the serial numbers.

1. From a safety standpoint, they're
 2. usually doing the normal checks, if you will.
 3. Checking temperature and pressure, and in some
 4. cases, full gas temperatures, et cetera. But
 5. there is no inspection between each water heater,
 6. if you will. It's looked at from a system
 7. standpoint, if you will, and not so much
 8. individually.
 9. MR. SILER: I think also --
 10. MR. PETERS: So if you had four
 11. units, you'd look at the system of four units. On a
 12. rack -- you call it a rack system?
 13. MR. SCAFE: Yes. A rack system. One
 14. out of --
 15. MR. SILER: I think, also, the
 16. point -- I think Rohan was -- that bullet was trying
 17. to make, is we don't see the additional distance
 18. clearance between the units anywhere else but here.
 19. That's that additional 18 inches. Typically, what
 20. we see is, the clearances, the combustibles that we
 21. put on the rating plate are in the installation
 22. manual. That's what people will go. They don't add
 23. additional to that.
 24. MR. SCAFE: There's a two-inch
 25. clearance in between the water heaters we require

1. for non-combustibles and a half-inch -- excuse me.
 2. A two-inch to combustibles and a half-inch to
 3. non-combustibles. And in most installations it's
 4. beyond that. Even with our rack system, it's beyond
 5. what those clearances are.
 6. MR. HOLT: May I say something. You
 7. say that they -- the contractor collects the
 8. information and sends it in on those other states?
 9. MR. SCAFE: Yes. The contractor --
 10. MR. HOLT: But we need --
 11. MR. SCAFE: I'm sorry. Go ahead,
 12. man. Let me let you finish.
 13. MR. HOLT: When we inspect, we are
 14. the ones that have to physically look at that
 15. information and put it down and sign our name to
 16. that report as being accurate and complete. We
 17. can't rely on somebody else to do that. So it's --
 18. that's just the way that is.
 19. And there's another thing, too. You
 20. hang your Rinnais on a tank, also. That new
 21. design. If you were to go with the spaces down to
 22. where he says there, then that means, if someone
 23. puts four of those in to where the tankless is
 24. hanging on a tank, that means that those tanks can
 25. butt right together, then, right? That means we

1. can't inspect the tanks, if that were true. The
 2. clearances. So the tanks would be butted together
 3. or would the tanks still be 18 inches, which it's
 4. supposed to be? See, one's hanging on the wall,
 5. one's hanging on a tank. So therefore, if it's on
 6. a tank, you're saying you could just put the tanks
 7. together with no clearance, correct?
 8. MR. SILER: So is the requirement for
 9. that -- yeah.
 10. MR. HOLT: It's 18 inches.
 11. MR. SILER: You have to have 18
 12. inches --
 13. MR. HOLT: Yeah.
 14. MR. SILER: -- between the vessels,
 15. not the tankless.
 16. MR. HOLT: Yeah. I ran into four of
 17. those they put in and the tanks themselves that the
 18. Rinnai -- that are hanging on, they all have to have
 19. 18 inches around them. So all those tanks have to
 20. be 18 inches.
 21. MR. SCAFE: I would agree. In that
 22. sense, it makes a little bit of sense, because
 23. you've got to be able to walk around the tank --
 24. MR. HOLT: Yeah.
 25. MR. SCAFE: -- to inspect it, right?

1. I do get that. If you're below 18 inches, there's a
2. good chance you can't get in between, right?
3. MR. HOLT: It's like, there's a
4. tank -- the heater, not the --
5. MR. SCAFE: Right. What we're
6. speaking to today is the tankless water heater.
7. MR. HOLT: Yeah.
8. MR. SCAFE: You know. On a wall or
9. on a rack, free-standing.
10. MR. HOLT: My point is that a
11. tankless is hanging on a tank, so if you want to get
12. it changed to where the tankless clearances are
13. closer, then if they're on a tank and it's one unit,
14. you're saying that -- then someone would assume that
15. they could take the tanks with no clearance and put
16. them together, because there's a tankless hanging on
17. the tank.
18. MR. SCAFE: No. That's not what
19. we're saying but --
20. MR. HOLT: No. I know. But I'm
21. saying what contractors would do --
22. MR. SCAFE: I understand. I
23. understand.
24. MR. HOLT: And it's just confusing.
25. MR. SCAFE: And we --

1. MR. PISCHKE: Any laws or rules
2. regarding that would have to be very specific.
3. MR. SCAFE: Yes.
4. MR. HOLT: Yeah.
5. MR. PISCHKE: I guess that's the
6. point.
7. MR. HOLT: I'm just bringing up --
8. MR. PISCHKE: Sure. Absolutely.
9. It's --
10. MR. HOLT: -- that's what contractors
11. will do.
12. MR. BAILEY: If you know of any state
13. rules that you think are compatible to the tankless
14. system that would be --
15. MR. PISCHKE: Yeah. That's good.
16. MR. BAILEY: -- like, model rules
17. that you --
18. MR. BAUGHMAN: Bring to the table.
19. MR. BAILEY: -- would like for us to
20. consider, certainly, bring them to us or get them to
21. Sam or something before the next meeting.
22. Something -- that way -- you know, if we know
23. another state is doing it this way, just, you know,
24. we can, you know, study it and look at it and
25. decide.

1. MR. PISCHKE: If there is a best
2. practice out there, absolutely.
3. MR. SILER: That was going to be --
4. MR. BOWERS: What he was saying
5. originally is right is there's not many states -- we
6. may be the only state that does under 200,000.
7. MR. PISCHKE: No.
8. MR. CHAPMAN: Ohio. I just got an
9. e-mail from them last week.
10. MR. BOWERS: Okay.
11. MR. CHAPMAN: Their -- for a tankless
12. water heater is three feet.
13. MR. BOWERS: But do they do under
14. 200,000?
15. MR. CHAPMAN: Well, I can't remember
16. the guy's name now, because -- but --
17. MR. BOWERS: Yeah.
18. MR. CHAPMAN: They respecified it is
19. three feet for inspecting tankless water heaters.
20. MR. BOWERS: All of --
21. MR. CHAPMAN: Tankless water -- he
22. didn't give me a criteria.
23. MR. BOWERS: Okay.
24. MR. CHAPMAN: He just said tankless
25. water heaters.

1. MR. BOWERS: There's not many states
2. that do 200. And if they don't have a National
3. Board Number --
4. MR. SILER: That require inspection.
5. MR. BOWERS: Yeah. Tennessee does
6. 100,000 and above.
7. MR. SILER: Right.
8. MR. SCAFE: Correct.
9. MR. BOWERS: But there's not many
10. states. That's why this is kind of a unique
11. situation here in Tennessee, because we do do -- and
12. the ones you make are all under 200,000, right?
13. MR. SCAFE: That's correct.
14. MR. SILER: Yes, sir.
15. MR. SCAFE: Yes, sir.
16. MR. BOWERS: Y'all don't do anything
17. National Board registered, do you?
18. MR. SILER: We have some wall hung
19. condensing boilers for heating only that are above
20. 200,000.
21. MR. SCAFE: And those are ASME.
22. MR. SILER: And those are full ASME.
23. MR. ROBINSON: What kind of clearance
24. are you using on those?
25. MR. SILER: It's -- as far as the

1. exact clearance on the sides?
 2. MR. ROBINSON: Yeah.
 3. MR. SILER: I don't have it -- that
 4. memorized right now. Do you recall what the --
 5. MR. SCAFE: I don't. No, I don't --
 6. MR. SILER: I don't -- I can't -- I'd
 7. have to go back and look at what that is.
 8. MR. PETERS: Can we also enter into
 9. the interim of some states have different codes,
 10. just like Tennessee, and on some of the water
 11. heaters, they'll have that code for that state. For
 12. instance, New York, it may have a code for clearance
 13. in New York. Can we try to get Rinnai, in their
 14. manual or specs, have our code in the State of
 15. Tennessee, that this would be the requirement in the
 16. State of Tennessee?
 17. MR. SCAFE: I believe -- and you can
 18. keep me honest here, Jason. I believe we can make
 19. provisions to accommodate --
 20. MR. SILER: Well, we --
 21. MR. SCAFE: -- that request.
 22. MR. SILER: Well yeah, there is some
 23. specific --
 24. MR. SCAFE: We've done it in
 25. Massachusetts.

1. MR. SILER: Yeah. Massachusetts,
 2. there's --
 3. THE REPORTER: Don't speak over each
 4. other, please.
 5. MR. SCAFE: Sorry.
 6. MR. SILER: Yeah. So in
 7. Massachusetts, there's a diagram that we're required
 8. to put in there for heating applications. We do --
 9. in combination domestic water heating, heating
 10. applications we're required to put that in there.
 11. But we do put statements in there. I
 12. mean, that doesn't state specific, but it says,
 13. you must follow local and state codes. So we --
 14. you know, we -- because we don't know all those
 15. and they can change county to county, city to
 16. city, and state to state.
 17. MR. PETERS: But it would simplify a
 18. lot of the problems that we see, especially when it
 19. comes off the drawing board and when it deals with
 20. the contractor. Then we go out and look at it. And
 21. if it was simplified in that manual for the State of
 22. Tennessee requires 18 inches, then that architect's
 23. going to look at it, then that contractor's going to
 24. look at it, and we won't have a lot of these
 25. discussions about clearance issue in the State of

1. Tennessee or the 100,000 BTU as a cutoff. Then it'd
 2. be simplified on the specifications.
 3. And we have it in our rulebook, but a
 4. lot of times, the contractors will tell you, man,
 5. I never heard of that before. And I think it
 6. would simplify, especially on a contractor's end.
 7. They're looking at the space, yes, because of the
 8. money side of the space. Every square foot is a
 9. dollar, and they'll just have to look at it and
 10. determine how much more money it's going to cost
 11. over here, but it's going to simplify the codes
 12. and the requirements of the State of Tennessee.
 13. There is a big issue with the
 14. confined space with water heaters. It's pretty
 15. bad across the state. Not so much that you think
 16. we try to control it, but we do the best we can.
 17. MR. SCAFE: I understand.
 18. MR. PISCHKE: At this time, due to
 19. time, I'm going to cut off the discussion, and we'll
 20. pick it back up in December. We'll put it on the
 21. agenda as a discussion item. And hopefully, we'll
 22. have the full group here, as well, to discuss that.
 23. I thank you, gentlemen, for, you
 24. know, presenting this, and we'll give it a due
 25. consideration for sure.

1. MR. SILER: Yeah. We thank you for
 2. everybody's time and all the feedback also. We
 3. appreciate it.
 4. MR. PISCHKE: Thank you.
 5. MR. SCAFE: Thank you.
 6. MR. PISCHKE: Okay. The last item on
 7. the agenda -- and I have actually one more thing to
 8. do after this. But Item Number 10, Rule Cases and
 9. Interpretations. You have updates on that, Eugene?
 10. MR. ROBINSON: Yes. Updating the
 11. rule cases and interpretations has been posted
 12. under -- on the Boiler Unit website, under that
 13. category. So it will be -- you'll have 2017, you'll
 14. also have the older interpretations that you could
 15. check, code cases. So it's available for use.
 16. That's it.
 17. MR. PISCHKE: That's it? Thank you.
 18. Before we adjourn, I missed something in the
 19. introductions that I was reminded to do. We have,
 20. you know, the two new members, Terry and Harold,
 21. that I'd like to take just a minute and have each
 22. one -- Terry, you can go first. Just tell us a
 23. little bit about yourself and your background and
 24. how you ended up here.
 25. MR. FOX: Don't know. Terry Fox.

1. I've been associated or have worked on boilers for
 2. the past 35 years, everything from doing refractory
 3. work to actual tube work to construction to welding
 4. repairs, R-1 repairs. In the past, I've moved on
 5. and done mainly control work. And did a lot of
 6. control work. I worked a lot with these boiler
 7. companies that introduced the Hawk-type system or
 8. the Cleaver-Brooks with the Hawk system for some of
 9. these variances that are being approved. And I just
 10. saw some things in this field that I thought needed
 11. to be addressed and changed and I was wanting to
 12. bring my expertise to the Board and try to help out.

13. MR. PISCHKE: Thank you.

14. MR. FOX: That's why I'm here. Thank
 15. you.

16. MR. CHAPMAN: Thank you.

17. MR. PISCHKE: Harold?

18. MR. BOWERS: My name is Harold
 19. Bowers. I live in Centerville, Tennessee. I've
 20. been in this industry probably -- about like Terry,
 21. 35 to 40 years. I was the plant engineer at the
 22. same plant in Clarksville for 23 years. I've been
 23. with FM Global for 17 years. And this industry has
 24. been really good to me, and I just wanted to serve
 25. to kind of pay back to this industry that's been

1. really good for me. So -- and I really appreciate
 2. the appointment to the Board.

3. MR. CHAPMAN: Thank you.

4. MR. PISCHKE: Thank you.
 5. (Applause.)

6. MR. PISCHKE: With that, I will -- if
 7. there's no other items or issues, I will call for
 8. the adjournment.

9. MS. BENNETT: And the next meeting.

10. MR. CHAPMAN: Next meeting.

11. MR. PISCHKE: Oh, I'm sorry. Thank
 12. you. The next meeting will be December 13th at
 13. 9:00 o'clock in --

14. MS. BENNETT: I'm not sure what room
 15. yet.

16. MR. PISCHKE: I was just going to ask
 17. that. Do we know which room yet?

18. MS. BENNETT: Not yet.

19. MR. PISCHKE: But it's either this
 20. room or the other room. The --

21. MS. BENNETT: Yeah. It'll be on the
 22. next agenda.

23. MR. PISCHKE: Yeah. Okay. And I
 24. want to thank everybody for helping me out in
 25. Brian's absence. You know.

1. MR. BAILEY: You did a good job.

2. MR. ROBINSON: You did good.

3. MS. BENNETT: You did a really good
 4. job.

5. (Applause.)

6. MR. PISCHKE: I don't know about
 7. that, but we made it through. That's all -- thank
 8. you.

9. So I move to adjourn.

10. END OF PROCEEDINGS.

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1. CERTIFICATE

2.
 3. STATE OF TENNESSEE)
 4. COUNTY OF WILLIAMSON)

5.
 6. I, Dominique A. Dubois LCR# 686, Notary
 7. Public and Court Reporter, do hereby certify that I
 8. have recorded to the best of my skill and ability
 9. by machine shorthand all the proceedings in the
 10. foregoing transcript, and that said transcript is a
 11. true, accurate, and complete transcript to the best
 12. of my ability.

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

18. SIGNED this 8th day of November 2017.

19.
 20.
 21. _____
 22. Dominique A. Dubois, LCR# 686
 23. Notary Public State at Large
 24. My commission expires: 4/9/2018
 25.

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