

1 STATE OF TENNESSEE
2 DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT
3 BOARD OF BOILER RULES
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8 QUARTERLY MEETING OF THE
9 STATE OF TENNESSEE
10 BOARD OF BOILER RULES

11 Via Zoom Videoconference

12 December 16, 2020
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16

17 ORIGINAL
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21

22 -----
23 CASSANDRA M. BEILING, LCR# 371
24 STONE & GEORGE COURT REPORTING
25 2020 Fieldstone Parkway
Suite 900 - PMB 234
Franklin, Tennessee 37069
615.221.1089

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1 APPEARANCES:
 2 Brian Morelock, Chairman
 Owner-User Representative
 3
 David W. Baughman
 4 Owner/User Representative
 Allied Boiler & Supply, Inc.
 5 4006 River Lane
 Milton, Tennessee 37118
 6
 Harold F. Bowers
 7 Insurance Representative
 Centerville, Tennessee
 8
 Jeffery Henry, Board Member
 9 Boiler Manufacturer Representative
 ATC-CES, Chattanooga, Tennessee
 10
 Dr. Keith Hargrove, Board Member (not present)
 11
 Sam Chapman, Chief Boiler Inspector
 12
 Chris O'Guin, Assistant Chief Boiler Inspector
 13
 Thomas Herrod
 14 Assistant Commissioner, State of Tennessee
 Daniel Bailey, Esq.
 15 Legal Counsel, State of Tennessee
 16
 Carlene T. Bennett
 17 Board Secretary, State of Tennessee
 18 Jamie Presson
 Executive Admin. Assistant, State of Tennessee
 19
 Michelle Irion
 20 Boiler Admin. Staff Supervisor, State of Tennessee
 21
 22
 23
 24
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1 A G E N D A
 2 I. Call Meeting to Order
 3 II. Introductions and Announcements
 4 III. Adoption of Agenda
 5 IV. Approval of the September 16, 2020
 meeting minutes
 6
 V. Old Business
 7 None
 8 VI. New Business
 20-15 - UPM Pharmaceuticals
 9 20-16 - Holston Valley Medical Center
 20-17 - LG Electronics USA, Inc.
 10
 VII. Rule Case & Interpretations
 11 BI 20-02 - Approved Variance Changes
 BI 20-03 - Tentative Variance Expirations
 and changes
 12
 VIII. Open Discussion Items
 13 * Tentative 2021 Meeting Dates
 14 > Wednesday, March 10
 > Wednesday, June 9
 15 > Wednesday, September 22
 > Wednesday, December 15
 16
 * Variance Guideline & Checklist Revisions
 17 * Dave Baughman - Tennessee Code Annotated
 68-122-110, Inspection of boilers, (a)(2)
 18 that states "Low pressure heating boilers
 shall be inspected both internally and
 19 externally biennially where construction
 will permit.
 20
 IX. Announcement of Next Meeting
 21 Unless the Board decides otherwise, the
 next regularly scheduled meeting of the
 22 Board of Boiler Rules will be held 9:00 a.m.
 March 10, 2021, at the State of Tennessee
 23 Department of Labor and Workforce
 Development building located at 220 French
 24 Landing Drive, Nashville, Tennessee.
 25 X. Adjournment

Page 3

1 Guest Appearances:
 2 ECS CONSULTING and BOISCO TRAINING GROUP
 Marty Toth
 3
 UPM PHARMACEUTICALS
 4 Chris Johnson, Associate Director of Engineering
 Maintenance and Facilities
 5 Anthony Dean, Maintenance Technician
 6 HOLSTON VALLEY MEDICAL CENTER
 Ben Spivey
 7 Lee Godfrey (phonetic), Facility Manager
 Greg Jones, HVAC Control Group Leader
 8
 INDUSTRIAL BOILER & MECHANICAL
 9 Keith Butler
 10 LG ELECTRONICS, USA, INC.
 Michael Hudson, EHC Manager
 11 Lee Insick, Director of EHS
 12 MR. CLEANERS - KINGSPORT
 Mark Reppart
 13
 ++++++
 14
 Court Reporting Services and Zoom
 15 Videoconferencing:
 16 STONE & GEORGE COURT REPORTING
 Nan George, Zoom moderator
 17 Cassandra M. Beiling, LCR
 18
 19
 20
 21
 22
 23
 24 ** Reporter's Note: All names are spelled
 phonetically unless otherwise provided to the
 25 Reporter by the parties.

Page 5

1 * * * * *
 2 MS. GEORGE: Good morning. I'm Nan
 3 George with Stone and George Court Reporting, and
 4 I'm the Zoom host. Cassandra Beiling is the court
 5 reporter today. She's also with Stone and George.
 6 And our job is to ensure that a verbatim
 7 transcript is produced at the end of all this.
 8 And part of that includes getting the participants
 9 correct. So I would ask everybody that's in this
 10 meeting to just go to the chat box and give us
 11 your name and the company you represent and your
 12 position, so we'll have that. And I think most of
 13 you-all have been on these Zooms with us before.
 14 Just keep yourself muted until you're called on to
 15 speak.
 16 There's a phone number, 931-503-7526.
 17 If that is -- if you're using your phone just for
 18 the audio and your name is on the screen, could
 19 you let us know? I think everybody else's names
 20 are up here.
 21 So I'll turn it over to you, now,
 22 Mr. Chairman.
 23 CHAIRMAN MORELOCK: Thank you.
 24 Thank you very much.
 25 I want to welcome everybody to the

<p style="text-align: right;">Page 6</p> <p>1 December 16 Tennessee board meeting. I hope you 2 have a copy of the agenda. That's what we will be 3 working off of in our meeting today. There was a 4 revised agenda sent out which basically just added 5 an item for approval of the September 16 minutes, 6 which we'll discuss here in a minute. But make 7 sure you have a copy and you can follow along with 8 the meeting.</p> <p>9 We will have Nan hosting. Carlene 10 Bennett will -- if anybody does want to raise a 11 hand, we'll try to see that, and Carlene can keep 12 me honest on seeing those hands raised if you have 13 a comment. And so really that's the bulk of it.</p> <p>14 We will have the board members vote 15 by roll call, so I'll call each board member by 16 name to approve items. And I think -- like Nan 17 said, I think that covers the ground rules.</p> <p>18 So the first item on our agenda is 19 call meeting to order, so I would like to call 20 this December 16 meeting to order of the Tennessee 21 Board of Boiler Rules.</p> <p>22 As far as introductions and 23 announcements, before we do introductions, I do 24 want people to remember Dr. Hargrove. He really 25 wanted to be here today, but we found out, through</p>	<p style="text-align: right;">Page 7</p> <p>1 Carlene reaching out to Dr. Hargrove, he's had 2 knee replacement surgery and he is not well enough 3 to participate today, so just remember 4 Dr. Hargrove and his healing and recovery.</p> <p>5 And so as far as introductions, I 6 will go down the participant list and let 7 everybody introduce themselves. Sometimes that 8 list starts moving around a little bit, so if I 9 leave somebody out, it's not intentional. You can 10 correct me at will.</p> <p>11 So I'm going to start with Cassandra. 12 You can introduce yourself.</p> <p>13 THE REPORTER: Cassandra Beiling 14 with Stone and George Court Reporting.</p> <p>15 CHAIRMAN MORELOCK: Thank you.</p> <p>16 Mr. O'Guin?</p> <p>17 MR. O'GUIN: Chris O'Guin, 18 Assistant Chief Boiler Inspector.</p> <p>19 CHAIRMAN MORELOCK: Okay. Thank 20 you, sir.</p> <p>21 C. Johnson?</p> <p>22 MR. JOHNSON: Yes. This is Chris 23 Johnson from UPM Pharmaceuticals.</p> <p>24 CHAIRMAN MORELOCK: Thank you, 25 Chris. And if you would, just go in and change</p>
<p style="text-align: right;">Page 8</p> <p>1 your name to your full name so that we will have a 2 correct record of your attendance, please.</p> <p>3 MR. JOHNSON: Okay.</p> <p>4 CHAIRMAN MORELOCK: Thank you.</p> <p>5 Mr. Bailey?</p> <p>6 MR. BAILEY: Dan Bailey, legal 7 counsel.</p> <p>8 CHAIRMAN MORELOCK: Mr. Baughman?</p> <p>9 MR. BAUGHMAN: I'm Dave Baughman, 10 board member. I'm with Allied Boiler & Supply, 11 Incorporated.</p> <p>12 CHAIRMAN MORELOCK: Thank you, sir.</p> <p>13 Mr. Bowers?</p> <p>14 MR. BOWERS: Harold Bowers, board 15 member with FM Global Insurance Company.</p> <p>16 CHAIRMAN MORELOCK: Thank you, sir.</p> <p>17 We have Industrial Boiler & 18 Mechanical on the call list. If you would 19 introduce yourselves.</p> <p>20 MR. BUTLER: Keith Butler with 21 Industrial Boiler & Mechanical. I'm here to 22 represent LG Electronics for their bid for 23 Tennessee Specials.</p> <p>24 CHAIRMAN MORELOCK: Thank you. 25 Jamie?</p>	<p style="text-align: right;">Page 9</p> <p>1 MS. PRESSON: Jamie Presson, 2 Executive Admin Assistant, WRC.</p> <p>3 CHAIRMAN MORELOCK: Thank you.</p> <p>4 Mr. Henry?</p> <p>5 MR. HENRY: Jeff Henry, board 6 member. ATC-CES.</p> <p>7 CHAIRMAN MORELOCK: Thank you, sir. 8 Mark Reppart?</p> <p>9 (No verbal response.)</p> <p>10 CHAIRMAN MORELOCK: I don't know if 11 you're muted -- yeah, you're muted.</p> <p>12 (No verbal response.)</p> <p>13 CHAIRMAN MORELOCK: We still -- I 14 can't hear you. It doesn't show you're muted but 15 I still can't hear you.</p> <p>16 (No verbal response.)</p> <p>17 CHAIRMAN MORELOCK: I'll come back 18 and see if we can work that out.</p> <p>19 Mr. Toth?</p> <p>20 MR. TOTH: Marty Toth, 21 ECS Consulting and the Boisco Training Group.</p> <p>22 CHAIRMAN MORELOCK: Thank you, sir. 23 Michelle?</p> <p>24 MS. IRION: Good morning. Michelle 25 Irion. I'm the new admin supervisor here in our</p>

<p style="text-align: right;">Page 10</p> <p>1 boiler division, State of Tennessee.</p> <p>2 CHAIRMAN MORELOCK: Thank you,</p> <p>3 Michelle.</p> <p>4 Mr. Herrod?</p> <p>5 MR. HERROD: Tom Herrod, Assistant</p> <p>6 Commissioner, WRC.</p> <p>7 CHAIRMAN MORELOCK: Thank you, sir.</p> <p>8 And we have Michael Hudson with LG.</p> <p>9 (No verbal response.)</p> <p>10 CHAIRMAN MORELOCK: I can see you</p> <p>11 but I can't hear you.</p> <p>12 (No verbal response.)</p> <p>13 CHAIRMAN MORELOCK: And then we</p> <p>14 still have the phone number that Nan mentioned.</p> <p>15 We don't have a name tied to that number,</p> <p>16 1-931-503-7526. So if you can introduce yourself</p> <p>17 or go in and change your name. You can</p> <p>18 temporarily change that name to add a name or a</p> <p>19 company name or both to that, please.</p> <p>20 And I still did not -- Mark, did you</p> <p>21 ever get your audio to work to introduce yourself?</p> <p>22 (No verbal response.)</p> <p>23 CHAIRMAN MORELOCK: It shows you're</p> <p>24 muted. Oh, there we go. Thank you for updating</p> <p>25 that.</p>	<p style="text-align: right;">Page 11</p> <p>1 It says Kingsport, so is that Holston</p> <p>2 Valley?</p> <p>3 MR. SPIVEY: This is Ben Spivey</p> <p>4 with Holston Valley Medical Center.</p> <p>5 CHAIRMAN MORELOCK: Yes.</p> <p>6 MR. SPIVEY: In the room with me, I</p> <p>7 have our facility manager, Lee Godfrey(phonetic);</p> <p>8 our HVAC control group leader, Greg Jones.</p> <p>9 CHAIRMAN MORELOCK: Thank you.</p> <p>10 Mark, I still can't hear you.</p> <p>11 And who have I left out? If I've</p> <p>12 left you out, I apologize, but introduce yourself.</p> <p>13 MS. BENNETT: (Indicating.)</p> <p>14 CHAIRMAN MORELOCK: Oh, Carlene. I</p> <p>15 knew I'd forget somebody.</p> <p>16 MS. BENNETT: Yeah. That's fine.</p> <p>17 It's Carlene Bennett. I'm Board Secretary.</p> <p>18 CHAIRMAN MORELOCK: Sorry about</p> <p>19 that.</p> <p>20 All right. Who else have I left out?</p> <p>21 MR. CHAPMAN: Sam Chapman,</p> <p>22 Tennessee Chief Boiler Inspector.</p> <p>23 CHAIRMAN MORELOCK: Well, now,</p> <p>24 Carlene paid me to do that one.</p> <p>25 MR. CHAPMAN: Oh, she did?</p>
<p style="text-align: right;">Page 12</p> <p>1 CHAIRMAN MORELOCK: I'm just</p> <p>2 kidding. I'm just kidding.</p> <p>3 MR. CHAPMAN: Oh, okay.</p> <p>4 CHAIRMAN MORELOCK: All right. All</p> <p>5 right. Sam, thank you for that.</p> <p>6 Who else have I left out?</p> <p>7 (No verbal response.)</p> <p>8 CHAIRMAN MORELOCK: All right.</p> <p>9 Hearing none -- for those that did not introduce</p> <p>10 themselves, I hope we can get your audio and video</p> <p>11 working so we can talk with you. So, like I said,</p> <p>12 there's still a phone number that we don't have a</p> <p>13 name tied to it, and I couldn't get Mark -- I</p> <p>14 couldn't make contact with him.</p> <p>15 So continue to work on that so we</p> <p>16 have a -- let's see. Let me check my chat here</p> <p>17 right quick and see what I have. Okay. So if</p> <p>18 you'll go into the chat and add your name and the</p> <p>19 company, that will help us to have a written</p> <p>20 record of who is here. Several have already done</p> <p>21 that. If you've not done that, please go into the</p> <p>22 chat box and add that.</p> <p>23 All right. With that said, I'm going</p> <p>24 to move on to Item 3, adoption of the agenda. And</p> <p>25 hopefully, you have a copy of that before you. So</p>	<p style="text-align: right;">Page 13</p> <p>1 are there any changes to the agenda before we vote</p> <p>2 on it?</p> <p>3 MR. BAUGHMAN: The only thing I'd</p> <p>4 look at is, just depending on time, we've got a</p> <p>5 pretty full agenda today, and the last thing on</p> <p>6 the agenda is the discussion items. And so just</p> <p>7 seeing how that comes up, we may table that last</p> <p>8 item about the low-pressure boilers.</p> <p>9 CHAIRMAN MORELOCK: Okay.</p> <p>10 MR. BAUGHMAN: But that would just</p> <p>11 be -- I was just looking at the time of what we've</p> <p>12 got to work with.</p> <p>13 CHAIRMAN MORELOCK: Yes, sir. All</p> <p>14 right. We'll do the best we can. But thank you</p> <p>15 for the comment.</p> <p>16 So any other additions, deletions, or</p> <p>17 changes to the agenda?</p> <p>18 (No verbal response.)</p> <p>19 CHAIRMAN MORELOCK: All right.</p> <p>20 Hearing none, I'm going to call for approval of</p> <p>21 the December 16th agenda. And we'll do that by</p> <p>22 role call.</p> <p>23 So Mr. Baughman?</p> <p>24 MR. BAUGHMAN: Aye.</p> <p>25 CHAIRMAN MORELOCK: Mr. Bowers?</p>

<p style="text-align: right;">Page 14</p> <p>1 MR. BOWERS: Aye.</p> <p>2 CHAIRMAN MORELOCK: Mr. Henry?</p> <p>3 MR. HENRY: Aye.</p> <p>4 CHAIRMAN MORELOCK: Thank you. We</p> <p>5 have an agenda. That will take us to Item 4,</p> <p>6 which is approval of the September 16th, 2020</p> <p>7 Tennessee Board meeting minutes. Those are posted</p> <p>8 out on the website for anyone to review. Are</p> <p>9 there any changes or comments about the</p> <p>10 September 16 agenda and the -- the minutes?</p> <p>11 MS. BENNETT: Brian?</p> <p>12 CHAIRMAN MORELOCK: Yes.</p> <p>13 MS. BENNETT: Until they're</p> <p>14 approved, they're actually not put on the website.</p> <p>15 CHAIRMAN MORELOCK: Okay.</p> <p>16 MS. BENNETT: I sent a copy to you</p> <p>17 guys for the meeting, for you to read and approve.</p> <p>18 But then once it's approved, then I will put it on</p> <p>19 the website.</p> <p>20 CHAIRMAN MORELOCK: Okay. Very</p> <p>21 good.</p> <p>22 MS. BENNETT: Okay.</p> <p>23 CHAIRMAN MORELOCK: Very good.</p> <p>24 Thanks for that clarification.</p> <p>25 Okay. So do I have a motion to</p>	<p style="text-align: right;">Page 15</p> <p>1 approve the September 16, 2020 meeting minutes?</p> <p>2 MR. BOWERS: I motion to approve.</p> <p>3 CHAIRMAN MORELOCK: Motion by</p> <p>4 Mr. Bowers. Do I have a second?</p> <p>5 MR. HENRY: Second.</p> <p>6 CHAIRMAN MORELOCK: Second by</p> <p>7 Mr. Jeff Henry.</p> <p>8 Any other questions or comments?</p> <p>9 (No verbal response.)</p> <p>10 CHAIRMAN MORELOCK: Hearing none,</p> <p>11 I'm going to have a roll call for approval.</p> <p>12 Mr. Baughman?</p> <p>13 MR. BAUGHMAN: Aye.</p> <p>14 CHAIRMAN MORELOCK: Mr. Bowers?</p> <p>15 MR. BOWERS: Aye.</p> <p>16 CHAIRMAN MORELOCK: Mr. Henry?</p> <p>17 MR. HENRY: Aye.</p> <p>18 CHAIRMAN MORELOCK: We have the</p> <p>19 September 16th minutes approved, and then they</p> <p>20 will be put on the website.</p> <p>21 So thank you, Carlene, for doing</p> <p>22 that.</p> <p>23 That takes us to Item 5, which is old</p> <p>24 business, which we have no old business, so we'll</p> <p>25 move on to Item 6, which is new business. And our</p>
<p style="text-align: right;">Page 16</p> <p>1 first item is 20-15, UPM Pharmaceuticals, in</p> <p>2 Bristol, Tennessee, is requesting a variance for</p> <p>3 two high-pressure boilers. So if you would</p> <p>4 introduce yourselves and present your variance</p> <p>5 request.</p> <p>6 And while you're doing that, is there</p> <p>7 a conflict of interest on this item from any board</p> <p>8 member?</p> <p>9 MR. BAUGHMAN: Brian, we may. I'll</p> <p>10 let Dan kind of weigh in on it. We're going to be</p> <p>11 training their personnel at some point in the near</p> <p>12 future. So we're training them on the technical</p> <p>13 aspects of the boiler, not so much within the</p> <p>14 variance. So I don't know what conflict that may</p> <p>15 have, but I just wanted to, at least, brooch that</p> <p>16 with you.</p> <p>17 CHAIRMAN MORELOCK: Mr. Bailey,</p> <p>18 you're muted, please.</p> <p>19 MR. BAILEY: Sorry. I was saying I</p> <p>20 really don't think that poses a conflict, just the</p> <p>21 fact that you're going to be providing some</p> <p>22 training. I don't think that causes -- rises to a</p> <p>23 conflict level.</p> <p>24 CHAIRMAN MORELOCK: Thank you,</p> <p>25 Mr. Bailey.</p>	<p style="text-align: right;">Page 17</p> <p>1 MR. BAUGHMAN: Thank you.</p> <p>2 CHAIRMAN MORELOCK: All right.</p> <p>3 Mr. Johnson, I spoke over the top of you. I</p> <p>4 apologize for that. If you're ready to present</p> <p>5 your item, the floor is yours.</p> <p>6 MR. JOHNSON: I have Anthony Dean</p> <p>7 with me here, too. He's one of my main</p> <p>8 maintenance technicians, and he knows our boilers</p> <p>9 very well. But we're requesting a variance for</p> <p>10 our two gas-fired burners. We have previously had</p> <p>11 variances in the past, but since the last one,</p> <p>12 we've done several staffing changes, and we've</p> <p>13 updated the procedure and the variance. And then</p> <p>14 we've also changed one of our burners out on one</p> <p>15 of our boilers, so that was added to the new</p> <p>16 variance. But we're requesting to get our</p> <p>17 variance put back in place so that we can go to</p> <p>18 the electronic monitoring and not doing the</p> <p>19 20-minute checks.</p> <p>20 CHAIRMAN MORELOCK: Okay. So</p> <p>21 Appendix O is a summary of revisions to this</p> <p>22 variance. So is there anything you want to speak</p> <p>23 to on these summary of revisions in Appendix O?</p> <p>24 MR. JOHNSON: Most of the first</p> <p>25 ones were mainly just due to staffing changes and</p>

<p style="text-align: right;">Page 18</p> <p>1 organizational structure changes. So we did 2 update those to what we're currently doing. And 3 we did change on the Appendix B-1. We went from 4 using radios to using cell phones for our system 5 for contacting the boiler operators and our 6 security guards. So that was one change we had 7 made. And then it talks about the job 8 descriptions and everybody. We updated those to 9 make those current for the maintenance technicians 10 and the security guards as well. So a lot of it 11 was just clerical and then we added the boiler 12 burner to it as well.</p> <p>13 CHAIRMAN MORELOCK: Okay. All 14 right. With that presentation, do I have a motion 15 to discuss this variance?</p> <p>16 MR. BAUGHMAN: So moved.</p> <p>17 CHAIRMAN MORELOCK: Thank you, 18 Mr. Baughman.</p> <p>19 Do I have a second?</p> <p>20 MR. BOWERS: Second. Harold 21 Bowers.</p> <p>22 CHAIRMAN MORELOCK: Thank you, 23 Mr. Bowers.</p> <p>24 What questions or comments do you 25 have for UPM Pharmaceuticals?</p>	<p style="text-align: right;">Page 19</p> <p>1 I will just say in the process of 2 revising your manual -- it's over here -- well, in 3 2016, we updated Rule 800-3-03, and now the 4 20-minute rule is 0800-3-3.08(11), instead of 5 .04(22). So you'll just need to update that on 6 your cover page of your manual. And there's 7 some -- just do it in your manual. You'll just 8 need to update that to the current rule, for the 9 20-minute rule.</p> <p>10 MR. JOHNSON: Okay. No problem.</p> <p>11 CHAIRMAN MORELOCK: Thank you for 12 that.</p> <p>13 Any other questions? 14 (No verbal response.)</p> <p>15 CHAIRMAN MORELOCK: While you're 16 thinking, when I look on page 3, it references the 17 microprocessor-based controller, to see 18 Appendix B, and then the controller will shut down 19 on any condition listed in Appendix C. And I 20 don't see a lot of detail in those two appendices, 21 so can you speak to that?</p> <p>22 MR. JOHNSON: Appendix B and 23 Appendix C?</p> <p>24 CHAIRMAN MORELOCK: Appendix B and 25 Appendix C.</p>
<p style="text-align: right;">Page 20</p> <p>1 MR. JOHNSON: Appendix B-1, the 2 equipment description?</p> <p>3 CHAIRMAN MORELOCK: Well, you've 4 got your equipment listed.</p> <p>5 MR. JOHNSON: Yes.</p> <p>6 CHAIRMAN MORELOCK: And there's 7 some questions that we typically see on the 8 checklist, such as, you know, how do you protect 9 it from -- you say it's password protected to 10 prevent unauthorized access, which is fine.</p> <p>11 I guess the biggest thing that, 12 typically, we see in Appendix C is a fault code 13 listing, which I don't see.</p> <p>14 MR. JOHNSON: Oh, okay. So you 15 want to see a fault code listing?</p> <p>16 CHAIRMAN MORELOCK: Yes. Because 17 when the site visit is made by the Boiler Unit, 18 the fault codes that you list, they have the 19 prerogative to have you to initiate any of those 20 situations that would cause that fault code to 21 occur.</p> <p>22 MR. JOHNSON: Okay. I can add 23 that.</p> <p>24 CHAIRMAN MORELOCK: Okay. Again, 25 in your Appendix N, your variance request cover</p>	<p style="text-align: right;">Page 21</p> <p>1 letter, you need to correct the rule in that area, 2 too. When you go to page 12, which is listed as 3 your emergency procedure --</p> <p>4 MR. JOHNSON: Yes.</p> <p>5 CHAIRMAN MORELOCK: -- the 6 procedure looks fine, but if you'll look on the 7 checklist, Item 40, it --</p> <p>8 MR. JOHNSON: Needs to be yellow?</p> <p>9 CHAIRMAN MORELOCK: Yeah. 10 Highlighted or tabbed where it's easy to find.</p> <p>11 MR. JOHNSON: Yeah. Sam got me on 12 that one the other day.</p> <p>13 CHAIRMAN MORELOCK: Let's see.</p> <p>14 MR. JOHNSON: The one on the wall 15 is yellow. I just didn't put the yellow one in 16 here.</p> <p>17 CHAIRMAN MORELOCK: What other 18 comments does the board members have? That's all 19 the comments I have.</p> <p>20 MR. BAUGHMAN: This is Dave 21 Baughman, board member.</p> <p>22 Chris, thanks for you and Anthony 23 being here to discuss this.</p> <p>24 MR. JOHNSON: No problem.</p> <p>25 MR. BAUGHMAN: I had the same thing</p>

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1 as Mr. Morelock. On Appendix C, page C-1, it just
 2 describes the following, taken from product
 3 literature, explains the fault messages, but there
 4 was no following to that. So I kind of reiterate
 5 that.

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

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

10 MR. BAUGHMAN: Webster. Very good.

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

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

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

25 MR. JOHNSON: It still runs pretty

Page 24

1 does not produce a code to the boiler attendant
 2 itself, other than generic visual and audible
 3 alarm.

4 MR. BAUGHMAN: Very good. On the
 5 emergency stop there at the guard station, is that
 6 through the computer?

7 MR. DEAN: It's hardwired. It's
 8 hardwired all the way back to the original
 9 location, one outside the boiler house, one inside
 10 the compressor room. There is a conduit. It is
 11 hardwired from there to there. It does not
 12 interface with the HMI. It's a merely open-and-
 13 close panic switch and gives that enable to run
 14 and fire.

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

25 MR. DEAN: We're still trying to

Page 23

1 good.

2 MR. DEAN: It's the better of the
 3 two.

4 MR. BAUGHMAN: Yeah. Well, I
 5 remember being there just over three years ago and
 6 going through the old radio system, which at that
 7 time was working fine. But I saw where it was
 8 starting to have some issues. So I'm glad this
 9 all got updated and upgraded.

10 MR. DEAN: It just didn't give us
 11 good confidence that we could shut it off if
 12 something went wrong. And our new -- the HMI
 13 produces an alarm at the front office, if -- when
 14 the security guards are monitoring, or the other
 15 designated boiler attendant. So the alarm it
 16 gives is a generic one-symbol alarm. It does not
 17 throw a code to a security guard for him to
 18 cipher, or the other boiler attendant. It merely
 19 shows a red banner and an alarm, and he's
 20 instructed to shut that boiler off.

21 So it's very simple. Our alarm codes
 22 are on the front of the boilers. When it shows
 23 low water, misfire, or something like that, you
 24 can only really get that information from the
 25 boiler head, the boiler burners themselves. It

Page 25

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

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

20 The only other question I had was
 21 under Appendix D, D-1, maintenance tech/boiler
 22 attendant, under Appendix G, the maintenance tech
 23 duties, boiler attendant, I didn't see, was
 24 listed. And is the maintenance tech actually
 25 going to be a boiler attendant, or if that's part

<p style="text-align: right;">Page 26</p> <p>1 of his duties, and if so, maybe I just missed it 2 in the description in Appendix G. But if he is 3 going to be a boiler attendant also, I just 4 figured it needed to be under his duty listing. 5 MR. DEAN: It should have been -- 6 Anthony Dean speaking -- I don't see it on here. 7 I think we could update that. 8 MR. JOHNSON: Yeah. It's -- well, 9 it has -- it's kind of listed a little vaguely -- 10 I'm sorry, this is Chris. It says under essential 11 duties, Number 2, maintain boiler and air 12 compressor equipment. We may need to clarify that 13 as boiler attendant. 14 MR. BAUGHMAN: I would, just 15 because maintaining is part of the maintenance but 16 not necessarily, specifically, identified as a 17 boiler attendant to this variance. 18 MR. JOHNSON: Yeah. We can update 19 that. 20 MR. BAUGHMAN: Just goes to show 21 you we read these in pretty good detail. 22 MR. JOHNSON: Oh, that's good. 23 MR. BAUGHMAN: Mr. Morelock and I 24 have talked many times about being up until 1:00 25 or 2:00 in the morning going over these, and</p>	<p style="text-align: right;">Page 27</p> <p>1 that's kind of why we're charged with this. 2 MR. DEAN: I'm glad you do. 3 CHAIRMAN MORELOCK: What helps you 4 with that is in the organizational chart under 5 Appendix D, it does list the maintenance 6 technician as a boiler attendant in Appendix D. 7 But reinforcing that in Appendix G would be great. 8 MR. JOHNSON: Okay. That's no 9 problem. 10 CHAIRMAN MORELOCK: And I do have 11 one more question. If you look on page 9, at the 12 bottom of the page, Item 7, it says the remote 13 station operator shall not leave the campus. Does 14 that also apply to the boiler attendant? 15 MR. JOHNSON: Yes. We have 24-hour 16 security guards that cannot leave the front desk 17 for any reason. They have to be relieved if they 18 do. And the maintenance technician that is 19 assigned to be the boiler attendant for each 20 shift, he stays here all day. 21 CHAIRMAN MORELOCK: Okay. 22 MR. JOHNSON: He doesn't run to get 23 anything at Lowe's or nothing like that. 24 CHAIRMAN MORELOCK: Okay. You may 25 want to strengthen your manual a little bit by</p>
<p style="text-align: right;">Page 28</p> <p>1 just stating that they will be there, you know, 2 during the whole shift and not leave the campus. 3 MR. JOHNSON: Okay. 4 CHAIRMAN MORELOCK: Any other 5 questions or comments about this manual? 6 MR. HENRY: This is Jeff Henry, 7 board member. If I could ask just a quick 8 question. 9 Mr. Johnson, I assume that you 10 understand the operation, overall design and 11 operation, of the boiler. And in looking at -- 12 following on from Mr. Baughman's question, looking 13 at the maintenance tech duties, the knowledge 14 necessary to perform the job, a basic knowledge of 15 boilers and operation of boilers isn't listed on 16 here. Is there anybody besides you, Mr. Johnson, 17 who has that kind of knowledge? 18 MR. JOHNSON: Yeah. All of the 19 guys have been -- the maintenance department 20 doesn't turn over very quickly, and they've all 21 been through training in the past for the boiler 22 operations. And they're set for renewal of that 23 training as well. 24 MR. HENRY: Okay. So -- 25 MR. JOHNSON: We send them all</p>	<p style="text-align: right;">Page 29</p> <p>1 through it. 2 MR. HENRY: So that's a normal and 3 essential part of their training for the job. 4 MR. JOHNSON: Yes. Yes. 5 MR. HENRY: Okay. Thank you. 6 MR. BAUGHMAN: And I'll just add to 7 that. This is Dave Baughman. We trained six 8 years ago and then three years ago. And so I'll 9 probably see some of the faces. I know some 10 people like Jason has moved on. 11 MR. JOHNSON: Yes. 12 MR. BAUGHMAN: But I'm looking 13 forward to getting over there and meeting with 14 everybody. One of the interesting things in this 15 process was working with both the maintenance 16 people. And you noticed on your log sheet that 17 security people were trained separately than what 18 the maintenance was. There was two separate 19 groups of people. And maintenance felt pretty 20 good about the whole training end of it. 21 Security, it scared the heck out of them. That 22 was good. Everybody had a healthy respect for 23 what it is that they're working with. But I just 24 know, as we were going through the training end of 25 it, security was, like, man, those things have a</p>

<p style="text-align: right;">Page 30</p> <p>1 lot of power. I was, like, yeah.</p> <p>2 But they have kept up with the</p> <p>3 training on a good basis, at least our end of it</p> <p>4 going back over the last, well, six to nine years,</p> <p>5 so...</p> <p>6 MR. HENRY: Thank you for the</p> <p>7 clarification. Wouldn't that be considered part</p> <p>8 of the knowledge necessary to perform the job for</p> <p>9 the maintenance tech duties?</p> <p>10 MR. JOHNSON: Yes. I can put more</p> <p>11 detail about that in the job description.</p> <p>12 MR. HENRY: All right. Thank you.</p> <p>13 CHAIRMAN MORELOCK: Any other</p> <p>14 questions or comments?</p> <p>15 (No verbal response.)</p> <p>16 CHAIRMAN MORELOCK: Hearing none,</p> <p>17 do I have a motion for tentative approval of this</p> <p>18 variance based upon revisions to the manual from</p> <p>19 comments from the board meeting today and a</p> <p>20 successful site visit by the Boiler Unit?</p> <p>21 MR. BOWERS: This is Harold Bowers.</p> <p>22 I would make that motion.</p> <p>23 CHAIRMAN MORELOCK: All right. So</p> <p>24 I have a motion by Mr. Bowers. Do I have a</p> <p>25 second?</p>	<p style="text-align: right;">Page 31</p> <p>1 MR. BAUGHMAN: Second.</p> <p>2 CHAIRMAN MORELOCK: I have a second</p> <p>3 from Mr. Baughman. Any other conversations,</p> <p>4 questions, comments?</p> <p>5 (No verbal response.)</p> <p>6 CHAIRMAN MORELOCK: All right.</p> <p>7 Hearing none, I'm going to call the question by</p> <p>8 roll call.</p> <p>9 Mr. Baughman?</p> <p>10 MR. BAUGHMAN: Aye.</p> <p>11 CHAIRMAN MORELOCK: Mr. Bowers?</p> <p>12 MR. BOWERS: Aye.</p> <p>13 CHAIRMAN MORELOCK: Mr. Henry?</p> <p>14 MR. HENRY: Aye.</p> <p>15 CHAIRMAN MORELOCK: All right.</p> <p>16 Gentlemen, you have a tentatively approved boiler</p> <p>17 variance.</p> <p>18 MR. JOHNSON: Thank you.</p> <p>19 MR. DEAN: This is Anthony.</p> <p>20 I have one final question. Do we</p> <p>21 still stay on our 20-minute rule just like we are</p> <p>22 now?</p> <p>23 CHAIRMAN MORELOCK: Yes. Until you</p> <p>24 complete the site visit and all that, you will</p> <p>25 continue on the 20-minute rule.</p>
<p style="text-align: right;">Page 32</p> <p>1 MR. DEAN: Yes, sir. Thank you</p> <p>2 very much.</p> <p>3 CHAIRMAN MORELOCK: All right.</p> <p>4 That takes us to Item 20-16, Holston Valley</p> <p>5 Medical Center, requesting a new variance for</p> <p>6 three high-pressure boilers.</p> <p>7 And while these gentlemen are getting</p> <p>8 ready to make their presentation, is there a</p> <p>9 conflict from the board members on this item?</p> <p>10 (No verbal response.)</p> <p>11 CHAIRMAN MORELOCK: Hearing none,</p> <p>12 gentlemen, introduce yourselves and present your</p> <p>13 manual.</p> <p>14 MR. SPIVEY: Yes. Hello. My name</p> <p>15 is Ben Spivey. I am the northwest market facility</p> <p>16 director for Allied Health. In the room with me,</p> <p>17 I have Lee Godfrey (phonetic). He is our Holston</p> <p>18 Valley Medical Center facility director -- or</p> <p>19 manager. And, also, I have Greg Jones. He is our</p> <p>20 HVAC controls group leader.</p> <p>21 Just a little history for Holston</p> <p>22 Valley Medical Center. We're located in</p> <p>23 Kingsport, Tennessee. We're up in the upper</p> <p>24 northeast end of the state. Our facility is</p> <p>25 licensed for 505 beds and we are, approximately, a</p>	<p style="text-align: right;">Page 33</p> <p>1 990,000-square-foot facility.</p> <p>2 Our boiler room is located in the</p> <p>3 back side of our facility and it is not free</p> <p>4 standing. It is attached to the building. We</p> <p>5 utilize two 500 horsepower, one 600 horsepower</p> <p>6 Superior air tube boilers to release our steam.</p> <p>7 And we use the steam for heating, cooking, and for</p> <p>8 sterilization.</p> <p>9 The details of the boiler operation</p> <p>10 are described beginning on page 3 of our boiler</p> <p>11 room attendants variance document. We also</p> <p>12 included pictures of the boilers, the deaerator</p> <p>13 and feed pumps in this section as well.</p> <p>14 And I guess, in summary, how our</p> <p>15 boilers function, we utilize one boiler online,</p> <p>16 one boiler on standby, and then one boiler in</p> <p>17 storage. Of course, we rotate the boilers to</p> <p>18 ensure equal run times.</p> <p>19 Our boiler room is staffed 24/7. We</p> <p>20 have designated staffing: Four boiler room techs</p> <p>21 and one lead boiler room tech. And within our</p> <p>22 boiler room, existing conditions today, we have</p> <p>23 what we call a boiler room attendant monitoring</p> <p>24 station. It's described on page 10 of the</p> <p>25 variance document.</p>

<p style="text-align: right;">Page 34</p> <p>1 This station is constructed of 2 storefront glass. It allows the boiler room 3 operator to look out across the boiler room. It 4 also contains our Metasys monitors. We use the 5 Johnson Control Metasys system for monitoring the 6 alarm conditions of the boiler and to alert our 7 boiler attendant in realtime of any alarm 8 conditions. In addition to getting an alarm at 9 the monitors, it also sends an alarm out to our 10 tech, in case he's outside the boiler room or 11 inside the boiler room performing daily tasks.</p> <p>12 In addition, this station has an 13 emergency-stop push button for the boilers. And, 14 again, even though this attendant station provides 15 continuous monitoring, our tech is continuously 16 stationed in the boiler room and does physically 17 visit the boiler on the 20 minutes and conducts 18 rounding throughout the boiler itself just to 19 verify that operations are continuing and are 20 safe.</p> <p>21 So here is the main reason for our 22 request for the variance. I think we all know 23 with other pressures today, there's a lot of 24 pressure for -- to increase -- or increased 25 demands to ensure that we are cost-effective and</p>	<p style="text-align: right;">Page 35</p> <p>1 we have efficient operations, so we have adjusted 2 our in-house staffing. Now, this is completely 3 separate from our boiler room staffing. The 4 in-house staff takes care of the hospital, of 5 course, all the departments in the hospital. So 6 we've adjusted our staffing to have the majority 7 of our staff available during peak times for 8 service requests, which just happens to be first 9 shift. In doing so, we've had to cut back 10 staffing for second and third shift to one 11 in-house tech.</p> <p>12 So what we're hoping, by gaining the 13 variance, is to be able to utilize the boiler room 14 attendant to assist our second- and third-shift 15 in-house techs just when they need a helping hand. 16 Like, for example, if the in-house tech needs help 17 with a water leak, then, of course, we would want 18 the boiler room tech to leave the boiler room and 19 to help him out. But, again, that time period 20 cannot exceed the four hours.</p> <p>21 And to ensure that we continue with 22 monitoring the boilers continuously, we've 23 prepared, but we've not implemented yet, but we've 24 prepared a remote monitoring station, which the 25 description is down on page 14 of the boiler room</p>
<p style="text-align: right;">Page 36</p> <p>1 variance document. And this remote monitoring 2 station, basically, is located at the front of the 3 hospital in the lobby/PBX area. It will be 4 staffed 24/7 by the PBX attendant.</p> <p>5 And within that station, we have a 6 boiler alarm panel which consists of a local alarm 7 indicator light and emergency-stop push button for 8 each boiler. And, of course, in addition, the PBX 9 attendants will see annual training which consists 10 of the location of the emergency boiler shut-down 11 panel, location and demonstration of the visual 12 and audible alarms, location and demonstration of 13 the emergency boiler shut-down button and 14 emergency paging process for the boiler room 15 attendant.</p> <p>16 Now, we did -- in hopes of gaining 17 the variance, we have initially trained all of the 18 PBX staff back in October. I believe we've 19 trained that staff. But, again, we have not 20 implemented a remote station. We're waiting and 21 hopefully we'll receive approval for the variance 22 attendants, and from that time, we would implement 23 that remote station.</p> <p>24 CHAIRMAN MORELOCK: Thank you for 25 that presentation.</p>	<p style="text-align: right;">Page 37</p> <p>1 Any questions, comments about this 2 variance request?</p> <p>3 MR. BOWERS: So we've opened 4 discussion on this, right?</p> <p>5 CHAIRMAN MORELOCK: I think so.</p> <p>6 MR. BOWERS: Okay. The only 7 question I have, I know this is a really big 8 hospital, and we look at the vast -- you know, 9 when the boiler operator gets away from there -- 10 and four hours is an awful long time to be away -- 11 and they looked at steam droppage, you know, 12 demand and what would that do if the boiler 13 operator -- if the boiler is shut down, how 14 long -- if they had a problem with a boiler and 15 the boiler operator was on the other side of the 16 hospital, how long would it take for the boiler 17 operator to get back to the boiler room?</p> <p>18 MR. SPIVEY: This is Ben Spivey.</p> <p>19 To answer your question, our facility 20 manager, Lee Godfrey (phonetic), has stated that 21 it would take five minutes from the farthest end 22 of the building.</p> <p>23 MR. BOWERS: So you're saying, Ben, 24 that -- so he gets an emergency call and he's got 25 his tools all scattered out, and so he's just</p>

<p style="text-align: right;">Page 38</p> <p>1 supposed to drop everything and within five 2 minutes he's going to be back in the boiler room? 3 MR. SPIVEY: Let me clarify what 4 we're wanting to use the boiler room tech for. 5 The boiler room tech still will be the primary 6 duties of the boiler room. He's coming -- he 7 would come out of the boiler room if he needed to 8 assist one of our in-house techs. In other words, 9 he would be holding a device or something like 10 that, helping them move something. He would not 11 be assigned solo jobs out in the facility. 12 Now, it may take a little more than 13 five minutes. You're correct. You know if he's 14 holding something, got his hand on a water leak, 15 it may take a little bit more than five minutes, 16 but surely, I believe we could get there within 17 20 minutes to take care of that boiler. And my 18 understanding is what would happen if we had an 19 alarm condition, at that point in time, our remote 20 monitoring station would get the alarm, and they 21 will be instructed to immediately push the 22 emergency-stop, and that boiler that's an alarm 23 would be taken offline, and the standby boiler 24 would come up. 25 Does that sort of make sense?</p>	<p style="text-align: right;">Page 39</p> <p>1 MR. BOWERS: Yes, it does. I 2 appreciate that -- Harold Bowers, again -- I 3 appreciate that. 4 MR. BAUGHMAN: This is Dave 5 Baughman, board member. 6 Thank you for going over this with 7 us, Mr. Spivey. So the alarms -- we talked about 8 this before and Mr. Morelock had talked about it 9 in a previous variance today. But the list of 10 alarms, I'm showing the attendant station 11 monitoring field controller captures in realtime 12 the following alarms on page 10. And this is 13 under the attendant station monitoring alarm 14 sequence. And so I take it that this is our -- 15 this is our inclusive alarm that gets alarmed out 16 to the monitoring station; is that correct? 17 MR. SPIVEY: Yes. These are the 18 alarms that occur at the boiler attendant station, 19 we call it. That would be correct. 20 MR. BAUGHMAN: And so these alarms 21 would then generate an alarm back to the remote 22 station once it's implemented back to the PBX so 23 that they could shut the boiler off; is that 24 correct? 25 MR. SPIVEY: Yes. They get the</p>
<p style="text-align: right;">Page 40</p> <p>1 alarm simultaneously. 2 THE REPORTER: Is that Ben? 3 MR. SPIVEY: Yes, Ben. Yeah, I'm 4 sorry. This is Ben. 5 THE REPORTER: Thank you. 6 MR. BAUGHMAN: Very good. But 7 that's the inclusive list of alarms right there, 8 for our reference, correct? 9 MR. SPIVEY: I am going to let 10 Greg, our HVAC controls guy answer that, but it's 11 my understanding that even if we have a flame 12 failure on the boiler, any alarm will go through 13 the PBX. But I'll let Greg clarify that. 14 MR. JONES: Can you hear me? 15 MR. BAUGHMAN: I can hear you, yes. 16 MR. JONES: Okay. The alarms that 17 are canned in the boiler from the factory, 18 anything on burner control, anything like that 19 that automatically kills the boiler, then we have 20 a high-pressure mechanical limit that's added 21 alongside the boiler from the factory, that also 22 will take it out at low water. Anything in 23 that -- and they're all in a series together -- 24 they'll come through and they'll hit the Johnson 25 Control system, end up at the PBX operator, and</p>	<p style="text-align: right;">Page 41</p> <p>1 they'll kill the switch and kill it. And it will 2 individually kill each boiler as the alarm comes 3 in. They're separated per boiler. 4 MR. BAUGHMAN: So part of this 5 discussion is because it shows that it captures, 6 in real time, the following alarms. It's a very 7 short alarm detail. And in that, of course, you 8 just mentioned flame safeguard and flame failure. 9 Flame failure was not mentioned in this particular 10 alarm enunciation. 11 The programmers themselves, I see 12 that we've got this Medisys system, which is a 13 Johnson Controls for your communications, but I 14 don't see what the actual boiler programmers are 15 as part of the hardware within this system. I see 16 they're Superior boilers with low knocks, and I 17 was looking back through the page 3, the 18 description for the system components and 19 operation. But I didn't see anywhere, in 20 particular, what the flame safeguard system was, 21 as far as the hardware. 22 I would kind of like to have a 23 description of the hardware, not so much just for 24 the remote monitoring, but what the hardware is on 25 the boiler that's communicating with that remote</p>

<p style="text-align: right;">Page 42</p> <p>1 system enunciation. So do you know what 2 programmers are on these burners? 3 MR. JONES: Are you talking about, 4 like, the Honeywell burner control? 5 MR. BAUGHMAN: If it's Honeywell, 6 yes, sir. 7 MR. JONES: If the fuel air 8 controls Honeywell, it's all Honeywell. 9 MR. BAUGHMAN: Okay. 10 MR. JONES: That's all factory. 11 And all we did was series in that high limit with 12 this and brought that into a Johnson Control 13 system. All that stuff was already there and the 14 Johnson Controller came in as central alarm to the 15 Johnson Control system. The boiler was shut down. 16 We used to get a binary input into that control 17 where that told you that you had a boiler alarm. 18 Then you would have to go in there and read the 19 Honeywell controller. But that's the same thing. 20 It'll page out to these guys. It's going to page 21 it out to them when they get it. 22 MR. BAUGHMAN: Going to page 36, 23 Appendix H, this may be a minor detail, but in the 24 job description, I couldn't find anywhere in that 25 job description where it specifically identified</p>	<p style="text-align: right;">Page 43</p> <p>1 boiler attendants. I know it says boiler room 2 attendant job description, but I didn't see in the 3 job description itself it identifying boiler 4 attendants. 5 MR. SPIVEY: This is Ben. 6 Yes, sir. The job descriptions that 7 we have in place all throughout Ballad Health are 8 Tech 1, Tech 2, and Tech 3, and then it's a lead 9 tech. And so, basically, we don't have an 10 official job description through Ballad Health for 11 a boiler room operator. 12 We did list the duties of the boiler 13 room operator, but the physical job description, 14 we do not have one specific to a boiler room 15 operator within our system. 16 MR. BAUGHMAN: Okay. Well, I'll 17 leave that for further comment on how to address 18 that under his job description. Because if that's 19 his job description, it needs to be part of his 20 actual description, in my mind. But we'll leave 21 that to further discussion. 22 So when will this PBX remote 23 monitoring system actually be implemented? 24 MR. SPIVEY: This is Ben. 25 It's ready to go. We have trained</p>
<p style="text-align: right;">Page 44</p> <p>1 the PBX operators, but we will not implement until 2 the board gives us approval for the variance. 3 MR. BAUGHMAN: So without the 4 approval for the variance, even though they've 5 been trained and it's in place, it wouldn't be 6 implemented? 7 MR. SPIVEY: That's correct, sir. 8 We'll keep our boiler -- right now we're 24/7 in 9 the boiler room and we will be 24/7 in the boiler 10 room continuing. It's just that we would like to 11 be able to pull that guy out to help whenever we 12 needed help sometimes. 13 MR. BAUGHMAN: Very good. That's 14 all that I've got for now. Both of you, thank you 15 very much for your input. 16 One other thing that I just made a 17 note on, on page 4, we've got a description of the 18 DA, manufactured by Wheeler Tank, but I've gotten 19 no information as far as the design criteria on 20 that DA. I would like that, just for the manual, 21 to know what it is we're working with: Capacity, 22 design pressure, relief valve, so forth. 23 MR. SPIVEY: This is Ben. 24 Yes, sir. We can add that. 25 MR. BAUGHMAN: Very good. Well,</p>	<p style="text-align: right;">Page 45</p> <p>1 thank you very much. 2 MR. SPIVEY: Thank you, sir. 3 CHAIRMAN MORELOCK: Thank you, 4 Mr. Baughman. I, too, noted the lack of 5 description for the boiler attendant requirements 6 and the job description. On page 38, you'll also 7 see that there's no remote attendant duties as 8 well. And I understand the reply you've given 9 back to us concerning that, but whether it's in a 10 standardized job description, the hospital has 11 developed, you could also put that verbiage in 12 this manual in referring to the people who will 13 fill the roles of the boiler attendant and a 14 remote monitor. 15 MR. SPIVEY: This is Ben. 16 We tried to do that and maybe we need 17 to expand on it, but the boiler room attendant 18 monitoring personnel duties and responsibilities 19 are found on page 13. And the remote monitoring 20 personnel duties and responsibilities are found on 21 page 18. 22 CHAIRMAN MORELOCK: Right. 23 MR. SPIVEY: But we can expand 24 those if you feel like they need to be expanded. 25 CHAIRMAN MORELOCK: Just anything</p>

<p style="text-align: right;">Page 46</p> <p>1 that will add clarity to your manual would be 2 very, very helpful.</p> <p>3 MR. SPIVEY: Okay.</p> <p>4 CHAIRMAN MORELOCK: Because you're 5 looking at their duties as well as their training 6 and all of that. And I know you have sections for 7 boiler attendant and remote monitor, so just make 8 sure that those are really clear, as far as the 9 descriptions for that.</p> <p>10 MR. SPIVEY: Yes, sir.</p> <p>11 CHAIRMAN MORELOCK: Looking on 12 page 5, I appreciate the boiler data. And I 13 think -- yeah, I think that's pretty -- like 14 Mr. Baughman said, typically, we'll see some data 15 on a DA as well. I think -- so you do have 16 placards showing emergency procedures in the 17 remote monitoring station?</p> <p>18 MR. SPIVEY: This is Ben. 19 Have we got those up yet, Greg?</p> <p>20 MR. JONES: No, not yet.</p> <p>21 MR. SPIVEY: No, we haven't put 22 those up yet, sir.</p> <p>23 CHAIRMAN MORELOCK: Okay. So 24 you'll need to get those up as part of your 25 approved variance. When they make the field</p>	<p style="text-align: right;">Page 47</p> <p>1 visit, they'll want to see those.</p> <p>2 MR. SPIVEY: Okay.</p> <p>3 CHAIRMAN MORELOCK: I think that's 4 all the questions that I have. What other 5 questions does the board members have for this 6 variance?</p> <p>7 MR. BAUGHMAN: This is Dave 8 Baughman, board member. I'm back again.</p> <p>9 But I was interested to know on the 10 alarm sequence -- I know we've got low-water 11 alarms, but I'm interested to know which one -- 12 the boiler is required to have two -- which alarm, 13 actually, will enunciate back to the station? 14 Will it be the primary or the secondary which is 15 the manual reset?</p> <p>16 MR. SPIVEY: Okay. I am going to 17 let Greg answer that one for us.</p> <p>18 MR. JONES: Would you mind 19 repeating that please?</p> <p>20 MR. BAUGHMAN: Yes, sir. Being the 21 boiler has two low-water cutoffs, a primary and a 22 secondary, the secondary is a manual reset. The 23 primary is not. It's an automatic reset. But 24 which one of those two would enunciate back to the 25 remote monitoring station?</p>
<p style="text-align: right;">Page 48</p> <p>1 MR. JONES: Any alarm that was 2 originally from the boiler that will shut it down, 3 we pick that up on their alarm Comtex. Okay? And 4 it would be the one that requires the reset. And 5 then we add the pressure limits into our sequence. 6 I don't know about --</p> <p>7 MR. BAUGHMAN: Yeah. I'm sorry to 8 step on you there --</p> <p>9 MR. JONES: That alarm right there 10 is the Johnson Controls, and that will shut the 11 boiler down.</p> <p>12 MR. BAUGHMAN: Very good. And yes, 13 so I appreciate that. How many personnel would be 14 manning the PBX at any time?</p> <p>15 MR. JONES: You'll have from two to 16 four.</p> <p>17 MR. BAUGHMAN: Very good. I 18 noticed that the PBX switchboard operators handle 19 all of Washington County's facilities, including 20 all the system-wide hospital facilities, BHMA and 21 Ballad Corporate offices in Tennessee, Kentucky, 22 and Virginia. That's quite a load, isn't it?</p> <p>23 MR. SPIVEY: Yes, sir. Our PBX 24 here does not -- are you getting that -- this is 25 Ben -- are you getting that from the generic job</p>	<p style="text-align: right;">Page 49</p> <p>1 description from PBX?</p> <p>2 MR. BAUGHMAN: On page 38, yes. I 3 did not know that was a generic description. I 4 thought that was a specific description.</p> <p>5 MR. SPIVEY: This is Ben. 6 It's the same deal as the Tech 1. 7 They have a generic job description for all the 8 PBX operators. Here at Holston Valley, our 9 operators only dispatch for Holston Valley at this 10 point in time.</p> <p>11 MR. BAUGHMAN: Okay. My suggestion 12 would be is to make a nongeneric specific job 13 description. When we get into generic job 14 descriptions, as we're reading them, for whatever 15 that position may be, it's somewhat misleading. 16 And so my suggestion would be to make a specific 17 job description. There again, that's just my own 18 particular input and preference.</p> <p>19 MR. SPIVEY: This is Ben. 20 I understand. We could do that. We 21 can include it in the manual, basically, based on 22 the duties that we're asking them to do here at 23 Holston Valley.</p> <p>24 MR. BAUGHMAN: Thank you for that. 25 And Chairman Morelock will let you elaborate on</p>

<p style="text-align: right;">Page 50</p> <p>1 that more if you want to.</p> <p>2 CHAIRMAN MORELOCK: Okay. Mr. Toth</p> <p>3 has raised his hand so I will give him the floor.</p> <p>4 MR. TOTH: Thank you, Mr. Chairman.</p> <p>5 This is Marty Toth with ECS Consulting.</p> <p>6 I have a question just concerning</p> <p>7 precedence moving forward. And I have a question</p> <p>8 concerning the connection between the boiler,</p> <p>9 Johnson Control, and the remote station. And my</p> <p>10 question is are they going directly from the</p> <p>11 Honeywell system -- I assume it's maybe an R and</p> <p>12 7800 -- going into the Johnson Control system?</p> <p>13 And is that Johnson Control system a network</p> <p>14 connection to the remote station?</p> <p>15 MR. JONES: Okay. This is Greg.</p> <p>16 It's not coming directly from the</p> <p>17 Honeywell. The Honeywell is an alarm, and we pick</p> <p>18 it up off the panel. Because we're sending out</p> <p>19 24 volts but we can't fix them. So what happens</p> <p>20 is it energizes a relay and brings it in to the</p> <p>21 Johnson Controls alarm. And it is networked</p> <p>22 between the power plant and the switchboard. It's</p> <p>23 on the Johnson Control network.</p> <p>24 MR. TOTH: Okay. That's what I was</p> <p>25 concerned with. And I'll let the board handle</p>	<p style="text-align: right;">Page 51</p> <p>1 that question from there. Thank you.</p> <p>2 CHAIRMAN MORELOCK: Thank you,</p> <p>3 Mr. Toth.</p> <p>4 What follow-up does the board members</p> <p>5 have?</p> <p>6 MR. BOWERS: This is Harold Bowers,</p> <p>7 board member.</p> <p>8 More of a comment than a question. I</p> <p>9 know we do a lot of these variances and we do a</p> <p>10 lot of hospitals, but I wanted to stress to Ben</p> <p>11 and his staff that, you know, there's a lot more</p> <p>12 that can go on in a boiler room that would not</p> <p>13 cause a sensor to go off and be acknowledged. And</p> <p>14 four hours is the maximum that we look at. Which</p> <p>15 you're going from full-time operators to people</p> <p>16 running around the hospital, and so much can go</p> <p>17 wrong in that boiler room. And the longer you're</p> <p>18 away, the more that can happen.</p> <p>19 An example, we had one hospital that</p> <p>20 had a blow-out around the nozzle. The flame was</p> <p>21 coming out three foot. Well, there was no alarm</p> <p>22 that went off. There was nothing that went off.</p> <p>23 The operator happened to come by at his four-hour</p> <p>24 walk-through and see it. And, of course, he was a</p> <p>25 security guard and didn't know exactly what to do.</p>
<p style="text-align: right;">Page 52</p> <p>1 He took the fire extinguisher out instead of</p> <p>2 shutting the boiler down, but then he realized.</p> <p>3 So that goes to another comment I</p> <p>4 want to make. I think the boiler operator</p> <p>5 training is number one. Should be trained boiler</p> <p>6 operators. Now, if they want to be a trained</p> <p>7 boiler operator, slash, security guard, trained</p> <p>8 boiler operator, slash, maintenance mechanic,</p> <p>9 fine. The boiler operator responsibility should</p> <p>10 be number one. Then after that, as far as what he</p> <p>11 does in the hospital is secondary. But these</p> <p>12 operators, the people who run these boilers,</p> <p>13 there's so much potential. We have been really</p> <p>14 lucky in Tennessee for a long time.</p> <p>15 But if you'll look at some of these</p> <p>16 disasters that's happened, you need to really stay</p> <p>17 on top of those boilers, and you're really</p> <p>18 definitely going from full-time operators to the</p> <p>19 variance. If we do approve the variance, you're</p> <p>20 definitely increasing your risk of something going</p> <p>21 on in that boiler room that the sensor is not</p> <p>22 going to always catch. That's the only comment</p> <p>23 that I have to make.</p> <p>24 MR. SPIVEY: This is Ben.</p> <p>25 I appreciate your comments, sir, and</p>	<p style="text-align: right;">Page 53</p> <p>1 I tend to agree with that a hundred percent.</p> <p>2 That's one reason that we're still going to keep</p> <p>3 our 24/7 boiler room attendant staffed here</p> <p>4 on-site. And again, limited use, coming out of</p> <p>5 that room just to help our in-house tech guys if</p> <p>6 they get in trouble. I hope we never get to -- I</p> <p>7 know some facilities have changed where they just</p> <p>8 have a tech, and he's responsible for the boiler</p> <p>9 room and, also, taking care of the hospital. And</p> <p>10 I never want to go there. But I do appreciate</p> <p>11 your comments.</p> <p>12 CHAIRMAN MORELOCK: Other comments</p> <p>13 or questions?</p> <p>14 MR. BAUGHMAN: This is Dave</p> <p>15 Baughman, board member.</p> <p>16 You had some good questions thrown at</p> <p>17 you, Mr. Spivey, and -- the both of you. I</p> <p>18 appreciate that. So in going back to Mr. Toth's</p> <p>19 comments earlier, the alarms, in particular, the</p> <p>20 alarm that goes back to the PBX or for the e-stop,</p> <p>21 will this e-stop be generated by the Medisys</p> <p>22 through the relay? In other words, does the</p> <p>23 Medisys then have a --</p> <p>24 THE REPORTER: You cut out.</p> <p>25 MR. BAUGHMAN: I'm sorry.</p>

<p style="text-align: right;">Page 54</p> <p>1 THE REPORTER: You cut out on the 2 last few words, "does the Medisys then have a" -- 3 MR. BAUGHMAN: Yeah. I just saw 4 where it popped up "internet connection unstable." 5 The question being does the e-stop or 6 the alarm that's generated by the Medisys back to 7 the PBX remote station, is that generated back 8 through the internet or ethernet or intranet onto 9 the computer, or is it -- is that e-stop a 10 different mechanism, i.e., hardwired, or what's 11 the mechanism for it? 12 MR. JONES: Sir, it's hardwired 13 between the network controller, the Johnson 14 Control network controller and the power plant. 15 It receives the alarm and it's hardwired there on 16 the communication trunk over to the hospital. 17 Okay? And it's also -- that controller and the 18 PBX is on the same trunk. That's where it 19 receives that alarm, that controller. Then the 20 e-stop is up at the PBX, and they'll initiate it 21 manually. It has to be reset. Then it will send 22 a signal right back out on the same hardwired 23 trunk. 24 THE REPORTER: Is that Mr. Jones? 25 CHAIRMAN MORELOCK: Yes.</p>	<p style="text-align: right;">Page 55</p> <p>1 THE REPORTER: It's hard to hear 2 Mr. Jones, also. 3 MR. BAUGHMAN: Okay. Good. And 4 just so for clarification, that e-stop is actually 5 hardwired from the boiler room back to the PBX. 6 MR. JONES: Yes. The emergency 7 stop is hardwired at the controller at the PBX. 8 It receives it as a binary input, and then it goes 9 on that hardwire trunk and sends that signal to 10 the power plant, to the boiler, and shuts it off. 11 It will turn the -- 12 MR. BAUGHMAN: Via the -- 13 MR. JONES: It will power the 14 boiler down. 15 MR. BAUGHMAN: Okay. But that's 16 via the relay; is that correct? 17 MR. JONES: That relay is in series 18 with the power to the controller room downstairs. 19 When it energizes that relay, it shuts the boiler 20 off. 21 MR. BAUGHMAN: Very good. So in 22 this variance, part of the procedure is going to 23 be every four hours or whatever the stipulation 24 is, you're going to be checking to make sure that 25 that's all functional so that if we have a failure</p>
<p style="text-align: right;">Page 56</p> <p>1 with the relay, which man made it, and at some 2 point in time -- it's not perfect -- it will fail, 3 but there's a mechanism so that we're testing that 4 relay and total system as the manual specifies. 5 MR. SPIVEY: Yes, sir -- this is 6 Ben -- yes, sir, we do. 7 And what we plan on doing was testing 8 this system every shift. When the boiler tech 9 changes shift, he would work with the PBX, and 10 they would perform a test of the system. 11 MR. BAUGHMAN: That's very good. 12 Thank you for that input. 13 CHAIRMAN MORELOCK: Any other 14 questions or comments? 15 MR. O'GUIN: Chairman, Chris 16 O'Guin, Assistant Chief. I have a question. 17 CHAIRMAN MORELOCK: Okay. 18 MR. O'GUIN: Mr. Spivey, I'm 19 looking at the emergency procedure on page 18. 20 What is the next step if the boiler monitor can't 21 get anyone on the two phone lines that you have 22 listed? What's the next step? I don't see a next 23 step. 24 MR. SPIVEY: Greg is going to 25 answer that for us.</p>	<p style="text-align: right;">Page 57</p> <p>1 MR. JONES: Okay. When the Johnson 2 controller sends that alarm, it automatically -- 3 the power plant gets its own alarm -- 4 THE REPORTER: I'm so sorry, 5 Mr. Jones. I cannot understand what you're 6 saying. 7 MR. JONES: Can you hear me? 8 THE REPORTER: If you can maybe 9 just slow down and speak a little louder, please. 10 MR. JONES: Okay. 11 THE REPORTER: Thank you. 12 MR. JONES: All right. When we get 13 an alarm, the power plant is set up with an alarm 14 number of 28. It's nothing else the hospital has. 15 Okay? It automatically puts it out on Medisys and 16 flags it. You'll get the audible alarm on the 17 screen and you'll have your red alarm box. And at 18 that time, it pages the attendant's beeper, which 19 he carries with him his whole shift. It will 20 print out Boiler Number 5 is shut down, and 21 it'll -- there's a telephone number on there to 22 tell you it's the emergency shut-down system. And 23 he gets that at the same time he gets the -- if 24 he's sitting up by the screen. 25 MR. SPIVEY: This is Ben.</p>

<p style="text-align: right;">Page 58</p> <p>1 I think to add to that, what we're</p> <p>2 saying is at the PBX, they get the alarm</p> <p>3 simultaneously, and the PBX does their phone</p> <p>4 calls, basically. And, also, the boiler room</p> <p>5 attendant is getting the beep or the pager at the</p> <p>6 same time. That was sort of our backup or our</p> <p>7 redundancy for that.</p> <p>8 MR. JONES: And if we switch to</p> <p>9 cell phones in the future, we can text the cell</p> <p>10 phone, too. It has the capability of doing either</p> <p>11 one of them. But right now, we're on the paging</p> <p>12 system with that. We have a pager.</p> <p>13 MR. O'GUIN: Okay. Thank you.</p> <p>14 CHAIRMAN MORELOCK: Any other</p> <p>15 questions or comments?</p> <p>16 (No verbal response.)</p> <p>17 CHAIRMAN MORELOCK: Hearing none,</p> <p>18 do I have a motion for tentative approval of this</p> <p>19 variance based upon revisions to the manual to</p> <p>20 address board member comments and comments during</p> <p>21 the discussion today, as well as a successful site</p> <p>22 visit by the Boiler Unit?</p> <p>23 MR. BOWERS: This is Harold Bowers,</p> <p>24 board member.</p> <p>25 I'll go ahead and do that motion.</p>	<p style="text-align: right;">Page 59</p> <p>1 CHAIRMAN MORELOCK: Okay. I've got</p> <p>2 a motion from Mr. Bowers. Do I have a second?</p> <p>3 MR. HENRY: Second.</p> <p>4 CHAIRMAN MORELOCK: I've got a</p> <p>5 second from Mr. Henry. Any more questions,</p> <p>6 comments, or further discussion?</p> <p>7 (No verbal response.)</p> <p>8 CHAIRMAN MORELOCK: Okay. Hearing</p> <p>9 none, I am going to have a roll call vote.</p> <p>10 Mr. Baughman?</p> <p>11 MR. BAUGHMAN: Aye.</p> <p>12 CHAIRMAN MORELOCK: Mr. Bowers?</p> <p>13 MR. BOWERS: Aye.</p> <p>14 CHAIRMAN MORELOCK: Mr. Henry?</p> <p>15 MR. HENRY: Aye.</p> <p>16 CHAIRMAN MORELOCK: Thank you,</p> <p>17 gentlemen. You have a tentatively approved</p> <p>18 variance based upon a site visit from the Boiler</p> <p>19 Unit. Make the necessary corrections to your</p> <p>20 manual and get that to the Boiler Unit as well.</p> <p>21 And thank you for your time and your presenting</p> <p>22 this item.</p> <p>23 MR. SPIVEY: Thank you, board</p> <p>24 members.</p> <p>25 CHAIRMAN MORELOCK: I'm showing</p>
<p style="text-align: right;">Page 60</p> <p>1 almost 10:15, and I would like to let everybody</p> <p>2 have a ten-minute break before we take our last</p> <p>3 business item. So be back by 10:25.</p> <p>4 MR. JOHNSON: This is Chris from</p> <p>5 UPM. Could I ask a quick question?</p> <p>6 CHAIRMAN MORELOCK: Yes.</p> <p>7 MR. JOHNSON: Can we cut off from</p> <p>8 the meeting, or do we need to stay until the end</p> <p>9 of it, or...</p> <p>10 CHAIRMAN MORELOCK: It's an open</p> <p>11 meeting. You're welcome to stay if you'd like or</p> <p>12 you can -- if you need to leave, you can leave as</p> <p>13 well.</p> <p>14 MR. JOHNSON: Okay. I was just</p> <p>15 wanting to make sure. Thank you.</p> <p>16 CHAIRMAN MORELOCK: You're welcome.</p> <p>17 These meetings are always open meetings.</p> <p>18 MR. JOHNSON: Okay. Thank you very</p> <p>19 much.</p> <p>20 CHAIRMAN MORELOCK: You're very</p> <p>21 welcome.</p> <p>22 (Recess observed.)</p> <p>23 CHAIRMAN MORELOCK: I'm going to</p> <p>24 move on to our next business item, which is 20-17,</p> <p>25 LG Electronics in Clarksville, Tennessee. It has</p>	<p style="text-align: right;">Page 61</p> <p>1 a request that 50 vessels be classified as</p> <p>2 Tennessee Specials. So before they begin this</p> <p>3 presentation, does any board member have a</p> <p>4 conflict of interest on this item?</p> <p>5 (No verbal response.)</p> <p>6 CHAIRMAN MORELOCK: All right.</p> <p>7 Hearing none, please introduce yourself and</p> <p>8 present your item, please.</p> <p>9 MR. BUTLER: Yes. This is Keith</p> <p>10 Butler with Industrial Boiler. I'm not sure that</p> <p>11 Michael and them can talk to us at the moment.</p> <p>12 The vessels that they have there were</p> <p>13 fabricated in Korea by a code shop. They did</p> <p>14 receive an ASME stamp with a new designator. They</p> <p>15 had sent the entire packaging complete with the</p> <p>16 data reports, which I had forwarded on to the</p> <p>17 board members. It's quite a hefty book. I have</p> <p>18 gone through and checked the calculations, looked</p> <p>19 them over, looked at the materials. I have been</p> <p>20 to the plant and also verified the stampings on</p> <p>21 the vessels and the location of them.</p> <p>22 The main problem with these tanks is</p> <p>23 none of them have a national board number or</p> <p>24 national board registration, which is in violation</p> <p>25 of board laws. But they have asked that these</p>

<p style="text-align: right;">Page 62</p> <p>1 vessels be given Tennessee Special recognition so 2 that they can operate them on their presses. I 3 could not find anything wrong with the 4 calculations or anything else. It seems to be 5 more of a clerical error on the fabricator's part. 6 I've discussed with the plant, the plant manager 7 and the plant engineer, as to what a Tennessee 8 Special means, as far as they are not allowed to 9 repair these vessels without the board's 10 permission, and that if you-all don't approve 11 them, then these vessels would have to be 12 replaced, which as you understand, would be a very 13 expensive and costly proposal, as far as their 14 operations. So we're asking that you approve 15 these vessels for Tennessee Special status.</p> <p>16 CHAIRMAN MORELOCK: Thank you, 17 Mr. Butler.</p> <p>18 So to clarify what a Tennessee 19 Special entails is it is a vessel that either 20 doesn't have an ASME mark or -- and/or not 21 registered with the National Board. National 22 Board publication 264 clearly states that that 23 registration has to happen within 30 days of 24 completing the manufacture of that vessel, which 25 is really unfortunate that they did not do that.</p>	<p style="text-align: right;">Page 63</p> <p>1 However, if the Board chooses to make these 2 vessels Tennessee Specials, what that will mean to 3 LG is that yes, they can operate the vessels. The 4 nameplate will be the -- will show a State of 5 Tennessee outline with the "Special" stamped under 6 it to show that it is a Tennessee Special.</p> <p>7 The only thing that I would clarify 8 is that all repairs would have to be approved by 9 the Boiler Unit itself. Only the alterations 10 would have to come to the Tennessee Board for 11 board approval.</p> <p>12 But still, that's a little bit more 13 work than just your typical R-stamp repair. So 14 the only thing I would -- since it is the 15 Christmas season, the only thing I can share with 16 you that might be helpful is -- and I'll let 17 Mr. Bailey back me up on this -- but if you read 18 Tennessee law 68-122, and you come to 68-122-105, 19 which is exemptions for boilers and pressure 20 vessels, and you go down and read Item 5, Item 5 21 states, "Unfired pressure vessels having a volume 22 of five cubic feet or less are exempt.</p> <p>23 So if you take those 50 vessels and 24 you calculate the volumes of those vessels -- and 25 granted, if you look through that gigantic book,</p>
<p style="text-align: right;">Page 64</p> <p>1 most of the dimensions are metric -- so five cubic 2 feet is the equivalent of 0.141584 cubic meters. 3 And so the good news is I did calculate the 4 volumes of these 50 vessels, and 23 of these 5 vessels are exempt. So that will take your 6 Tennessee Special list and cut it almost in half. 7 You would end up with 27 vessels that would need 8 to be Tennessee Specials instead of 50.</p> <p>9 So, Mr. Butler, the only thing I 10 could not find is I could not find one of the 11 vessels in the package. And I can show you where 12 that is, but it's GS-1712-11, which the nameplate 13 is A-1709. There's not a U-1 or a nameplate in 14 the package for that particular vessel. So I 15 don't know -- I don't know where that vessel is. 16 The U-1s have multiple vessels on each U-1, so as 17 far as being covered by the U-1, it's there, but I 18 don't see a nameplate for one in there. So that 19 takes you to 49 vessels. And so, you know, 20 these -- I guess, just for the sake -- my sake and 21 the Board's sake -- is what will these vessels be 22 used for?</p> <p>23 MR. BUTLER: The use of these 24 vessels is their own presses which stamp out the 25 parts for the appliances that they're building,</p>	<p style="text-align: right;">Page 65</p> <p>1 and on these presses, the air, basically, shifts 2 from the top part of the press to the low part of 3 the press.</p> <p>4 CHAIRMAN MORELOCK: Okay.</p> <p>5 MR. BUTLER: They're all air 6 vessels, as far as that goes. If you're familiar 7 with, like, Nissan or some of those plants, they 8 use the same type presses. So to operate the 9 presses, it's just air tanks, air surge tanks, 10 that shift air from the top portion to the lower 11 portion of the press.</p> <p>12 CHAIRMAN MORELOCK: Okay.</p> <p>13 MR. BOWERS: This is Harold Bowers, 14 board member.</p> <p>15 Is there bladders inside those tanks?</p> <p>16 MR. BUTLER: No, sir, there's not.</p> <p>17 MR. BAUGHMAN: This is Dave 18 Baughman, board member.</p> <p>19 I noticed no relief protection 20 information is on any of these data reports. But 21 there is a note at the very bottom of each U-1a 22 report that the over-pressure protection will be 23 provided by the user. So that's something that -- 24 as we go through this process, we need to have 25 that, at least listed, and make sure that since</p>

<p style="text-align: right;">Page 66</p> <p>1 it's being provided by the user, that it's -- and 2 it's not in the data report, that it is the proper 3 over-pressure protection for these units.</p> <p>4 CHAIRMAN MORELOCK: Mr. Baughman, 5 unlike a boiler, unfired pressure vessels, you'll 6 typically see in the remarks section on the U-1 7 that it's the owner's responsibility to provide 8 over-pressure protection per UG-125 to UG-140. So 9 that's not uncommon to see that.</p> <p>10 I do have -- I do want to show you an 11 example, Mr. Butler. If you will go to Section 4 12 of this book, and if you'll look at the nameplate 13 for A-17-02, and let me know when everybody is 14 there, when they've found that page.</p> <p>15 MR. BUTLER: What was that page 16 number again?</p> <p>17 CHAIRMAN MORELOCK: It's in 18 Section 4. And it will be the first nameplate 19 that you come to, which is A-17-02.</p> <p>20 MR. BUTLER: All right.</p> <p>21 CHAIRMAN MORELOCK: Are you there?</p> <p>22 MR. BUTLER: Yes, sir.</p> <p>23 CHAIRMAN MORELOCK: Okay. If 24 you'll put your finger in that and then go back to 25 the associated U-1, which is the next page after</p>	<p style="text-align: right;">Page 67</p> <p>1 the Section 4, if you'll look on the nameplate, 2 the nameplate, it says hydrotest pressure at 3 0.891-megapascals.</p> <p>4 But if you look adjacent to that 5 page, all of these vessels were pneumatically 6 tested. They were not hydrotested. And the 891 7 is incorrect because it doesn't match the 8 pneumatic pressure on the U-1. Because 891 would 9 be a hydro -- let's see. I'm sorry. They're 10 pneumatically testing it at 892, but if you look 11 back on the previous pages from the nameplate and 12 look at the pressure test report, it clearly says 13 it was pneumatically tested, not hydro'd, so that 14 nameplate is wrong. And there's several of those 15 nameplates that are wrong, and they need to be 16 corrected. And the stamping needs to be corrected 17 some way, somehow.</p> <p>18 I don't know if the company can fix 19 their errors on the nameplates and send you new 20 nameplates and let them be swapped out with the 21 authorized inspector or what. But there are 22 several instances in this book where the U-1 and 23 the nameplate does not match. So -- and that's a 24 boiler unit issue more than a board, because we're 25 not asking anything to be changed. We're just --</p>
<p style="text-align: right;">Page 68</p> <p>1 they would find it, if they went and did their own 2 inspection, once they looked at the documentation 3 and the nameplate, they would see that it's not 4 correct.</p> <p>5 MR. BUTLER: Yes, sir. I see that. 6 I guess I didn't compare that because that wasn't 7 on the official ASME nameplate. So that's kind of 8 a -- the nameplate specifying the actual vessel 9 itself, which they should be able to provide new 10 nameplates for that since it's not a code 11 nameplate. That portion of it is not.</p> <p>12 CHAIRMAN MORELOCK: Yeah, that's -- 13 you're correct on that. That's correct. They 14 can. We just need to make sure that the data is 15 correct. But you're right about that.</p> <p>16 So I guess, Keith, since you're the 17 engineering arm of this request, are you going to 18 work with LG to get the nameplates corrected, and 19 are you going to go back and verify which vessels 20 are exempt and which vessels need to be Tennessee 21 Specials?</p> <p>22 MR. BUTLER: Yes, sir, I can do 23 that. A lot of these vessels, like I said, are on 24 top of presses which were operating while I was 25 there. They will be shut down the week between</p>	<p style="text-align: right;">Page 69</p> <p>1 Christmas and New Years, so I can actually go back 2 up there and visit those vessels and make sure 3 everything is correct on them. And, also, 4 which -- Michael, the engineer, can hear us, so -- 5 he just cannot respond --</p> <p>6 CHAIRMAN MORELOCK: Okay.</p> <p>7 MR. BUTLER: We will work with the 8 Korean company to get replacement nameplates or at 9 least pull those nameplates off and restamp them 10 with the proper pressure.</p> <p>11 CHAIRMAN MORELOCK: Okay. That 12 would be very helpful.</p> <p>13 So I'm not going to speak for the 14 Boiler Unit, but I think once those corrections 15 are made, and, like I said, back-check my math, 16 but it should be -- you should have only 27 17 vessels that would need to be -- 26 or 27 vessels 18 that would need to be Tennessee Specials, not 50.</p> <p>19 MR. BUTLER: Okay.</p> <p>20 CHAIRMAN MORELOCK: And, like I 21 said, if you go to -- oh, let's see. Let me see 22 if I can tell you what section it's in.</p> <p>23 MR. BUTLER: I knew some of them 24 were kind of small, as far as the volume of them.</p> <p>25 CHAIRMAN MORELOCK: Yes. I'm</p>

<p style="text-align: right;">Page 70</p> <p>1 trying to find which one has got the missing 2 nameplate in it.</p> <p>3 MR. BUTLER: I think you said it 4 was Number 11.</p> <p>5 CHAIRMAN MORELOCK: Well, it's 6 GS-17-12-11. I'm trying to figure out what 7 section of the book that's in.</p> <p>8 MR. BUTLER: That should be in 9 Section 8.</p> <p>10 CHAIRMAN MORELOCK: Maybe so. 11 Yeah. Maybe so. So I can't find the A-1709 12 nameplate. That's what I'm missing. I've got 7, 13 8, and 10. So yeah, you're right; it's in 14 Section 8, and it's the last two pages in the 15 book. You see the nameplate for 7 and 8, and then 16 the back page is 10, and there is no nameplate for 17 9.</p> <p>18 MR. BUTLER: Okay.</p> <p>19 CHAIRMAN MORELOCK: And that's all 20 the questions and comments I have. 21 What questions and comments do the 22 board members, have?</p> <p>23 MR. BOWERS: Yeah. This is Harold 24 Bowers, board member. 25 When it comes to Tennessee Specials,</p>	<p style="text-align: right;">Page 71</p> <p>1 I have to admit I'm kind of ignorant of all the 2 rules. And I know you, Brian, at Eastman, 3 probably run into situations and I know you 4 explained that on the Tennessee Specials. Now, 5 who would actually register these units? Would it 6 be the state inspector? Sam would go out there 7 and check the safety valves to make sure they meet 8 the standards of the vessel? Or how does that -- 9 this whole process come about? Could you explain 10 that?</p> <p>11 CHAIRMAN MORELOCK: I can. Sam and 12 Chris would probably be better versed. But it's 13 either going to have to be their insurance 14 inspector or a state inspector or somebody that 15 they've written a contract to do their inspection 16 work for them to get that work done and then 17 submit it to the State for a certificate of 18 inspection.</p> <p>19 And, Sam, correct me if I've left 20 anything out.</p> <p>21 MR. CHAPMAN: It is a state 22 inspector that will be doing that, performing that 23 inspection.</p> <p>24 CHAIRMAN MORELOCK: So like I said, 25 the good news is, it's going to be about half of</p>
<p style="text-align: right;">Page 72</p> <p>1 what you thought you were going to have to 2 inspect, so that's good.</p> <p>3 MR. BOWERS: This is Harold Bowers 4 again.</p> <p>5 So you were also saying any repairs 6 on these vessels, it's different than doing a just 7 regular Section 8 vessel, correct? You'd have to 8 go back before the Board to do any repairs; is 9 that correct?</p> <p>10 CHAIRMAN MORELOCK: That's not 11 correct. Any repairs, you would have to receive 12 permission from the State of Tennessee, from the 13 Chief Inspector, for a repair. An alteration 14 would have to be brought to the Tennessee Board 15 for review and approval.</p> <p>16 MR. BOWERS: This is Harold Bowers 17 again.</p> <p>18 So any repairs would have to go 19 through the chief.</p> <p>20 CHAIRMAN MORELOCK: Yes.</p> <p>21 MR. BOWERS: Yes. And do they 22 tag -- once we have -- these have National Board 23 plates on those but not a National Board, is the 24 Tennessee Special number, is that stamped on that 25 data plate, or how is that number associated with</p>	<p style="text-align: right;">Page 73</p> <p>1 that vessel?</p> <p>2 CHAIRMAN MORELOCK: Yeah. You'll 3 have a Tennessee Special stamp applied, and then 4 the Boiler Unit will number it. And they'll keep 5 a record of their -- they've got a list of their 6 Tennessee Special vessels.</p> <p>7 MR. BOWERS: Well, this is 8 definitely a learning experience for me, because 9 I've never dealt with, really, any Tennessee 10 Specials.</p> <p>11 CHAIRMAN MORELOCK: Well, it's not 12 frequent. We have instances where we've had 13 vessels that have been brought into the state of 14 Tennessee, and they were built to code that's not 15 ASME, and so those are brought to the Board, as 16 well, for review and approval as a Tennessee 17 Special. And the inquirer has to show that they 18 have done calculations to assure the State of 19 Tennessee that the vessel is safe, that, 20 basically, you take that foreign vessel, run an 21 ASME code calc on it, and if it passes, then you 22 can satisfy yourself that it's not stamped for 23 ASME, but it satisfies ASME, and therefore, it's 24 safe to operate in the state. But it will still 25 be a Tennessee Special.</p>

<p style="text-align: right;">Page 74</p> <p>1 MR. BOWERS: This is Harold Bowers. 2 Also, too, as the -- I know all of 3 the measurements are in metric. The safety 4 valves, would they all be in metric, too? 5 Matching those numbers up to make sure everything 6 is, you know -- I guess there's a way that people 7 smarter than me can figure it out, going from one 8 to another, but just that question there. 9 CHAIRMAN MORELOCK: Yes. And I 10 didn't do any relief valves. But like I said, 11 5 cubit feet is 0.41584 cubit meters. So when you 12 look at these vessels, you can see what's exempt 13 and what's not. So, like, if you just look at the 14 vessels in Section 1, they're basically made out 15 of 8-inch pipe. And the shell length is 13 and 16 3/4, so you do a simple volume calculation, and it 17 comes out to be .4 cubic feet, which is far less 18 than 5 cubic feet. And it would be .0113 cubic 19 meters if you let Excel -- Excel will do 20 conversions for you automatically if you'll set up 21 the cell to do that. 22 But I want Mr. Butler to verify, 23 because my numbers were done in haste. But, like 24 I said, it looks to me like about 23 of those 25 vessels would be exempt from having to be a</p>	<p style="text-align: right;">Page 75</p> <p>1 Tennessee Special. 2 MR. BUTLER: I agree with that. I 3 mean, I haven't done every one of them, but the 4 8-inch pipes and -- it seems like some of them may 5 have been 6. 6 CHAIRMAN MORELOCK: Yeah. You've 7 got a mix -- 8 MR. BUTLER: There are eights and 9 tens. There were several of them there that were 10 small. 11 CHAIRMAN MORELOCK: Yeah. You've 12 got a range of 8 to 18. 13 MR. BUTLER: All right. 14 CHAIRMAN MORELOCK: You've got some 15 that are 18-inch pipe, 10-inch pipe, 16-inch pipe, 16 and 8-inch pipe. And then depending on the shell 17 length, they vary a little bit. 18 So I guess my question is -- 19 MR. TOTH: Mr. Chairman? 20 CHAIRMAN MORELOCK: -- how do you 21 want to proceed Mr. Butler? 22 MR. BUTLER: Well, I guess, I need 23 to go back and the descriptive nameplates, I need 24 to get that taken care of so that they match the 25 actual --</p>
<p style="text-align: right;">Page 76</p> <p>1 CHAIRMAN MORELOCK: Yeah, the -- 2 and the test reports as well. 3 MR. BUTLER: I would check with the 4 plant. I know sometimes plants are, like, well, 5 I've got a code vessel, and, you know, I want it 6 to be correct. As it's exempted under the cubic 7 foot volume, I would like to just drop those out 8 and not worry about them, and just submit those 9 for Tennessee Special status that are -- or have 10 to be. That way I don't have to keep -- the plant 11 won't have to keep up with them as close. I know 12 there are safety relief valves on the system 13 themselves that have been set for the proper 14 pressure ratings. Those have been verified on the 15 systems, so, I mean, they're actually looking at 16 going through and recertifying all the relief 17 valves on those. 18 I didn't know if this was going to be 19 a stickler, that we have to come back in three 20 months to revisit this or not, since they're being 21 designated as Tennessee Specials, if you're going 22 to have to have us come back in three months. 23 CHAIRMAN MORELOCK: Well, we 24 don't -- 25 MR. BUTLER: Or it would be nice if</p>	<p style="text-align: right;">Page 77</p> <p>1 we can get them designated that today so we can 2 get this out of the way. 3 CHAIRMAN MORELOCK: Well, you're 4 going to have to designate them. That's a 5 conflict of interest for me to designate them. 6 MR. BOWERS: This is Harold Bowers, 7 boiler inspector. 8 Wouldn't it be that it would fall 9 back to, actually, the chief looking at each 10 individual vessel to see if they passed muster 11 without us wholesaling and saying, hey, these are 12 all Tennessee Specials? I'm not sure, exactly, 13 how that works. 14 CHAIRMAN MORELOCK: Well, it's a 15 good question, Mr. Bowers. And before I forget, 16 Mr. Toth had a comment, and I need to let him make 17 that comment. 18 MR. TOTH: Thank you, Mr. Chairman. 19 Just something that Mr. Bowers had alluded to and 20 just to help out with some education, if you go 21 look under board cases and interpretations, you 22 will find a couple that may help shine a little 23 bit of light. One would be the question about 24 authorization for repairs or repair for 25 alterations. That's going to come -- that</p>

<p style="text-align: right;">Page 78</p> <p>1 verbiage is going to come directly from BI 04-22 2 that pretty much stipulates what Mr. Chairman had 3 mentioned that repairs are authorized by the 4 Boiler Unit, i.e., the Chief Inspector. 5 Alterations are submitted to the board, such as 6 you would a variance or this 45 days ahead of 7 time.</p> <p>8 The other one that you may want to 9 take a look at is also BC 05-22. And that one 10 covered more of a lost data plate, where if you 11 lost -- illegible or something of that nature -- 12 but it did kind of go into the processes regarding 13 a Tennessee Special. And the reason why we -- the 14 Board went that route back in 2005 was because the 15 definition that you're going to find in .03 of the 16 code, the rules and regulations and the definition 17 of the Tennessee Special all pointed -- and that's 18 going to be paragraph 6 of .03 -- is going to 19 really discuss items that are to come into the 20 state prior to construction. And so that's where 21 the Board did a board case instead of a board 22 interpretation back in 2005. And if you read over 23 those two, I think you'll kind of see a little bit 24 of an understanding of where the history of that 25 came from.</p>	<p style="text-align: right;">Page 79</p> <p>1 CHAIRMAN MORELOCK: Thank you, 2 Mr. Toth.</p> <p>3 MR. BAUGHMAN: Mr. Morelock, this 4 is Dave Baughman, board member.</p> <p>5 I'm kind of in the same position with 6 Harold on my newness and lack of particular 7 knowledge within the Tennessee Specials on unfired 8 vessels. We've been involved with the Board but 9 not so much on the unfired vessels. The numbers, 10 in particular, the design criteria, are those 11 numbers actually stamped in these vessels along 12 with the data plate, or is it just on the data 13 plate itself?</p> <p>14 CHAIRMAN MORELOCK: It's on the 15 nameplate like you see in the book here. When you 16 see the nameplate report, that's an actual photo 17 of what's been placed on the vessel. And ASME 18 allows that to be either stamped into the vessel 19 itself, or it can be put on a nameplate that can 20 either be welded or screwed or even adhesively 21 attached to the vessel per Section --</p> <p>22 MR. BAUGHMAN: Okay. And -- very 23 good. I was under the interpretation that the 24 nameplate was a facsimile or a representation of 25 what was actually stamped in the vessel itself.</p>
<p style="text-align: right;">Page 80</p> <p>1 So that is not actually correct.</p> <p>2 CHAIRMAN MORELOCK: Not for unfired 3 pressure vessel, no.</p> <p>4 MR. BAUGHMAN: Very good. And I 5 know Mr. Bowers alluded to the conversion of 6 metric to our system here in the U.S., 7 predominantly. But making those calculations, in 8 particular, for the relief valves. Which 9 Mr. Butler said the relief valves have already 10 been -- are on the vessels.</p> <p>11 My question being are those relief 12 valves in metric settings or are they in standard 13 psi settings?</p> <p>14 MR. BUTLER: I would have to check 15 with the plant. I know they're there. I could 16 not get up on top of the press close enough to 17 read those labels myself. I would have to 18 verify -- I mean, as long as they're set for the 19 right pressure, it shouldn't matter if they're in 20 metric or American standards. Most of these are 21 designed for right around 100 psi. But, I mean, 22 as far as the relief valve, its design, whether 23 it's metric or American is not really important.</p> <p>24 MR. BAUGHMAN: Well, I agree. It's 25 just for the ease of the inspector. As Harold</p>	<p style="text-align: right;">Page 81</p> <p>1 goes in, I can see him scratching his head doing 2 the math or whether he already did the Excel 3 conversion. What I'm saying is, is that we've got 4 various inspectors that will be at LG over the 5 years coming forward, and so I just wanted to make 6 sure that as they were looking at something, I'm 7 anticipating that everything is correct. But for 8 the ease of the inspectors is why I was asking 9 that question.</p> <p>10 So on this Tennessee Special number, 11 where will it get attached or how does it get 12 attached to the unit? It's -- I mean, we've seen 13 numbers attached to units in different ways over 14 the years, anything from writing it on with a 15 permanent marker to attaching it with a label to 16 actually stamping a vessel. What's the protocol 17 for attaching a Tennessee Special number on the 18 vessel?</p> <p>19 CHAIRMAN MORELOCK: I will defer to 20 the Boiler Unit since they're the people who 21 actually create those. So Sam or Chris, I'll let 22 you answer that.</p> <p>23 MR. CHAPMAN: Well, right now, at 24 the moment -- this is Sam Chapman the chief -- 25 right at the moment, we do not have any V or SP</p>

<p style="text-align: right;">Page 82</p> <p>1 stickers -- I mean tags. So we have to come up 2 with some of them again, because we're all out of 3 them. Because we normally have SP and then the 4 Tennessee, too. But we don't have any at the 5 moment.</p> <p>6 CHAIRMAN MORELOCK: But when you do 7 have those, those would be stamped with a unique 8 Tennessee Special number and it would be attached 9 to the vessel, correct?</p> <p>10 MR. CHAPMAN: Yes, it would.</p> <p>11 CHAIRMAN MORELOCK: Okay.</p> <p>12 MR. BOWERS: This is Harold Bowers, 13 boiler inspector, board member.</p> <p>14 The question I have is, okay, as time 15 goes on, like, I believe, Dave had talked about, 16 is the conversion. So we start out on the safety 17 valves, originally, maybe, in metric. Then five 18 years down the road, we're changing them out. 19 Then we get them in the United States, and now 20 they're in psi and capacity of CFM. And so then 21 we say, well, for the inspectors, someone has to 22 do that conversion. The tanks says one thing -- 23 the MAWP of a tank says one thing. It's in 24 metric. Then the other one is -- now the new 25 replacement safety valve is in psi and CFM.</p>	<p style="text-align: right;">Page 83</p> <p>1 That's one factor I'm concerned about down the 2 road unless the plant has a conversion. Or, you 3 know, we could figure it out ourselves, but it 4 would take a little work.</p> <p>5 Another issue I look at is on these 6 Tennessee Specials. Right now -- 20 years from 7 now, we go work on a boiler or go work on a tank, 8 and we can't find the data sheet. We contact the 9 National Board. We've got that number. We find 10 out if we can get the data sheet for that vessel. 11 And as David has found out in the past, sometimes 12 we can't always find the data sheet. But how 13 would these data sheets be archived? Would they 14 be added -- once we give a Tennessee Special, is 15 this going to be archived forever in the Tennessee 16 boiler division where 10 years, 20 years from now 17 we have to do -- they have to do a repair on these 18 vessels, the contractor is, of course, going to 19 need the data sheet to do the repair. Can't go to 20 the National Board because it's not there. So is 21 this going to be archived with the State forever?</p> <p>22 MR. CHAPMAN: This is Sam Chapman. 23 Yes. With those, they are archived 24 and they're a record that's kept permanent. We do 25 not get rid of them. So if somebody comes along</p>
<p style="text-align: right;">Page 84</p> <p>1 10, 20 years down the line and asks, "Hey, do 2 you-all have the records on these?" we can pull 3 them out and give them to them.</p> <p>4 Right now we're converting them all 5 over into the computer and maintaining them on the 6 computer instead of having to pull paperwork. So 7 I hope that answers your question.</p> <p>8 MR. BOWERS: Perfect.</p> <p>9 CHAIRMAN MORELOCK: And, Harold, to 10 add to a little bit of that, you know, there's 11 situations in the past where the Board has had 12 companies come to the Board saying we have 13 acquired a site, we've inspected the vessels, but 14 we don't have inspection records on them from 15 previous. They can't verify. Like you said, they 16 don't have maybe a U-1 or anything like that. And 17 so they'll hire, like, a company to come in and do 18 thickness monitoring or -- not monitoring but 19 thickness measurements, ultrasonic thickness 20 measurements through the calculations, prove that 21 the vessel is safe, and then make it a Tennessee 22 Special.</p> <p>23 MR. TOTH: Mr. Chairman?</p> <p>24 CHAIRMAN MORELOCK: Yes?</p> <p>25 MR. TOTH: Yes. This is Marty</p>	<p style="text-align: right;">Page 85</p> <p>1 Toth. If I can make a little bit of a comment 2 concerning the metrification and using the U.S. 3 customary standards. We've got to remember also 4 that in regards to what Mr. Bowers said, NBIC is 5 specific, and when they talk about the use of 6 metrification or use in the metric system, it has 7 to follow that vessel. And following that vessel 8 regards to use in the metric system on your relief 9 valves, actually, that's not really -- safety 10 valves, that is -- that's not really an issue, 11 Mr. Bowers. I mean you can order valves in metric 12 or in customary standards. That's not an issue. 13 Where you come up against the issue is when you 14 look at repairs and alterations of those units, we 15 do repairs and alterations. They have to be done 16 in metric. If the vessel is built in metric, you 17 have to stick with metric. That comes straight 18 out of the NBIC.</p> <p>19 So, also, if you were to look, as an 20 inspector -- every inspector should have access to 21 the NBIC -- part 1, Section, I think, 7 has -- 22 actually, has a conversion chart that will help 23 you as an inspector to be able to convert over 24 pretty simply -- so those are the two things I 25 wanted to mention, is just remember that once you</p>

<p style="text-align: right;">Page 86</p> <p>1 start, you build with metric, the vessel has to 2 live in metric. That's all I have. Thank you. 3 CHAIRMAN MORELOCK: Thank you, 4 Mr. Toth. 5 MR. BAUGHMAN: This is Dave 6 Baughman, board member. 7 What's the inspection cycle on these 8 Tennessee Special unfired vessels? Will it be 9 once every five years? But what's the inspection 10 cycle of these vessels, if anything? And the 11 second question was is there a corrosion mechanism 12 or a risk-based assessment that's going to be in 13 place for determining the corrosion rates on these 14 units and so forth -- I didn't know if LG had 15 anything in place -- but where we're at, moving 16 forward, to be able to identify any corrosion 17 mechanisms? 18 MR. BUTLER: I'm not sure if LG has 19 anything in place. Sam could tell you how often 20 they have to be recertified by state standards. 21 I'll throw that on his lap. I mean, typically, 22 when you go through and you get a vessel 23 recertified, you open it up and look in it just 24 like you do a boiler. 25 There is a very small corrosion</p>	<p style="text-align: right;">Page 87</p> <p>1 allowance built onto these vessels. When I see a 2 corrosion allowance of 1 millimeter, I mean, 3 that's miniscule. Typically -- like I said, these 4 are air tanks. Typically, there's a lot of oil in 5 these air lines on these. I know, just working 6 With other customers that have these type, 7 corrosion is very seldom an issue. There's that 8 much oil in the air on them. And usually, welding 9 on them is the issue because of all the oil that's 10 on them. We very seldom see any further corrosion 11 problems for these type of air tanks. 12 MR. BAUGHMAN: So I don't know if 13 that quite answers my question, but -- 14 MR. BUTLER: It was a political 15 answer. I tap danced all around it. 16 CHAIRMAN MORELOCK: So, 17 Mr. Baughman, to answer your question, the 18 Tennessee law says that an unfired pressure vessel 19 has to be internally inspected every two years. 20 MR. CHAPMAN: Yes. 21 CHAIRMAN MORELOCK: And so as a 22 Tennessee Special, these vessels would have an 23 internal every two years. 24 MR. CHAPMAN: Yes. 25 CHAIRMAN MORELOCK: And so, you</p>
<p style="text-align: right;">Page 88</p> <p>1 know, to Mr. Butler's point, yeah, the .01 -- or 2 the corrosion allowance is 40,000 of an inch, so 3 if you have four mils of corrosion per year, 4 you're going to go ten years before you get down 5 to a T-min. Or it's a built-in corrosion 6 allowance. It's not necessarily T-min, but down 7 to the minimum calculated thickness. 8 MR. BAUGHMAN: Well, and henceforth 9 my question on it was I didn't -- that's still 10 that ten years goes by in the blink of an eye, as 11 we know. So I wanted to make sure that there was 12 a mechanism in place by the customer to keep up 13 with this. Because as we know inspections go, 14 whether or not they get inspected, they pull off 15 production and so forth, things slipping through 16 the cracks, we want to make sure that all these 17 mechanisms are in place to identify -- and like 18 you say, it seldom happens with these units, but 19 seldom is not never. And so we want to make sure 20 that we're as safe as what we can possibly be. 21 CHAIRMAN MORELOCK: Right. Well, 22 and to add to that, when these vessels are built, 23 they're using a standard plate size. So, 24 basically, you do your calculation and you pick 25 the next plate size. You put a corrosion</p>	<p style="text-align: right;">Page 89</p> <p>1 allowance on it. And then, when that vessel goes 2 into service, yes, it's going to corrode. Once 3 you get down to calculated thickness minus 4 corrosion allowance, then you do a true T-min 5 calculation. 6 You can do a fitness for service. 7 You can invoke API 579 and go to 90 percent of 8 that thickness with a fitness-for-service 9 evaluation, which you have to submit to the State 10 of Tennessee. So that's all part of that 11 risk-based inspection program that the NBIC allows 12 you to utilize along with API documents and all 13 that. So that's a really brief, in-a-nutshell 14 fitness-for-service conversation. 15 MR. BOWERS: This is Harold Bowers, 16 board member. 17 The question I have, I guess, for 18 Sam, are these going to be treated, as Tennessee 19 Specials, treated just like any other unfired 20 pressure vessels at the standard two-year 21 intervals just like any other pressure vessel, or 22 are they handled -- are they treated separate -- 23 differently? 24 MR. CHAPMAN: They're treated like 25 the two years inspection. The only thing</p>

<p style="text-align: right;">Page 90</p> <p>1 different on it is you have markings on it for 2 saying that it's a Tennessee Special. That's 3 about it on that.</p> <p>4 MR. BOWERS: Thank you, Sam. 5 MR. CHAPMAN: All right. 6 CHAIRMAN MORELOCK: So the question 7 we have before us, as a Board, is -- to attempt to 8 answer Mr. Butler's question is this, is if he 9 goes and does all the legwork, verifies what 10 vessels indeed are exempt, what vessels have to be 11 Tennessee Specials, does he have to wait until the 12 next board meeting? And by practice, the answer 13 to that question is yes.</p> <p>14 So my question to you, Mr. Butler, is 15 these vessels are in service and are operating 16 right now. Do they have certificates of 17 inspection from the State of Tennessee? 18 MR. BUTLER: No, sir, I don't 19 believe they do. 20 CHAIRMAN MORELOCK: Okay. So the 21 only thing I know -- and I'm going to -- this is 22 the Boiler Unit's call. I'm just talking. I 23 don't know if we can do something similar to a 24 variance where if Mr. Butler works with IG, they 25 take these 50 vessels, they do the evaluation,</p>	<p style="text-align: right;">Page 91</p> <p>1 they figure out definitively which vessels are 2 exempt from Tennessee law, what vessels have to be 3 Tennessee Specials, and then the Boiler Unit comes 4 out and looks at them -- I just -- I don't know if 5 the Boiler Unit is going to be comfortable with a 6 tentative approval or they would prefer that you 7 come back to the Board with a revised item 8 showing, definitively, what will be a Tennessee 9 Special. And we vote it in March.</p> <p>10 MR. HENRY: Mr. Chairman, this is 11 Jeff Henry, board member. 12 Could I ask a couple of questions? 13 CHAIRMAN MORELOCK: Absolutely. 14 MR. HENRY: Mr. Butler, you've been 15 to the facility and you've seen where these are 16 installed. In the event one of these were to 17 fail, would they present a safety issue to the 18 people of the plant? 19 MR. BUTLER: No, sir, none that I 20 see. Some of them are located in a basement area 21 underneath the presses. The others are located on 22 top of the presses. There's not people standing 23 next to them, if that's the question you're 24 asking. 25 MR. HENRY: But, I mean, there are</p>
<p style="text-align: right;">Page 92</p> <p>1 times when people would be in the area that could 2 constitute a hazard if one were to fail.</p> <p>3 MR. BUTLER: Well, that would be 4 true of any vessel failure. I mean -- 5 MR. HENRY: But I mean in some 6 cases, you have these vessels actually located in 7 segregated rooms. 8 MR. BUTLER: Right. I mean, the 9 ones in the basement area are that way. The 10 others, like I said, are 15 feet on top of a steel 11 press. I mean, if they were to fail, say, 12 catastrophically, which is what we're talking 13 about here, they're going to go up and away, 14 through the roof. They're not going to go down 15 through a heavy press to get to whoever is working 16 in that area. 17 MR. HENRY: Okay. Then I guess the 18 second question is to you, Mr. Chairman, is that 19 if they don't have this variance and they don't 20 have authorization, I guess, from the State, how 21 are they operating these things? Is it legal? 22 MR. BUTLER: Who is that question 23 for? 24 MR. HENRY: I was actually asking 25 that question of our Chairman.</p>	<p style="text-align: right;">Page 93</p> <p>1 CHAIRMAN MORELOCK: Well, if they 2 don't have a valid certificate of inspection, they 3 don't have permission to operate them. 4 MR. HENRY: So they're operating 5 these illegally right now. 6 CHAIRMAN MORELOCK: I mean, it's no 7 different. We've had board cases come to us 8 several years ago where a company had a vessel in 9 service for three years with no valid certificate 10 of inspection. And there are -- once you satisfy 11 the safety concerns, then it goes back to the 12 State of Tennessee on what the law says, as far 13 as -- I think it's a Class C misdemeanor for every 14 day, and it's a \$50 fine for every day you operate 15 without a valid certificate of inspection. 16 Mr. Bailey can confirm that for me. 17 MR. HENRY: Okay. Thank you. 18 CHAIRMAN MORELOCK: Thank you. 19 MR. BAILEY: This Dan Bailey. 20 I'll have to look at the statute, 21 Mr. Chairman. 22 MR. BOWERS: This is Harold Bowers 23 again. 24 The only thing that I have to say is, 25 you know, they have come to us to say they have a</p>

<p style="text-align: right;">Page 94</p> <p>1 problem. And a lot of times new plants, when they 2 first get started up, we didn't always, as state 3 inspectors and insurance inspectors, inspect those 4 units at startup. We just usually, a lot of 5 times, inspect it right after startup. 6 And I'm not sure how long these have 7 been in use, but they did come to us because they 8 know they have a problem. Now, I guess it's up to 9 the Board and the Chief to decide where we go from 10 there on these right here. 11 I've inspected many of these units at 12 different plants. And most of them are, like he 13 said, at the top of the press or underneath the 14 press. I'm not sure what, actually -- if he can 15 tell us what the source is of the air going to 16 these, as far as the psi being fed. You know, in 17 most cases, if they're centrifugal compressures or 18 rotary screws, probably a maximum of 125 psi, and 19 you use the conversion to figure out the safety 20 factor there. But I know we need to do something 21 on this, and we'd hate to shut down this plant 22 saying, well, they can't use these right now. But 23 I guess that's up to the board members to decide 24 or give these people a grace period to come back 25 next board meeting, and hopefully, we'll get this</p>	<p style="text-align: right;">Page 95</p> <p>1 thing settled by then. 2 CHAIRMAN MORELOCK: Thank you, 3 Mr. Bowers. 4 So we, as a board, have been asked to 5 determine if a certain number of vessels can be 6 Tennessee Specials. And that's what we're doing. 7 We're looking at the rule and the law. Now, as 8 far as operating a vessel or not, that comes from 9 the Boiler Unit. That doesn't come from the 10 Tennessee Board. We support the Boiler Unit, but 11 the Boiler Unit is the enforcement of the rules 12 and the law. And so we promulgate and review and 13 update the rule and the law. So that's the 14 difference in the responsibility. So it 15 ultimately comes to the Boiler Unit on the 16 decision to operate or not. 17 But Mr. Bowers' point is, you know, 18 true, is I think we've done some good work today 19 to help LG realize that they don't have 50 20 Tennessee Specials. You're probably going to have 21 about 27, which I think that's good. 22 But now Mr. Butler is going to have 23 to finish his work to put everything together to 24 get these vessels labeled correctly and have a -- 25 work with the Boiler Unit to get a valid</p>
<p style="text-align: right;">Page 96</p> <p>1 certificate of inspection. 2 MR. BAUGHMAN: This is Dave 3 Baughman, board member. 4 Who will the -- and Sam, this is -- 5 Chief, this is more directed to you, but who will 6 the inspector be from the State that will be 7 assigned? Because 27 vessels, if that's what we 8 end up having for Tennessee Specials, that's a 9 pretty good additional load on somebody, 10 especially since we're already pretty well loaded 11 up. I'm just interested to know who the inspector 12 would be. 13 MR. CHAPMAN: Well, the inspector 14 will be Steven Perry, because he's right there in 15 the Clarksville area. So he should be able to get 16 all that set up in a couple of days and stuff, 17 because he, most likely, is going to have to get a 18 cherry picker or something to get high over the 19 press, and then down in the basement of it. He 20 most likely is going to have the press shut down 21 at that time when he's doing the inspection. 22 MR. BAUGHMAN: Yes. And that will 23 be quite a logistics -- I'm sure they won't have 24 all of them shut down at the same time, but there 25 will be multiple trips involved. But just</p>	<p style="text-align: right;">Page 97</p> <p>1 logistics, it's going to take a little while. 2 MR. CHAPMAN: Well, normally -- 3 now, I'm just speaking from the past, because 4 there's one place that's in -- down by us. 5 Normally, when you go in there, you set it up to 6 where, okay, we're going to do all these here in a 7 row, because they're normally in a row. And that 8 way they can shut those presses down as they go up 9 and inspect. So that's normally how they do it. 10 MR. BAUGHMAN: Yeah. Because 11 there's a lot of lockout/tagout, a lot of 12 mechanisms involved that make all that happen 13 properly. 14 MR. CHAPMAN: Yes, it is. But that 15 is one time that we will actually set it up to 16 say, okay, this is when we're going to do it. 17 Because they work together on that part so that 18 they can work together and get everything done as 19 much as possible. 20 MR. BAUGHMAN: That's very good. 21 Thank you, Chief. 22 CHAIRMAN MORELOCK: So, I guess, 23 my -- 24 MR. BUTLER: Would -- 25 CHAIRMAN MORELOCK: Go ahead.</p>

<p style="text-align: right;">Page 98</p> <p>1 MR. BUTLER: Would they be able to 2 go in and do some of these inspections before the 3 next board meeting? I mean, like I said, this 4 entire plant will be shut down, I think it's a 5 week and a half. I mean, we understand, the plant 6 understands, that, you know, they don't have 7 operating certificates on these, like I said. 8 Mr. Bowers said, you know, they came 9 to you and said here is our problem. Could the 10 inspections already be performed if I say, hey, 11 these are the 27 vessels that we need Tennessee 12 Specials on? 13 MR. CHAPMAN: (Shakes head.) 14 MR. BUTLER: So Sam is shaking his 15 head no, so he's not going to send an inspector 16 out there until an official vote takes place. 17 MR. CHAPMAN: That is true. 18 CHAIRMAN MORELOCK: Okay. So I 19 need to make sure Mr. Herrod and Mr. Bailey weigh 20 in on this question. But due to the fact that we 21 are going to be meeting electronically for the 22 foreseeable future, if I have agreement with the 23 Boiler Unit and the State of Tennessee, I am not 24 opposed to letting LG and Mr. Butler to get a 25 revised package put together as quickly as they</p>	<p style="text-align: right;">Page 99</p> <p>1 can and have a special-called electronic Zoom 2 meeting just for this item to get it approved. 3 But I need Mr. Herrod and Mr. Bailey to let me 4 know if that's possible or not. 5 MR. HERROD: Well, for the Boiler 6 Unit, that would be acceptable. How quickly are 7 they talking about having that package put 8 together? In January? 9 MR. BUTLER: Yes, sir. I'd need 10 until then so I can go up and verify these 11 vessels. Like I said, the plant will be shut down 12 so we can go up and fix these descriptive 13 nameplate issues, eliminate those that are too 14 small and then resubmit the package which should 15 be about half this size. I'll only kill, like, 16 one tree. So yeah, I would say the second week of 17 January, the latest. 18 MR. HERROD: I'm not sure if we 19 have time. Do we have to give a 30-day notice of 20 a meeting, Carlene? 21 MS. BENNETT: It's my understanding 22 we did. Dan could probably speak more to that 23 than I could. 24 MR. BAILEY: I think the statute 25 says reasonable notice. I don't think it</p>
<p style="text-align: right;">Page 100</p> <p>1 specifies 30 days. 2 MS. BENNETT: Okay. 3 MR. BAILEY: I believe I have seen 4 some case law where it was held at two weeks and 5 was considered reasonable. So it's one of those 6 things that, you know, I would say at least two 7 weeks. If you can get 30 days, that's great. But 8 I think if you can give at least two weeks' public 9 notice, you'll be okay. 10 And by the way, Mr. Chairman, that is 11 a Class C misdemeanor for each day. Of course, 12 that would be something that a prosecutor would 13 have -- we would have to bring it to a 14 prosecutor's attention, and I don't think that's 15 the intent here. 16 CHAIRMAN MORELOCK: It's not. It's 17 not. I do know we have been in this situation 18 before. We had a June meeting. We had to red-tag 19 a vessel that didn't have a valid certificate of 20 operation. It never had one for three years. And 21 they had to -- it basically shut the plant down. 22 They sent people home until they could get the 23 calculations to prove the vessel was safe. We had 24 a special-called meeting in July of that year to 25 just take care of that one item, to get their</p>	<p style="text-align: right;">Page 101</p> <p>1 plant back open and get their employees back to 2 work. So we have done it before. 3 But I just want to make sure that we 4 get the right -- that we're following the statute 5 of the law, as far as how quickly it can be 6 scheduled. If LG can get everything ready by mid 7 January, you could almost schedule the meeting 8 next week for the middle of January, and that 9 would be a month's notice. And then let them get 10 all their work done and come back to the Board 11 with a specific list of vessels that they know 12 will need to be Tennessee Specials with corrected 13 nameplates and let the Board vote on that. 14 MR. BAUGHMAN: Chairman Morelock, 15 this is Dave Baughman, board member. 16 One of the things I would like, just 17 for my own end of it is to make sure that on these 18 vessels that are going to be exempt, if somebody 19 would be as kind to show us just the simple 20 mathematics just to corroborate the vessels being 21 exempt. The other is understanding that we all 22 understand that these units are operating outside 23 the scope of our rules. And so I don't feel 24 comfortable putting a stamp of approval on that, 25 necessarily, from a liability standpoint, should</p>

<p style="text-align: right;">Page 102</p> <p>1 there be an accident and the ramifications of 2 that. So I just want to make sure that we all 3 understand that both Michael Hudson and Keith 4 Butler and the rest of us that are in on this 5 meeting understand what those legalities are in 6 moving forward with this.</p> <p>7 I don't want to shut anybody down, in 8 particular, and don't have that capability or 9 desire, but I want to make sure of just bringing 10 that up for the record that we do have a liability 11 involved here in saying, yes, we can continue to 12 operate until this comes about.</p> <p>13 CHAIRMAN MORELOCK: Well, and to 14 address your question, Mr. Baughman, the Board 15 doesn't have an item that they can vote on today. 16 And so we're not shutting anybody down. We're not 17 doing anything other than just following the rule 18 and the law on what needs to be done to have a 19 Tennessee Special. It's up to the Boiler Unit, as 20 the enforcement arm of the law and the rule, to 21 allow them to run or to red tag them and make them 22 shut down. So, I mean, that's where we're at.</p> <p>23 What we're trying to do is to have a 24 discussion on what's the most efficient way we can 25 get these Tennessee Special vessels clearly</p>	<p style="text-align: right;">Page 103</p> <p>1 designated, the vessels that are exempt to be 2 clearly designated, and then let them process our 3 normal channels to get a Tennessee Special for 4 those vessels that need to be stamped as a 5 Tennessee Special.</p> <p>6 MR. BOWERS: This is Harold Bowers. 7 If we had a meeting in 30 days, this 8 would give Sam, also, time to get his tags. He 9 has to order tags, and, also, he can set up the 10 manpower he needs to get these things done if we 11 so approve 30 days from now.</p> <p>12 MR. BAUGHMAN: This is Dave 13 Baughman, board member.</p> <p>14 Would these be charged back out as 15 special inspections for each individual vessel?</p> <p>16 MR. HERROD: This is Tom Herrod, 17 assistant commissioner.</p> <p>18 Yes. Potentially, they would be. We 19 would have to make that decision within the Boiler 20 Unit. But yes, we do have -- that is what we 21 could very well...</p> <p>22 MR. BAILEY: I think Tom froze up 23 on us.</p> <p>24 MR. BAUGHMAN: We missed the end of 25 that, Mr. Herrod. I'm sorry. You broke up.</p>
<p style="text-align: right;">Page 104</p> <p>1 MR. HERROD: Okay. Can you hear me 2 now?</p> <p>3 CHAIRMAN MORELOCK: Yes.</p> <p>4 MR. HERROD: Okay. We do have -- 5 we will discuss whether or not we would charge 6 individually or as a group, but that would be our 7 decision to make. And we do have that authority 8 to do individual units as a special inspection.</p> <p>9 CHAIRMAN MORELOCK: And that was 10 the way it worked with the last time we had this 11 issue. The Tennessee Board, we provided assurance 12 that the vessel was safe. It was a vessel of 13 non-ground. It was a not of circular 14 cross-section, and we provided calculations to 15 show that the vessel was safe. And then that was 16 where the Board stopped and the Boiler Unit and 17 the commissioner took over, or the assistant 18 commissioner took over on the legalities and all 19 of that.</p> <p>20 So the boiler board just confirmed 21 that the vessel was safe. It wasn't posing a 22 safety hazard, but it wasn't in compliance with 23 the rule and the law.</p> <p>24 MR. O'GUIN: Chairman, Chris 25 O'Guin, assistant chief.</p>	<p style="text-align: right;">Page 105</p> <p>1 Just to let all the members know, 2 once the meeting is over, the chief and I will 3 discuss, kind of, how the company can go forward 4 until we can get to the next meeting and the 5 specifics voted on.</p> <p>6 CHAIRMAN MORELOCK: Okay. So with 7 all that said -- I appreciate all the 8 conversation, and it's been an excellent 9 conversation -- unless Mr. Butler tells me 10 different, I think this item needs to be tabled 11 for a future meeting so Mr. Butler will have time 12 to put his proposal together with a more 13 definitive proposal and get the Board to vote on 14 it.</p> <p>15 Are there any comments from the board 16 members about that?</p> <p>17 MR. BAILEY: Mr. Chairman, and this 18 may be where you're going with that, but I think 19 there needs to be a motion made to table it and to 20 call a special-called meeting in 30 days to 21 revisit this one item.</p> <p>22 CHAIRMAN MORELOCK: That's an 23 excellent motion, Mr. Bailey.</p> <p>24 MR. BAILEY: I can't make motions. 25 CHAIRMAN MORELOCK: I know you</p>

<p style="text-align: right;">Page 106</p> <p>1 can't.</p> <p>2 So do I have a motion from the Board?</p> <p>3 MR. BOWERS: This is Harold Bowers.</p> <p>4 I'll make that motion to table it and</p> <p>5 have a special meeting within the next 30 days.</p> <p>6 CHAIRMAN MORELOCK: All right. Do</p> <p>7 I have a second.</p> <p>8 MR. HENRY: Second.</p> <p>9 CHAIRMAN MORELOCK: Thank you,</p> <p>10 Mr. Henry.</p> <p>11 I have a second. Any more</p> <p>12 discussion?</p> <p>13 (No verbal response.)</p> <p>14 CHAIRMAN MORELOCK: Hearing none,</p> <p>15 I'm going to have a roll-call vote.</p> <p>16 Mr. Baughman?</p> <p>17 MR. BAUGHMAN: Aye.</p> <p>18 I would look at those dates, too,</p> <p>19 just because I know there's some things coming up</p> <p>20 in January. I would definitely like to be on the</p> <p>21 meeting end of it. But yes, aye.</p> <p>22 CHAIRMAN MORELOCK: Certainly.</p> <p>23 Mr. Bowers?</p> <p>24 MR. BOWERS: Aye.</p> <p>25 CHAIRMAN MORELOCK: Mr. Henry?</p>	<p style="text-align: right;">Page 107</p> <p>1 MR. HENRY: Aye.</p> <p>2 CHAIRMAN MORELOCK: All right.</p> <p>3 Motion passes.</p> <p>4 MS. BENNETT: Mr. Chairman?</p> <p>5 CHAIRMAN MORELOCK: Yes.</p> <p>6 MS. BENNETT: I'm sorry. I'm just</p> <p>7 throwing this out there. Would January 13th fit</p> <p>8 the criteria of within 30 days or so?</p> <p>9 CHAIRMAN MORELOCK: Pretty close.</p> <p>10 MS. BENNETT: Okay. That's just a</p> <p>11 tentative date just, you know, if everybody could</p> <p>12 make it, then I could arrange it.</p> <p>13 MR. BAUGHMAN: I could not be</p> <p>14 there, Carlene. I'm sorry.</p> <p>15 MS. BENNETT: Okay. We could shoot</p> <p>16 for the 20th.</p> <p>17 CHAIRMAN MORELOCK: So what about</p> <p>18 March the 20th?</p> <p>19 MS. BENNETT: Oh, no. I was</p> <p>20 thinking January.</p> <p>21 CHAIRMAN MORELOCK: I meant</p> <p>22 January 20th. Sorry. I'm thinking too far ahead.</p> <p>23 MS. BENNETT: Okay.</p> <p>24 CHAIRMAN MORELOCK: So is that good</p> <p>25 with all the board members, January the 20th?</p>
<p style="text-align: right;">Page 108</p> <p>1 MR. BAUGHMAN: It is with myself.</p> <p>2 CHAIRMAN MORELOCK: Okay.</p> <p>3 MR. HENRY: I'm good with it, yes.</p> <p>4 CHAIRMAN MORELOCK: Okay.</p> <p>5 Mr. Bowers, are you good with that?</p> <p>6 MR. BOWERS: So far it looks all</p> <p>7 right to me.</p> <p>8 CHAIRMAN MORELOCK: Okay. It works</p> <p>9 for me as well.</p> <p>10 MS. BENNETT: Okay.</p> <p>11 CHAIRMAN MORELOCK: The 20th looks</p> <p>12 like a good date.</p> <p>13 MS. BENNETT: That will give me</p> <p>14 something to shoot for. If there's an issue, we</p> <p>15 will email amongst ourselves and figure it out.</p> <p>16 But I'll get it scheduled and posted.</p> <p>17 CHAIRMAN MORELOCK: Mr. Butler, is</p> <p>18 there anything we need to discuss before we leave</p> <p>19 this item?</p> <p>20 MR. BUTLER: No, sir. I'll get the</p> <p>21 new packages to Sam as quick as I can --</p> <p>22 CHAIRMAN MORELOCK: Okay.</p> <p>23 MR. BUTLER: -- and let him email</p> <p>24 them or whatever he did to get them to you-all.</p> <p>25 CHAIRMAN MORELOCK: All right.</p>	<p style="text-align: right;">Page 109</p> <p>1 Thank you for the presentation. Thank you for all</p> <p>2 the conversation.</p> <p>3 MR. BUTLER: Thank you-all for</p> <p>4 hearing us.</p> <p>5 CHAIRMAN MORELOCK: Thank you.</p> <p>6 Okay. So that takes us to Item 7,</p> <p>7 which is rule cases and interpretation. And our</p> <p>8 first one is board interpretations 20-02 for</p> <p>9 approved variance changes.</p> <p>10 MR. BAUGHMAN: Mr. Chairman, you</p> <p>11 said that was Item 7? I've got that as Item 6.</p> <p>12 CHAIRMAN MORELOCK: Well, the</p> <p>13 agenda was revised to add approval of the</p> <p>14 September 16th minutes.</p> <p>15 MR. BAUGHMAN: I did not print that</p> <p>16 off. Thank you, Mr. Chairman.</p> <p>17 CHAIRMAN MORELOCK: You are quite</p> <p>18 welcome.</p> <p>19 So who is presenting this item?</p> <p>20 MR. TOTH: I would say that would</p> <p>21 be me, Mr. Chairman, if we're referring to 20-02.</p> <p>22 CHAIRMAN MORELOCK: Yes.</p> <p>23 MR. TOTH: That was what I</p> <p>24 submitted.</p> <p>25 CHAIRMAN MORELOCK: Okay.</p>

<p style="text-align: right;">Page 110</p> <p>1 MR. TOTH: I'm glad I tuned in.</p> <p>2 Was this added to the agenda? I didn't see it the</p> <p>3 first time I looked, but okay.</p> <p>4 I'll go ahead and do this. If I can</p> <p>5 share my screen, I can pull it up. Okay. So if</p> <p>6 we look, this is the submission that was sent in</p> <p>7 October. Statements, ECS Consulting -- okay --</p> <p>8 requests the Board to provide an interpretation on</p> <p>9 re-presentation requirements for changes to</p> <p>10 board-approved remote attendants variances.</p> <p>11 A little bit of background on that.</p> <p>12 Owners-users of approved remote attendants</p> <p>13 variances are looking for an understanding of when</p> <p>14 they are required to re-present to the Tennessee</p> <p>15 Board of Boiler -- and that should be rules --</p> <p>16 when changes have occurred to the program.</p> <p>17 Inquiry Number 1, is it required for</p> <p>18 approved variances to be re-represented to the</p> <p>19 Tennessee Board of Boiler Rules if there have been</p> <p>20 equipment changes, replacement and/or additions to</p> <p>21 said variance. My submitted reply is yes.</p> <p>22 Inquiry Number 2, is it required for</p> <p>23 approved variances to be re-presented to the</p> <p>24 Tennessee Board of Boiler Rules if there have been</p> <p>25 common changes to said variance that do not affect</p>	<p style="text-align: right;">Page 111</p> <p>1 an equipment change, replacement and/or addition,</p> <p>2 or the original intent of a variance? And the</p> <p>3 reply I have is no.</p> <p>4 And that is the submission.</p> <p>5 CHAIRMAN MORELOCK: Okay. So...</p> <p>6 MR. O'GUIN: Chairman?</p> <p>7 CHAIRMAN MORELOCK: Yes.</p> <p>8 MR. O'GUIN: The Boiler Unit would</p> <p>9 like to request these interpretations be tabled</p> <p>10 until March to see if we can answer these</p> <p>11 questions in the checklist to save from having so</p> <p>12 many interpretations out on the system.</p> <p>13 THE REPORTER: Who is that</p> <p>14 speaking?</p> <p>15 MR. O'GUIN: Chris O'Guin,</p> <p>16 Assistant Chief.</p> <p>17 THE REPORTER: Thank you.</p> <p>18 MR. TOTH: Mr. Chairman, if I may.</p> <p>19 This is Marty Toth.</p> <p>20 Chris, I thought we had the intent to</p> <p>21 do that already. We had discussed that. That's</p> <p>22 why when I initially saw the agenda I did not see</p> <p>23 them on the agenda. I'm very much in favor of</p> <p>24 tabling both of these. I think it's something</p> <p>25 that needs to be addressed if the checklist</p>
<p style="text-align: right;">Page 112</p> <p>1 guidelines are to be revised. But I'm fine with</p> <p>2 tabling this if they can be addressed inside of</p> <p>3 the guidelines.</p> <p>4 CHAIRMAN MORELOCK: Very good. So</p> <p>5 as long as the Board agrees that we will take both</p> <p>6 of these board cases and -- board interpretations,</p> <p>7 actually, 20-02 and 20-03, if both of these items</p> <p>8 are handled with the revisions to the checklist</p> <p>9 and the guide, Mr. Toth is agreeable to that, and</p> <p>10 he supports Assistant Chief O'Guin's request, then</p> <p>11 we have a motion to table this item with that</p> <p>12 explanation. Do I have a motion to accept tabling</p> <p>13 this item?</p> <p>14 MR. BAUGHMAN: So moved.</p> <p>15 CHAIRMAN MORELOCK: Do I have a</p> <p>16 second?</p> <p>17 MR. BOWERS: Second by Harold</p> <p>18 Bowers.</p> <p>19 CHAIRMAN MORELOCK: Okay. Thank</p> <p>20 you.</p> <p>21 Any further discussion?</p> <p>22 (No verbal response.)</p> <p>23 CHAIRMAN MORELOCK: All right. So</p> <p>24 hearing none, I'm going to call for the vote on</p> <p>25 that, that being that we are going to table these</p>	<p style="text-align: right;">Page 113</p> <p>1 two board interpretations, contingent on the fact</p> <p>2 that these interpretations will be included in the</p> <p>3 revisions to the checklist and guide for the</p> <p>4 boiler attendant variance.</p> <p>5 MR. TOTH: Mr. Chairman, before you</p> <p>6 go to that vote, I just want to be clear in the</p> <p>7 understanding that on the second interpretation</p> <p>8 request, it had to do with tentative variance</p> <p>9 expirations; that no current applicants or</p> <p>10 tentatively approved variance will be held to an</p> <p>11 expiration until such time. There are some that</p> <p>12 are out there that have gone or are getting close</p> <p>13 to going over the presumed 12-month authorization</p> <p>14 time, which is not written anywhere.</p> <p>15 I just want to make sure that we are</p> <p>16 clear that if somebody comes up to be inspected by</p> <p>17 the Boiler Unit, they will not be turned down</p> <p>18 because they have exceeded some date that's been</p> <p>19 established.</p> <p>20 CHAIRMAN MORELOCK: Well, that's a</p> <p>21 fair statement because of two things. One,</p> <p>22 there's no published board interpretation to go</p> <p>23 to, and the checklist doesn't discuss it.</p> <p>24 MR. TOTH: Right. I just wanted to</p> <p>25 make sure.</p>

<p style="text-align: right;">Page 114</p> <p>1 CHAIRMAN MORELOCK: Thank you.</p> <p>2 All right. So any more questions or</p> <p>3 comments before I call the vote?</p> <p>4 (No verbal response.)</p> <p>5 CHAIRMAN MORELOCK: We're voting to</p> <p>6 table these two items contingent on review and</p> <p>7 revision of the checklist.</p> <p>8 (No verbal response.)</p> <p>9 CHAIRMAN MORELOCK: So hearing no</p> <p>10 comments, I'm going to have a roll-call vote.</p> <p>11 Mr. Baughman?</p> <p>12 MR. BAUGHMAN: Aye.</p> <p>13 CHAIRMAN MORELOCK: Mr. Bowers?</p> <p>14 MR. BOWERS: Aye.</p> <p>15 CHAIRMAN MORELOCK: Mr. Henry?</p> <p>16 MR. HENRY: Aye.</p> <p>17 CHAIRMAN MORELOCK: All right. So</p> <p>18 we have tabled these two board interpretations.</p> <p>19 MR. TOTH: Thank you, sir.</p> <p>20 CHAIRMAN MORELOCK: Thank you.</p> <p>21 So that takes care of rule cases and</p> <p>22 interpretations in Item 7.</p> <p>23 Moving on to Item 8, which is open</p> <p>24 discussion items. And our first discussion item</p> <p>25 is the tentative 2021 meeting dates, which would</p>	<p style="text-align: right;">Page 115</p> <p>1 be -- the first quarter would be March the 10th;</p> <p>2 second quarter would be June the 9th; third</p> <p>3 quarter would be September 22nd; and fourth</p> <p>4 quarter would be December the 15th. So we just</p> <p>5 want to make sure that those dates are good for</p> <p>6 the board members because it's important that we</p> <p>7 have a good, clear quorum when we meet. So does</p> <p>8 anybody have any conflicts with those dates?</p> <p>9 (No verbal response.)</p> <p>10 CHAIRMAN MORELOCK: All right.</p> <p>11 Hearing none, then those dates will stand.</p> <p>12 So moving on to our next open</p> <p>13 discussion item is the variance guideline and</p> <p>14 checklist revisions. So let me get my notes out</p> <p>15 on that. And I hope everybody has the notes on</p> <p>16 that.</p> <p>17 MR. BOWERS: Chairman, could we</p> <p>18 take, probably, a five-minute break?</p> <p>19 CHAIRMAN MORELOCK: Absolutely.</p> <p>20 Absolutely. We'll take a five- or ten-minute</p> <p>21 break. Let's just resume at 11:55. That will</p> <p>22 give you ten minutes.</p> <p>23 (Recess observed.)</p> <p>24 CHAIRMAN MORELOCK: In the essence</p> <p>25 of time here, we'll go ahead and start working on</p>
<p style="text-align: right;">Page 116</p> <p>1 this discussion item of looking at the guide and</p> <p>2 the checklist for the boiler variance. So I hope</p> <p>3 everybody has got a copy of it. Carlene sent</p> <p>4 those to the board members. So what we want to do</p> <p>5 here is we know there's some revisions we need to</p> <p>6 make to the variance guide, as well as the</p> <p>7 checklist. And Carlene sent out a note for</p> <p>8 comments. And so if you got the handout, what you</p> <p>9 have is the Revision 10, May 2017, of the guide</p> <p>10 and the checklist, and you also have comments from</p> <p>11 board members. And so, to me, I guess, the most</p> <p>12 expedient thing to do is let's look at the</p> <p>13 comments first, and then we'll take your comments</p> <p>14 as well.</p> <p>15 So Mr. Baughman, do you want to</p> <p>16 discuss your comments first?</p> <p>17 MR. BAUGHMAN: Yes, I'll be glad</p> <p>18 to. Do we need to have a motion to discuss, or</p> <p>19 are we good with just going into it?</p> <p>20 CHAIRMAN MORELOCK: This is a</p> <p>21 discussion item so we're not taking any action.</p> <p>22 MR. BAUGHMAN: Super. Yeah. And</p> <p>23 even after this was submitted, there's, of course,</p> <p>24 other ideas that come about, so I take it this is</p> <p>25 going to be a bit of a work in progress. But I'm</p>	<p style="text-align: right;">Page 117</p> <p>1 glad they got addressed.</p> <p>2 So on my comments that were sent out</p> <p>3 on October 26 and are part of the paperwork here,</p> <p>4 the first was just having the manual dated in some</p> <p>5 form or fashion that coincides with the</p> <p>6 inspection. In other words, when the inspector</p> <p>7 goes in, he can look at a manual, and the date of</p> <p>8 the manual coincides with the approval. So, in</p> <p>9 other words, he knows that that manual is three</p> <p>10 years out or is within a particular period of</p> <p>11 time. That's just one of the comments that I had</p> <p>12 heard, and I wanted to make it as part of our</p> <p>13 discussion.</p> <p>14 So in looking at these revisions,</p> <p>15 these are not only my own personal thoughts, but</p> <p>16 just getting input in from others out in the</p> <p>17 industry with it, we know the old flow chart of</p> <p>18 2009 needs to be updated. The flow chart is not</p> <p>19 quite in the manner of what it needs to be. And</p> <p>20 so however we decide to revise a flow chart or if</p> <p>21 we even decide to revise it, but that was one of</p> <p>22 the things that I had looked at, was I didn't</p> <p>23 think the flow chart reflected the actual</p> <p>24 communication chain of how we take care of our</p> <p>25 events.</p>

<p style="text-align: right;">Page 118</p> <p>1 Do you want to just read through 2 those, or do you want to address them one at a 3 time? 4 CHAIRMAN MORELOCK: I guess, as far 5 as -- do the board members agree that we need to 6 update the flowchart? Yes? No? Maybe so? 7 I agree with Mr. Baughman. We need 8 to take a look at it, and especially work with the 9 Boiler Unit and make sure this flow chart is -- 10 you know, let's make it what you want it to be 11 that supports the checklist. 12 So I'm in agreement with your 13 comment. I don't have a solution yet, but I do 14 agree with your comment. 15 MR. BAUGHMAN: So get advice from 16 the Boiler Unit and revise it accordingly with 17 their input? 18 CHAIRMAN MORELOCK: With their 19 input, as well as the board members', yes. 20 MR. BAUGHMAN: Harold or Jeff or 21 Chris or Sam, have you guys got anything on that? 22 MR. HENRY: I would agree with 23 that. I would agree with that, Dave. 24 MR. BOWERS: I'm the same way. I 25 agree with you-all, that we need to definitely</p>	<p style="text-align: right;">Page 119</p> <p>1 look at it and work with the Boiler Unit and see 2 is if we need to make any changes on this. 3 CHAIRMAN MORELOCK: So let me ask a 4 question of Mr. Bailey. Since this is a 5 discussion item and we are going to revise the 6 variance checklist and the guidelines, could the 7 Boiler Unit and the board members develop a draft, 8 take these comments and develop a draft, outside 9 of a meeting and then bring it to the meeting 10 either as a discussion item and eventually an 11 action item? Is that okay if we work on it? Or 12 do we have to work on it in an open meeting? 13 MR. BAILEY: I think very much like 14 when we redid the rules, you know, we circulated 15 drafts of proposed rule changes, language, and 16 that kind of thing and then brought the final 17 product to the Board for a discussion and public 18 vote. So I don't think there would be any problem 19 with doing that same thing here. 20 CHAIRMAN MORELOCK: Okay. I just 21 wanted to clarify that. So what we can do is 22 we'll talk about it and we'll take your comments. 23 We can circulate a red-line draft and kind of work 24 on it until we get it to a stage where we think 25 it's ready for a vote, a presentation and a vote.</p>
<p style="text-align: right;">Page 120</p> <p>1 So yeah, that's good. 2 Thank you, Mr. Bailey. 3 All right. Proceed, Mr. Baughman. 4 MR. BAUGHMAN: So under Section 1 5 of the introduction, Number 2, where it states a 6 computerized remote monitoring system is a minimum 7 requirement necessary to satisfy the degree of 8 safety desired, I was looking at changing to a 9 remote monitoring system is a minimum requirement. 10 And I guess it got down to the definition of 11 what's computerized. Why do we have to 12 necessarily specify a computerized system? Some 13 systems don't necessarily compute; they enunciate. 14 And by calling it "computerized," I just -- I 15 thought that was just part of the nomenclature 16 that we could change. Not that we even look at 17 that to any huge degree when we're going through 18 our hardware and analyzing it on, you know, does 19 this actually compute? 20 But I just thought that from the 21 standpoint of clarification that we put a remote 22 monitoring system is a minimum requirement 23 necessary to satisfy the degree of safety desired. 24 Again, point for discussion and so forth on it. 25 Next item? Or do you want to discuss</p>	<p style="text-align: right;">Page 121</p> <p>1 that? 2 CHAIRMAN MORELOCK: Does anybody 3 have a comment about taking the word 4 "computerized" out of Item 2 under the 5 introduction on the guide? 6 MR. BOWERS: This is Harold Bowers. 7 I agree with Dave. "Computerized" is 8 such a generic term. We really don't know what it 9 really entails, so I think it would be best to 10 take "computerized" out. I agree with that. 11 CHAIRMAN MORELOCK: Okay. 12 Mr. Henry? 13 MR. HENRY: I agree as well. I 14 think it's a good suggestion. 15 CHAIRMAN MORELOCK: All right. 16 Very good. All right. Next comment, 17 Mr. Baughman. 18 MR. BAUGHMAN: Under Section 2, a 19 system operating manual, Number 1, states any 20 changes must have prior review and acceptance by 21 the Tennessee Board of Boiler Rules. Putting down 22 that it's worth discussion on what constitutes 23 change, technical or editorial. And I know we 24 discussed this as we're going through. But it was 25 just changing that wording of "any changes" to</p>

<p style="text-align: right;">Page 122</p> <p>1 getting a better description of changes.</p> <p>2 How to word that, I hadn't come up</p> <p>3 with, but I just thought that there would be a --</p> <p>4 that's a question when it comes up, "any changes."</p> <p>5 And people say, well, what -- and we get that</p> <p>6 before the Board even. People will ask what, you</p> <p>7 know, technical or editorial, does that have to</p> <p>8 come up for review.</p> <p>9 CHAIRMAN MORELOCK: So what</p> <p>10 comments does the Board have?</p> <p>11 MR. HENRY: I guess I think it's a</p> <p>12 fair comment. I guess my only question would be</p> <p>13 who would be the ultimate arbiter on what's</p> <p>14 technical and what's editorial. If we were to say</p> <p>15 only technical issues had to come before the</p> <p>16 Board, somebody's got to make that decision as to</p> <p>17 whether a particular item is editorial or</p> <p>18 technical. And who would that be?</p> <p>19 CHAIRMAN MORELOCK: Well, the only</p> <p>20 thing you could do would be to add a section, like</p> <p>21 Mr. Toth has done for the variance manuals, to</p> <p>22 define what that is. You could put some</p> <p>23 definitions in it.</p> <p>24 MR. HENRY: Okay.</p> <p>25 MR. BAUGHMAN: And I guess my</p>	<p style="text-align: right;">Page 123</p> <p>1 intent on that, too, Mr. Henry, as I'm sure you</p> <p>2 understand, was when they've had, maybe, personnel</p> <p>3 changes, security guards change and so forth and</p> <p>4 what have you, isn't a big thing. The training</p> <p>5 is, but the technical being the hardware, the</p> <p>6 controllers, the burners, and so forth.</p> <p>7 And one of the things that we talked</p> <p>8 about in a previous meeting was these lateral</p> <p>9 changes that happen within the industry, as one</p> <p>10 programmer gets obsoleted out and new programmers</p> <p>11 get put in place, does that change the technical</p> <p>12 review?</p> <p>13 And so those are things that I wanted</p> <p>14 to just clarify. And I always like to look at</p> <p>15 technical stuff, even if it's a lateral change</p> <p>16 technically, I look at, typically, when there's a</p> <p>17 hardware change, there's differences in that piece</p> <p>18 of equipment that are enhanced. In other words,</p> <p>19 it may be enhanced password protection; it may be</p> <p>20 enhanced whatever capabilities. And I always like</p> <p>21 to review those.</p> <p>22 Whether that's actually necessary for</p> <p>23 the intent of our variance, I don't know, but I</p> <p>24 always like to look at technical changes</p> <p>25 personally.</p>
<p style="text-align: right;">Page 124</p> <p>1 CHAIRMAN MORELOCK: Well, technical</p> <p>2 changes are required to be reviewed by the Board.</p> <p>3 We just need to define -- maybe have a definition</p> <p>4 of what an editorial change would be versus a</p> <p>5 technical change.</p> <p>6 MR. BAUGHMAN: The next was under</p> <p>7 the Section 2, system operating manual Number 2,</p> <p>8 parenthesis, B, again, changing "computerized"</p> <p>9 from the description. I put along with that the</p> <p>10 dynamic self-checking. Dynamic self-checking is</p> <p>11 something some manufacturers use. I know we've</p> <p>12 talked about this in a previous meeting before,</p> <p>13 also. But it's a fancy term, but it's not</p> <p>14 necessarily a term that applies to every product</p> <p>15 that's out there. They don't always describe</p> <p>16 their products in that form.</p> <p>17 I think self-checking is good. In</p> <p>18 other words, it's got a means of being able to</p> <p>19 check the system to see if its electronics are</p> <p>20 operating properly and so forth. But I would</p> <p>21 delete the word "computerized" from the</p> <p>22 description. And changing the wording of "dynamic</p> <p>23 self-checking," I would probably suggest that we</p> <p>24 put in there that it's a self-checking system and</p> <p>25 not so much the word "dynamic," which I don't</p>	<p style="text-align: right;">Page 125</p> <p>1 exactly know what that brings to the table.</p> <p>2 What do you guys think?</p> <p>3 MR. BOWERS: Dave, I totally agree</p> <p>4 with you on that, both of those.</p> <p>5 MR. HENRY: I agree as well.</p> <p>6 CHAIRMAN MORELOCK: Yeah. I think</p> <p>7 a lot of that has come from the literature that --</p> <p>8 from the systems that people have purchased.</p> <p>9 That's where that term came from.</p> <p>10 MR. TOTH: Mr. Chairman, this is</p> <p>11 Marty Toth. Can I make a comment about that?</p> <p>12 CHAIRMAN MORELOCK: Yes.</p> <p>13 MR. TOTH: So we talked about this</p> <p>14 probably a couple of years ago where the term --</p> <p>15 you know, the term "dynamic" really comes from</p> <p>16 constant change. I mean, that's really the</p> <p>17 definition of dynamic. And as Mr. Chairman had</p> <p>18 mentioned, there are some manufacturers that</p> <p>19 utilize "dynamic" as a fancy word, I would say.</p> <p>20 But the self-checking -- and the reason why is</p> <p>21 because if it's self-checking, some could</p> <p>22 misinterpret that to say that it's -- that it can</p> <p>23 do it once every 15 minutes, something along that</p> <p>24 lines; where the term "dynamic" was always put in</p> <p>25 to monitor constant change. Okay?</p>

<p style="text-align: right;">Page 126</p> <p>1 I don't think it's necessary, myself. 2 I agree that it is something that was pulled 3 from -- you can look right at Honeywell. 4 Honeywell likes using the word "dynamic." FireEye 5 does not. Siemens does not. But they do use the 6 term "self-checking." And the understanding is 7 that these units have to be monitored constantly. 8 I don't think you need to put the word "dynamic" 9 in there. That's just my opinion. 10 MR. BAUGHMAN: And thank you for 11 that input, Mr. Toth. One of the things we look 12 at is some of these systems may not even -- we 13 talk about a FireEye E110; we talk about the 14 Honeywell 7800 series. But they may have a 15 FireEye Mec120 that doesn't -- it's all solid 16 state -- it's a solid state controller and not a 17 mechanical relay controller, but it doesn't 18 necessarily go through all the self-checks. It 19 goes through some, but not to the degree that a 20 CB780, 7800 series, so forth, would do. So, 21 again, I just thought that -- and I appreciate 22 your input in on that, because that word "dynamic" 23 was something that we never held anybody's feet to 24 the fire on. And I definitely think it should be 25 delineated. So --</p>	<p style="text-align: right;">Page 127</p> <p>1 MR. TOTH: And if I can add to 2 that. Really, the main concern for safety that we 3 need to have, in essence, with self-checking has 4 everything to do with flame scanning, ensuring 5 that we're monitoring the flame scanner of the 6 unit itself. And that's where, in some cases, you 7 have units that don't have self-checking 8 capability, but they may have a flame scanner that 9 is self-checking. So that's really where the 10 attention needs to be laid, is towards that flame 11 scanning and self-checking, and -- which it does. 12 MR. BAUGHMAN: Thank you. So are 13 we good with changing that, removing the 14 "computerized" and "dynamic self-checking" to 15 "self-checking"? 16 (Affirmative response.) 17 MR. BAUGHMAN: Moving on to the 18 next, which is under Item 36 of the checklist for 19 the attendants variance request. I just made a 20 note that I would clarify or change the wording of 21 Item B, the boiler water column to state "positive 22 check of the low-water cutoff." In addition, 23 adding an addition to the manual to include a 24 check of the water level in the boiler site glass 25 along with a check of the boiler flame and stack</p>
<p style="text-align: right;">Page 128</p> <p>1 temperature if the unit is fuel fired. So some 2 multiple things in there. Changing the wording of 3 the boiler water column to state "positive check 4 of the low water," I think that that's the intent 5 of what we had put in that checklist. We were 6 saying check the boiler water column, but it 7 didn't necessarily define what that check was. 8 And as Mr. Toth and probably the rest 9 of us know, that two leading causes of accidents 10 each and every year are low-water and operator 11 error, slash, boiler maintenance. So I wanted to 12 make sure that at some point in time that we were 13 specifying a positive check of the low-water 14 cutoff. 15 And then additionally, just adding 16 that check of the water level, the boiler water, 17 and the boiler sight glass level. And the purpose 18 of that is because boiler site glass valves get 19 plugged up, as the inspectors see, as any of us 20 are involved in this industry. And so if that's 21 part of our checks in the manual, then it gets 22 attended to or should get attended to. 23 And then just checking of the boiler 24 flame. As we know, too, and we deal with this a 25 lot in the service industry, we'll have a linkage</p>	<p style="text-align: right;">Page 129</p> <p>1 that slips on gas valve, air, or what have you, 2 and one of the easiest things to notice is the 3 flame pattern is different than what it was 4 before. And then as the flame changes, stack 5 temperature changes. As heat transfer decreases, 6 stack temperature increases. So being able to 7 have a check of the flame itself, if it's fuel 8 fired, and then possibly having a check of the 9 stack temperature itself, the flue gas 10 temperature, and being able to correlate those in 11 as part of the safety checks that's being looked 12 at as this process goes. 13 Just points for discussion, but I 14 wanted to put those out there. 15 MR. BOWERS: This is Harold Bowers. 16 Yes, I agree with you, perfect on the 17 water column. Yeah, it definitely needs to be a 18 low-water cutoff because it's -- people will look 19 at the water column and not see a whole lot, you 20 know, unless they actually checked the low-water 21 cutoff. Surprisingly, I've gone to new accounts 22 and people have never done a low-water cutoff 23 check. And so I think this, in the variance, is 24 definitely -- you know, we definitely need to 25 narrow it down to the low-water cutoff.</p>

<p style="text-align: right;">Page 130</p> <p>1 MR. TOTH: Mr. Chairman, Marty 2 Toth. Can I make a comment, please? 3 CHAIRMAN MORELOCK: Certainly. 4 MR. TOTH: I agree with 5 Mr. Baughman on this. A lot of the clients that I 6 do visit, they tend to ask, well, what do we need 7 in regards to our boiler log? And I always advise 8 that the more information the better, especially 9 for management purposes. 10 For safety purposes, I always call it 11 the trinity, which is your pressure, your 12 temperature, and your water level, is really the 13 three that I make sure, at a minimum, that they 14 have on a boiler log to include areas for testing, 15 such as your low-water cutoff. So I would agree 16 that if you put it in the guideline of those, 17 especially those three along with -- because 18 you've got to have that info, as an operator, and 19 you need to be able to record that and review it. 20 CHAIRMAN MORELOCK: Any other 21 comments? 22 (No verbal response.) 23 CHAIRMAN MORELOCK: Okay. I'm 24 making notes. So I guess my thoughts are, what 25 we'll do, we'll take this and develop a revision</p>	<p style="text-align: right;">Page 131</p> <p>1 document and send it out to let people review and 2 comment on it. 3 MR. BAUGHMAN: All right. I'll 4 move on to the next, which is just a note. We've 5 had questions about the wood-fired boilers, 6 Biomass boilers, and whether or not they fall 7 under the requirements for the 20-minute rule for 8 the application of a variance and so forth. They 9 operate somewhat differently, as far as their fuel 10 input goes. But to follow that up, the same 11 question, then, applies to Section 1 boilers that 12 are electric and that are above the 5 horsepower 13 criteria. 14 And so I just made a statement or put 15 something in there to have a statement that 16 states, in some form or fashion, any boilers that 17 meet the criteria of Section 1 power boilers that 18 are about 5 horse or 50 square foot of heat 19 absorbing surface. 20 And the next note to that was we've 21 had companies that have a Section 1 boiler that 22 it's stamped Section 1, but the criteria of the 23 boiler design, the relief valve openings and such 24 can accommodate 15 psi relief valves. The 25 controls can be changed to 15 psi. And so making</p>
<p style="text-align: right;">Page 132</p> <p>1 sure that we address if that boiler itself has a 2 15 psi relief valve and it's got sufficient 3 capacity to relieve what the boiler produces and 4 all the controls are 15 psi controls, can that 5 boiler, then, operate as a low-pressure boiler and 6 fall under the variance requirements or fall 7 outside of the variance requirements. 8 So we've had some that I've talked to 9 that said no, if that boiler is stamped Section 1, 10 no matter what the relief valves are, no matter 11 what the controls are, it's got to fall within the 12 variance. And I didn't see, necessarily, where 13 that had to be if it can't operate above 15 psi. 14 So that's up for discussion. 15 CHAIRMAN MORELOCK: Any questions 16 or comments? 17 MR. BOWERS: Yeah. I think that's 18 beyond the variance discussion. I think a lot of 19 that goes back to the chief on the -- or the rules 20 on -- a lot of times you'll go to the chief on 21 something that's been downgraded to a different 22 boiler. But I don't think that has really 23 anything to do with the variance part of this 24 discussion. Am I right or wrong, Sam? 25 MR. CHAPMAN: You're correct on</p>	<p style="text-align: right;">Page 133</p> <p>1 that. Normally, what we do is even though it has 2 an S-stamp on it and as long as they have the 3 relief valve and controls on it, they cannot 4 change the S-stamp. But it's operating as a 5 low-pressure boiler. The S-stamp, they cannot 6 change. 7 MR. BAUGHMAN: And so that's the 8 information that I wanted to get out to the 9 industry, to the inspectors, to anybody that's 10 consulting in the industry, to be able to be on 11 the same page, because there has been some that 12 had different views on it. And so I'm glad that 13 you, Chief, has that to be able to put forth out 14 in the industry that if the relief valve is set at 15 15 psi, if the boilers are -- the controls are 16 15 psi boilers, that boiler operates as a 17 low-pressure steam boiler even though it's 18 S-stamped. So I just wanted to make sure that we 19 had clarification on that within our guidelines or 20 however we're putting forth that information. 21 MR. TOTH: Mr. Chairman, I've got 22 some extra information for you on that BI. That 23 BI 05-22 specifically states Section 1 boilers 24 being used as heating boilers. And that kind of 25 gives -- that gives a lot of direction for what</p>

<p style="text-align: right;">Page 134</p> <p>1 you're asking about, which is that they are 2 treated as heating boilers. They are inspected as 3 heating boilers, and so on and so forth.</p> <p>4 MR. BAUGHMAN: That was 05-22? 5 MR. TOTH: Yes, sir. BI 05-22. 6 MR. O'GUIN: Dave, this is Chris. 7 I just emailed that to you. 8 MR. BAUGHMAN: Thank you. That's 9 great.</p> <p>10 Well, and that's why I wanted to make 11 sure that in our rules it says boilers that are 12 above 5 horsepower or 50 square foot of heat- 13 absorbing surface. The surface, I wanted to make 14 sure that that clarification was there, that even 15 though it's a Section 1 boiler and it's above 16 5 horse and above 50 square foot of heating 17 surface, that if it's operating within the 18 criteria of a low-pressure boiler, that was 19 attended to. And that's under this BI 05-22, from 20 what you're stating.</p> <p>21 MR. TOTH: Yes. 22 MR. BAUGHMAN: Great. Thank you so 23 much for that. I appreciate that. 24 All right. That's what I've got on 25 there, guys.</p>	<p style="text-align: right;">Page 135</p> <p>1 CHAIRMAN MORELOCK: Okay. Let me 2 flip back a page or two. Okay. So what I have 3 done is I sent an email to the Boiler Unit, and 4 it's in the page before you get to Dave's 5 comments. And so I can just read through what I 6 have captured and see if you agree.</p> <p>7 So under Section 1, introduction, 8 Item 3, which discusses that the variance grant 9 will expire three years after approval is granted 10 by the Board. And so that's brought some 11 conversation up as to what we want that date on 12 the manual to be. And so since we are usually 13 granting a tentative approval, based on a 14 successful site visit, we may want to rethink 15 those words to say a variance grant will expire 16 three years after approval is granted by the 17 Board. And then it's the responsibility of the 18 variance holder to request renewal of the variance 19 by written request to the Boiler Unit 180 days 20 prior to expiration.</p> <p>21 The request shall contain a statement 22 of any changes to the manual, date of last 23 inspection by the chief inspector or chief 24 inspector's designee. If there's no technical 25 changes to the manual, the Boiler Unit can review</p>
<p style="text-align: right;">Page 136</p> <p>1 and approve the renewal. If there are technical 2 changes to the manual, the Board will review and 3 approve revisions to the manual. And we also need 4 to update the flow chart for this process to show 5 the Boiler Unit can approve a variance renewal 6 without having a technical change.</p> <p>7 So that's one thing I'm proposing, is 8 that we update the flow chart but based on 9 conversations, do we want that manual to be dated 10 to coincide with the successful site visit by the 11 Boiler Unit? That way the variance holder has a 12 full three years for that renewal. Is that 13 correct, or not?</p> <p>14 MR. BOWERS: This is Harold Bowers. 15 I kind of agree with that because, I 16 mean, the Boiler Unit is doing a great job, but 17 there is a lot of variances out there, and these 18 guys are understaffed somewhat. So sometimes it 19 might take -- after the Board approves it, it 20 might take several months, up to six months, 21 before maybe they get out there and do that first 22 inspection. And maybe the date of the variance 23 should be from the time that Sam or one of his 24 inspectors does that first inspection, gets that 25 first inspection done. And that's when they issue</p>	<p style="text-align: right;">Page 137</p> <p>1 that -- I guess they finalize -- they put their 2 variance tag on there or whatever it is. So maybe 3 it should be from the time that Sam actually 4 approves -- because he does the final approval on 5 the variance anyhow with that inspection.</p> <p>6 Am I looking at it wrong, or what do 7 y'all think?</p> <p>8 CHAIRMAN MORELOCK: I think it 9 makes sense.</p> <p>10 MR. O'GUIN: This is Chris. 11 We can do the inspection and, you 12 know, request an updated cover letter for the 13 manual as far as the date, to match the inspection 14 date once it is approved.</p> <p>15 MR. BAUGHMAN: I think that that's 16 a great idea. For one, I think that getting your 17 input, Harold and Sam and Chris, as you guys go 18 out and look at these, does it not make it easier 19 for you? And it would make it easier for the 20 customer to know when their manual expires. I 21 mean that makes sense to me.</p> <p>22 MR. CHAPMAN: This is Sam Chapman, 23 Chief Inspector. 24 Yes, it does. Yes, it does, to a 25 point, you know. But also, that -- I'm going to</p>

<p style="text-align: right;">Page 138</p> <p>1 say customer is required -- you know, they can 2 renew it up to 180 days out. So take, for 3 instance, on this, they comment and they tell 4 them, hey, we've got a boiler variance. You say, 5 let me see your manual. Right there on the front 6 of the cover of it, it says November 2020. Do you 7 know in November of 2023, it's going to expire, 8 without a doubt. Well, it's best to get that 9 cover page changed to the same date that it got 10 inspected.</p> <p>11 MR. BAUGHMAN: You know, it may 12 also help to put the expiration date on it. They 13 might -- you've got the approved date, but then 14 adding the expiration date. So there might be -- 15 it might be helpful to put some kind of statement 16 on that cover letter, "Approved November 2020; 17 Expires November 2023. Resubmittable due by" -- 18 and I don't know if that is just a little bit more 19 information and typing, but it sure puts out some 20 good information.</p> <p>21 MR. CHAPMAN: Sam Chapman, Chief 22 Inspector again.</p> <p>23 When we sent out our letter, it's got 24 all that information on it. So we tell them 25 that -- you know, because we sent an email and we</p>	<p style="text-align: right;">Page 139</p> <p>1 sent it through the mail. That way they've got 2 two chances to get it. And so we tell them to 3 make a copy and stick it in the manual. That way 4 they know that, okay, it's going to expire at this 5 time unless they take that manual and throw it in 6 the corner somewhere and then they forget all 7 about it. But if they look at it every now and 8 then, it will show that it expires this date.</p> <p>9 Now, we're trying to make it to where 10 the only thing they have to do is look at it and 11 they can see exactly when it expires.</p> <p>12 MR. BOWERS: Now, as far as that 13 goes, you know, once they set a date, I don't 14 think that they should -- on the renewals, I think 15 they should keep their regular anniversary date as 16 before. That way -- that's how we do on these -- 17 most vessels and boilers. Unless we ask for a 18 definite change of the expiration date, once Sam 19 puts the original tag on that boiler or approve -- 20 do the final approval of that variance, it should 21 always keep that date from then on out. Just 22 whenever they do a renewal, still keep -- if they 23 do it six months early or six months late, 24 whenever Sam and them renew it, it should still 25 keep the original date that they originally</p>
<p style="text-align: right;">Page 140</p> <p>1 approved it. That way it will keep the State from 2 having to change those dates all the time.</p> <p>3 CHAIRMAN MORELOCK: Very good. Any 4 other comments?</p> <p>5 (No verbal response.)</p> <p>6 CHAIRMAN MORELOCK: All right. So 7 we'll move on to Section 2, system operating 8 manual. The first comment I had was paragraph 9 notation needs to be consistent. Currently, the 10 guide has a capital A, comma, a capital B, comma, 11 but then changes to C with no parentheses D and E.</p> <p>12 So it's just more of an editorial 13 update there, just to be consistent. And then I 14 also propose, to add to that, paragraphs F and G.</p> <p>15 We have a lot of detail on the 16 checklist for the remote monitor, but we don't 17 have a whole lot of checklist guidelines for the 18 boiler attendant personnel. And I don't have that 19 fleshed out. I'm just saying I'm proposing that 20 we add that to the checklist with similar 21 statements, like, you know, are they trained, who 22 does the training, do they have training records? 23 You know, do they have other duties other than the 24 boiler attendant, you know. And mirror the 25 questions that we ask of the remote monitor. Not</p>	<p style="text-align: right;">Page 141</p> <p>1 exactly, but similar categories. And that also 2 coincides with my proposed paragraph G, boiler 3 attendant, personnel duties and responsibilities.</p> <p>4 So I don't have it fleshed out. It's 5 just a general comment. If the Board thinks we 6 don't need it, that's fine. But if you like it, 7 we could start developing those paragraphs and 8 blocks on the checklist.</p> <p>9 MR. BAUGHMAN: I agree. I think 10 that's a -- I think it's something that's needed, 11 personally. Because we address it all the time, 12 don't we?</p> <p>13 CHAIRMAN MORELOCK: We do. We do. 14 And it, also, is doing the user a favor as they 15 develop their variance request and their variance 16 manual. It will give them a better road map so 17 that when they do get to the Boiler Unit and the 18 boiler board meeting, they may not have -- they 19 have fewer gaps in their manual if it's the first 20 time they've ever asked for a variance.</p> <p>21 So if you're okay with that, I'll 22 flesh that out a little bit.</p> <p>23 MR. HENRY: I agree as well.</p> <p>24 CHAIRMAN MORELOCK: Okay. So 25 moving on, some proposed revisions to the</p>

<p style="text-align: right;">Page 142</p> <p>1 attendant variance request, we've already talked 2 about the computerized monitoring system, but I 3 would like to add an item on the checklist that 4 states are the emergency stops, e-stops, hardwired 5 from the remote station to the boiler. So we can 6 just add clarity to that. What do you think? 7 Yes? No?</p> <p>8 MR. BOWERS: Yes. That's a good 9 idea. We've had questions before. I think we had 10 a -- we've had a person come before the Board a 11 while back, and we found out they weren't 12 hardwired; they were done through a computer 13 system. So I think that's definitely a good thing 14 to put in the checklist.</p> <p>15 CHAIRMAN MORELOCK: Okay.</p> <p>16 MR. BAUGHMAN: One of the things 17 that we ran into -- I don't know. This has been 18 some time back in one of our variance requests. 19 And it was over in West Tennessee at one of the 20 campuses. One boiler was so far away from the 21 remote monitoring station, and hardwiring the 22 e-stop back was going to cross roads, creeks, I 23 don't know. But there was quite a bit that was 24 involved. And he said it's not feasible. We 25 really can't do it. And what we said was, well,</p>	<p style="text-align: right;">Page 143</p> <p>1 you've got to. You know, you've got to have it 2 hardwired in.</p> <p>3 I was interested to know what the 4 outcome of that ever was. But there are systems, 5 too, that do both. In other words, you can 6 have -- and that's why we ask the question, is it 7 on your computer and is it hardwired. And it's 8 got to be hardwired.</p> <p>9 But there may be a time somewhere 10 along the way that that has to come up, that there 11 may be an instance where this thing is so far away 12 that it can't be hardwired. And we've looked at 13 the systems that are out there. They've got 14 systems now that can transmit two to three miles 15 and shut something off.</p> <p>16 So at any rate, what I was getting at 17 was technology is there that we mandate it to be 18 hardwired, but is there ever an instance that we 19 will bring up and discuss a case where it may be 20 not feasible, and then to be able to act upon it? 21 So I think our protocol is make it hardwired, but 22 I wanted to bring this up because I remembered 23 that in a case back, and I never knew what the 24 resolution was on it.</p> <p>25 MR. BOWERS: I think the resolution</p>
<p style="text-align: right;">Page 144</p> <p>1 on that one is they had to go by the 20-minute 2 rule. I remember that one. And that's what I was 3 discussing, that I don't know if there would ever 4 be a point in time that we really feel confident 5 of just having a boiler setting out there by its 6 lonely, and, you know, it could be a long way 7 away, four hours away, and life could happen. So 8 I don't know we'd ever -- I mean, there's very 9 good systems out there and we've got computer 10 systems, but I don't know if any of us feel 11 comfortable with it just sitting out there without 12 some, actually, hardwires going to it to measure.</p> <p>13 MR. BAUGHMAN: Well, and I always 14 thought that there would be a different way if 15 they couldn't put another remote station in 16 specifically for that boiler where there was other 17 personnel, besides wiring all the way back to 18 their main occupied setup. But there again, it 19 wasn't my place to go in and get involved, and 20 they weren't one of our customers, so I didn't 21 expand upon it. But at any rate, the statement 22 kind of got off, but the statement about being 23 hardwired in needs to be there.</p> <p>24 CHAIRMAN MORELOCK: Any other 25 comments?</p>	<p style="text-align: right;">Page 145</p> <p>1 MR. O'GUIN: Chairman, I did want 2 to add one of the e-stops. I know you were kind 3 of hitting that topic.</p> <p>4 CHAIRMAN MORELOCK: Okay.</p> <p>5 MR. O'GUIN: Does the emergency 6 stop shut down all the boilers in the boiler room? 7 That would kind of give us the answer, you know, 8 for the interpretation, last meeting, as far as 9 how many e-stops is in the boiler room, however we 10 want to word that in the --</p> <p>11 CHAIRMAN MORELOCK: So do any of 12 the e-stops shut down all the boilers?</p> <p>13 MR. O'GUIN: Let me go back to my 14 notes here. I put: Does the emergency stop shut 15 down all boilers in the bottom room? So that 16 would indicate one emergency stop.</p> <p>17 MR. CHAPMAN: At the egress door.</p> <p>18 MR. TOTH: Mr. Chairman, this is 19 Marty.</p> <p>20 Would it be helpful if you define 21 e-stops as remote versus local? That's usually 22 how I communicate. Remote e-stop is the one 23 that's going to be obviously in the remote 24 attendant station or the remote station. The 25 local e-stop is there at the boiler room. And</p>

<p style="text-align: right;">Page 146</p> <p>1 they -- obviously, they are handled differently.</p> <p>2 CHAIRMAN MORELOCK: Yeah, I think</p> <p>3 it's possible. Of course, we've had that</p> <p>4 conversation and, like, with our position at</p> <p>5 Eastman, we don't want to shut all of our boilers</p> <p>6 down at the same time. We've got three power</p> <p>7 houses. And so we're not opposed --</p> <p>8 MR. TOTH: But you handle --</p> <p>9 CHAIRMAN MORELOCK: We're not</p> <p>10 opposed --</p> <p>11 MR. TOTH: You handled that through</p> <p>12 interpretation, though. You handle local e-stops</p> <p>13 through the interpretation from --</p> <p>14 CHAIRMAN MORELOCK: Yes. Yes.</p> <p>15 MR. TOTH: This is concerning</p> <p>16 remote stations and remote e-stops.</p> <p>17 CHAIRMAN MORELOCK: Right.</p> <p>18 MR. TOTH: Can you put in there</p> <p>19 guidelines indicating local e-stops if you wanted</p> <p>20 to, like I usually do in our site maps? I will</p> <p>21 show where local e-stops are. But it's really a</p> <p>22 different -- a bird of a different color.</p> <p>23 CHAIRMAN MORELOCK: Yeah.</p> <p>24 MR. BAUGHMAN: That local e-stop</p> <p>25 may not necessarily be at the boiler room either.</p>	<p style="text-align: right;">Page 147</p> <p>1 It may be somewhere else, but it's that definition</p> <p>2 of what's remote and what's local. And I was</p> <p>3 reading back on the minutes the other day about</p> <p>4 this discussion on the e-stops, the multiple -- it</p> <p>5 was quite a discussion that was there, and Brian's</p> <p>6 input in on it. And what it came down to was it</p> <p>7 wasn't a one size fits all. And there's still</p> <p>8 kind of discussion to be had within that end of</p> <p>9 it.</p> <p>10 Part of it was, too, I was reading</p> <p>11 about the e-stop that you guys activated at the</p> <p>12 remote station, and it didn't shut the boiler off.</p> <p>13 They were able to still start the boiler up with</p> <p>14 the e-stop activated at the remote station, and</p> <p>15 the e-stop was bad. So there was a lot of good</p> <p>16 discussion centered around that e-stop stuff. I</p> <p>17 don't know if we've really gotten a clear</p> <p>18 definition on it, but I was reading Mr. Fox's</p> <p>19 input in on it, and I thought that was an</p> <p>20 interesting comment, so...</p> <p>21 CHAIRMAN MORELOCK: Well, and I</p> <p>22 think the process of updating the checklist will</p> <p>23 probably be an avenue for us to improve it. You</p> <p>24 know?</p> <p>25 MR. BAUGHMAN: I do. Just as a --</p>
<p style="text-align: right;">Page 148</p> <p>1 well, I'll wait until you're done with your</p> <p>2 comments to add something else I've been wanting</p> <p>3 to address on, too, that I didn't address in</p> <p>4 writing.</p> <p>5 CHAIRMAN MORELOCK: Okay. Do you</p> <p>6 want to do it now while it's fresh on your mind</p> <p>7 and we'll get back to my comments?</p> <p>8 MR. BAUGHMAN: Yeah. Thank you.</p> <p>9 Well, so you know how my mind works. Thanks.</p> <p>10 CHAIRMAN MORELOCK: I do. Mine</p> <p>11 works the same way.</p> <p>12 MR. BAUGHMAN: It had to do with</p> <p>13 the addition of carbon monoxide. And since we've</p> <p>14 been talking about it and since it's a requirement</p> <p>15 now for the boiler room to have a CO alarm, and</p> <p>16 being that carbon monoxide is such an important</p> <p>17 aspect of what it is that we're working with, if</p> <p>18 that boiler room should happen to have CO in it,</p> <p>19 that's a bad thing for the operators. And we've</p> <p>20 dealt with that in different installations over</p> <p>21 the years. But I wanted to discuss the addition</p> <p>22 of carbon monoxide alarms being tied in as one of</p> <p>23 the alarm mechanisms to the remote variance.</p> <p>24 CHAIRMAN MORELOCK: Okay.</p> <p>25 MR. BAUGHMAN: Anybody else want to</p>	<p style="text-align: right;">Page 149</p> <p>1 add their input in on that?</p> <p>2 MR. TOTH: Mr. Chairman, Dave, I</p> <p>3 think that's -- monitoring, that's great. I think</p> <p>4 it's going to be very difficult on some of the</p> <p>5 controls to be able to tie all of that in on just</p> <p>6 the way that they're set up. If it is a separate</p> <p>7 line, a separate alarm, maybe, but I just don't</p> <p>8 really see -- unless they have a total integrated</p> <p>9 control system that has that ability or -- I just</p> <p>10 don't see that being a possibly or realistic, to</p> <p>11 be honest with you.</p> <p>12 MR. BAUGHMAN: Well --</p> <p>13 MR. TOTH: And I think it's a good</p> <p>14 idea to have a monitor. I think it's a good idea</p> <p>15 to have that. But is your expectation that if a</p> <p>16 CO2 alarm goes off, that they're to trip the</p> <p>17 boiler? And how do they know which boiler is in</p> <p>18 effect? Is it kind of a situation --</p> <p>19 MR. BAUGHMAN: Sure. So as you may</p> <p>20 or may not know, the State of Texas implemented</p> <p>21 into their rules, that went into effect September</p> <p>22 of this year, that the CO alarm be tied into the</p> <p>23 boiler itself, that it shut the boiler off. And</p> <p>24 so they've taken that level of safety up to a</p> <p>25 higher degree. And tying it into an alarm --</p>

<p style="text-align: right;">Page 150</p> <p>1 tying into an alarm circuit in just about any kind 2 of system isn't a difficult proposition where it's 3 alarming back to the remote monitoring station or 4 what have you. But to know that there are states 5 that are understanding the significance of what 6 carbon monoxide, CO, poisoning brings to the 7 equation. And so that's where I don't want to 8 be -- I don't want to be reactive. I want to be 9 proactive, and I want our state to be on the 10 leading side of what we're doing as far as our 11 monitoring and our safety and so forth. So we 12 wouldn't actually be the first out there by any 13 means, but that's why I wanted to bring this up 14 for discussion so that we could be able to revise 15 as we felt was in the best interest of public 16 safety.</p> <p>17 MR. TOTH: Well, now that you 18 mention it, I guess there could be a way if the 19 carbon monoxide monitor was hardwired such as you 20 would with a low-gas pressure switch or even a 21 low-water control. You could, in essence, tie 22 that into your limits and even into your alarm 23 circuit. That could work. It's just the concern 24 would be what would be the identification at the 25 boiler for that alarm once they find it.</p>	<p style="text-align: right;">Page 151</p> <p>1 But, you know, hey, I'm comfortable 2 with whatever the Board decides to do. It's just 3 moving toward, I would just ask that you be aware 4 of -- are existing variances going to be 5 grandfathered? Are you going to require for them 6 to update and tie those in? I think there's a lot 7 to it.</p> <p>8 Rob Trout and I, we're really good 9 friends, the Chief in Texas. And I know that his 10 heart is in the right place with all that. And I 11 do see the ability to cause the boiler to go into 12 alarm. I know Texas doesn't do variances like we 13 do, in the case of remote attendants. So I think 14 that's a little bit of a wrench that you have to 15 deal with it, but it might be a really good idea.</p> <p>16 MR. BAUGHMAN: And we've looked at 17 the wiring of it. And as you know, not all alarms 18 enunciate as to what they are. Industrial 19 Combustion wires their air flow switch in through 20 the gas pressure switches. And so it enunciates 21 as a -- if a gas switch trips, it enunciates as an 22 air flow problem, when it's not.</p> <p>23 So not necessarily -- and the CO 24 alarm is twofold with Texas. It's got an audible 25 alarm and it's also hardwired, so the problem that</p>
<p style="text-align: right;">Page 152</p> <p>1 I've got with that particular code is, is that in 2 a boiler room, you've got other devices that may 3 be producing the CO. In other words, you might 4 have a ceiling heater. You might have a gas-fired 5 water heater that actually is producing the carbon 6 monoxide, trips the alarm and shuts the boiler 7 off, which is not producing the carbon monoxide.</p> <p>8 So there's variables to this, but I 9 think that you look at what's the -- good for the 10 majority. And I know that carbon monoxide is one 11 of the major issues that we deal with in our 12 industry. We deal with them on almost a weekly 13 basis. And so I wanted to make sure that we 14 brought that up. We're on the forefront of adding 15 this in to enhance the safety. And that's what 16 we're here for. So that's my input in on it.</p> <p>17 MR. O'GUIN: This is Chris.</p> <p>18 If we look at that, we would have to 19 look at hardwiring the CO alarms, which the 20 interpretation, if I'm not mistaken, was 21 battery-operated would suffice that -- that code 22 in Tennessee. So we would have to revise that 23 interpretation, I would believe.</p> <p>24 MR. BAUGHMAN: And I agree. I 25 looked at that and tried to figure out how to mold</p>	<p style="text-align: right;">Page 153</p> <p>1 it because the -- also, they've got requirements 2 on how often that CO alarm has to be checked and 3 calibrated. You can't just put one up and just 4 leave it. It's got to have its own checks along 5 the way.</p> <p>6 So there's a lot that goes in it with 7 this carbon monoxide issue, but it's getting more 8 traction because of the amount of deaths and 9 injuries that are happening because of it, so -- 10 but there again, it's worth discussion.</p> <p>11 MR. BOWERS: This is Harold Bowers.</p> <p>12 Well, the only problem I have with it 13 is, you know, we just now had made an 14 interpretation on that. Should we make this 15 stricter, you know, people who are just going on 16 the 20-minute rule don't have to have it hardwired 17 into anything. So you're going to say, well, if 18 you get a variance, yeah, you've got to have it 19 hardwired in, where if you have a 20-minute rule, 20 it don't have to be hardwired in. Do we have to 21 go back and change the whole rules just because 22 another state changed its rules?</p> <p>23 I think we don't want to make -- we 24 want to make this where everybody can comply 25 without going in there and costing a lot of our</p>

<p style="text-align: right;">Page 154</p> <p>1 state citizens a bunch of money. And we don't 2 look at -- we don't look at home hot water 3 heaters, gas hot water heaters. You know, it can 4 be a never-ending thing on how to comply. I think 5 we went through the interpretations. I think we 6 should stick with that for now and see how that 7 works. Down the road, we can address it again.</p> <p>8 MR. BAUGHMAN: I agree. And I 9 think that sometimes we're a little ahead of 10 ourselves in interpretations. When we've got a 11 new code that comes out with NBIC putting in place 12 the carbon monoxide monitoring and alarms, and 13 understanding that that was going to be 14 revamped -- it was a somewhat vague putting out of 15 this information on the CO alarms. It didn't 16 necessarily specify where they get installed, how 17 far up off the ground, the PPMs, the calibrations 18 and so forth. So it was just this mandate on 19 you've got to have these alarms. And then we put 20 that into place as far as interpretation. That's 21 just the way the industry happens, too.</p> <p>22 But I think you're right in regards 23 to we at least look at it to start being proactive 24 on how we move forward. Because at some point, it 25 will. And it's such a safety concern that it's</p>	<p style="text-align: right;">Page 155</p> <p>1 got to be addressed. We don't want to get in the 2 pocketbooks of folks, but, you know e-stops got in 3 the pocketbooks. So, you know, what we're doing 4 is we're working in the interest of public safety, 5 and we want to make it easy on the customers. And 6 so there's these mechanisms of saying, okay, 7 you've got a year or two years or three years to 8 bring this under compliance so that you can at 9 least put it into the budget and know it's coming 10 up. But at any rate, it's worth good discussion 11 on -- thanks, Harold, very much.</p> <p>12 CHAIRMAN MORELOCK: Very good. Any 13 other comments on that?</p> <p>14 (No verbal response.)</p> <p>15 CHAIRMAN MORELOCK: All right. 16 We'll go back to -- the last comment I had on my 17 list was, again, I want to expand the boiler 18 attendant personnel checklist items. I don't have 19 a number to put with it yet, but just to, 20 basically, mirror what we do for the remote 21 attendant is to add some checklist items 22 concerning what are the minimum qualifications for 23 a boiler attendant personnel, what training do the 24 boiler attendant personnel receive; who 25 administers that training; what procedures are in</p>
<p style="text-align: right;">Page 156</p> <p>1 place for annual training for both experienced and 2 new personnel; do the boiler attendant personnel 3 have other duties; does the manual contain a 4 training log that contains a name, date, 5 instructor's signature and remarks; does the 6 manual include boiler attendants' other 7 responsibilities; and does the manual include 8 boiler attendant duties for each shift on a 9 day-to-day basis.</p> <p>10 So again, just to balance out the 11 responsibilities for remote and boiler attendants, 12 I think it would be helpful to add those to the 13 checklist.</p> <p>14 And that's all I had as far as 15 comments.</p> <p>16 MR. BAUGHMAN: I agree with those 17 comments, Brian.</p> <p>18 CHAIRMAN MORELOCK: Thank you.</p> <p>19 MR. HENRY: I agree as well.</p> <p>20 CHAIRMAN MORELOCK: Okay. So are 21 there any other comments that we want to get put 22 into the minutes of this meeting?</p> <p>23 Mr. O'Guin, did you have some items 24 to add or have we touched on them?</p> <p>25 MR. O'GUIN: I think you have</p>	<p style="text-align: right;">Page 157</p> <p>1 touched on all of them, Chairman.</p> <p>2 CHAIRMAN MORELOCK: Okay. Great. 3 So are there any other comments for 4 now?</p> <p>5 (No verbal response.)</p> <p>6 CHAIRMAN MORELOCK: What I'll do is 7 work with Carlene and get an editable copy of 8 these documents, and I'll take the comments from 9 today and I'll start building a revision of that. 10 And then based on what Mr. Bailey has given to us 11 as guidance, I'll send a draft copy to the board 12 members and the Boiler Unit where we can get some 13 comments and revisions going, and then try to have 14 a working draft at the March 2021 meeting as a 15 discussion item.</p> <p>16 MR. O'GUIN: This is Chris. 17 And, Chairman, you do have ECS's 18 interpretations, so we can be sure we get those 19 answered in the checklist, correct?</p> <p>20 CHAIRMAN MORELOCK: Remind me of 21 those. I don't know. I'm not --</p> <p>22 MR. O'GUIN: Well, the two that 23 Marty read off at the beginning.</p> <p>24 CHAIRMAN MORELOCK: Yes, yes, yes, 25 yes, yes, yes.</p>

<p style="text-align: right;">Page 158</p> <p>1 MR. O'GUIN: There was another page 2 that was with it.</p> <p>3 CHAIRMAN MORELOCK: Yeah, I've got 4 those. I thought you thought -- were there 5 other --</p> <p>6 MR. O'GUIN: No, sir. I just 7 wanted to be sure everybody was -- I'll just try 8 to capture those in the checklist while we're 9 revising it.</p> <p>10 CHAIRMAN MORELOCK: Yeah, I've got 11 those from today. Yes, I do have those.</p> <p>12 MR. O'GUIN: Okay.</p> <p>13 CHAIRMAN MORELOCK: I thought you 14 meant some from previous meetings.</p> <p>15 MR. O'GUIN: No, sir. Sorry for 16 the confusion.</p> <p>17 CHAIRMAN MORELOCK: Okay. No 18 problem.</p> <p>19 MR. TOTH: Thanks, Chris. 20 Mr. Chairman, I have to leave the 21 meeting.</p> <p>22 Great job, everybody. But if 23 anybody --</p> <p>24 Chris, if you need anything more from 25 me, or Mr. Chairman, if you need anything, just</p>	<p style="text-align: right;">Page 159</p> <p>1 let me know. But great job. 2 Merry Christmas, everybody.</p> <p>3 CHAIRMAN MORELOCK: Happy New Year, 4 Marty.</p> <p>5 Okay. Let's see. That takes care of 6 the variance guideline and checklist revisions.</p> <p>7 Our next discussion item is for 8 Mr. Baughman for Tennessee Code Annotated 9 68-122-110, inspection of boilers. Paragraph (a)2 10 states, "Low-pressure heating boilers shall be 11 inspected both internally and externally 12 biennially where construction will permit."</p> <p>13 MR. BAUGHMAN: I'll be glad to go 14 through this, but being 1:00 Central, 15 2:00 Eastern, to me, this is worthy of some good 16 input from those that are here, both Harold and 17 Sam and Chris. I know Marty has got input in on 18 it also. But it's something that I think is 19 worthy of discussion, moving to the March 10th 20 meeting, if that's okay, tabling this.</p> <p>21 CHAIRMAN MORELOCK: Okay.</p> <p>22 MR. BAUGHMAN: Unless anybody would 23 like to address it right on this end of it, which 24 I'm glad to report on, but being passionate on 25 this topic, I think it's something that I would</p>
<p style="text-align: right;">Page 160</p> <p>1 like to have a bit of time to be able to present.</p> <p>2 CHAIRMAN MORELOCK: Okay. We'll 3 make sure that we put this at the top of the 4 discussion item list at the March meeting. How is 5 that?</p> <p>6 MR. BAUGHMAN: That works real well 7 if that -- unless something else preempts it. But 8 I'm good with that. Thanks. Thank you.</p> <p>9 CHAIRMAN MORELOCK: Thank you. 10 Okay I'm making a quick note here.</p> <p>11 All right. That takes us to Item 9, 12 announcement of the next meeting. And so the -- 13 unless the Board decides otherwise, which we have, 14 we're going to have a meeting tentatively 15 scheduled for January 20th to handle the LG item. 16 But our next regularly scheduled Board of Boiler 17 Rules meeting will be at 9:00 a.m. on March the 18 10th, 2021. And I'm an optimist, so I would love 19 to travel to Nashville to meet you-all face to 20 face. But we'll just have to see how vaccines go 21 and all that good stuff, and we'll go from there. 22 But if it's not face to face, we'll certainly do 23 it electronically on that same day. And so, 24 just -- that's what we'll do.</p> <p>25 Again, I want to thank everybody. I</p>	<p style="text-align: right;">Page 161</p> <p>1 know it takes a big chunk out of your workweek to 2 have these meetings but I think they're extremely 3 productive and we get a lot done, certainly, to 4 protect public safety. And it's enjoyable. I 5 enjoy the conversations. I enjoy the debates. 6 It's a Proverbs 27:17, as iron sharpens iron, one 7 person sharpens another. So I enjoy the 8 conversations.</p> <p>9 Does anyone want to say anything 10 before I move to adjourn?</p> <p>11 MR. BAUGHMAN: I want to make a 12 comment. I see Cassandra over there wearing it 13 out. You guys do such a great job of being able 14 to put down into the minutes what all we were 15 discussing. And to be able to decipher what we're 16 saying, to be able to look and figure out who all 17 is doing -- what they're doing and saying, I'm 18 just -- I've always been in amazement, but I just 19 want to let you know how much you're appreciated 20 in the job that you do to bring this information 21 so that we can review it when we need to. So I 22 just wanted to say thank you.</p> <p>23 THE REPORTER: You're more than 24 welcome. Thank you. I enjoy being here.</p> <p>25 CHAIRMAN MORELOCK: Anybody else</p>

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1 have any words before I adjourn?

2 MR. CHAPMAN: Well, I just wish for

3 everybody to have a Merry Christmas and Happy New

4 Year.

5 MR. BOWERS: Same to you, Sam.

6 MR. HENRY: I second that.

7 MR. BAUGHMAN: I miss everybody. I

8 miss the physical presence of everybody. But

9 know, too, that I actually have everybody in a

10 daily prayer list, and I think that that's

11 important for me, personally, is to specifically

12 and passionately pray for each other. And I know

13 that might not be the protocol in a state meeting

14 to put out, but I wanted to let you guys know that

15 this is a great group of human beings, and it goes

16 beyond the work. This is what we do for a living

17 but it's not what's most important in our lives.

18 And this is a great group of people to fellowship

19 with.

20 CHAIRMAN MORELOCK: I agree. Well,

21 I also wish everyone a Merry Christmas and a Happy

22 New Year, and I do thank you for the great year

23 we've had with the meetings, especially with all

24 the new technology that we've learned and been

25 successful with.

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1 able to make the meeting, if you could let us

2 know, because, you know, with us being down a

3 person, a quorum is iffy. It's difficult to get.

4 So if you know you're not going to make a meeting,

5 if you don't mind letting me know, then we can do

6 something or make sure we do have a quorum.

7 CHAIRMAN MORELOCK: Yes.

8 MS. BENNETT: Thank you.

9 CHAIRMAN MORELOCK: Thank you.

10 Well, with that said, Item 10 is

11 adjournment. I hope you-all have a great week,

12 and again, Merry Christmas, Happy New Year. If

13 you need anything, don't hesitate to call me.

14 Maybe we'll figure out some way to use Zoom to do

15 some fun things and just have a conversation.

16 MS. GEORGE: Thanks, everyone.

17 Merry Christmas.

18 CHAIRMAN MORELOCK: Thank you-all.

19

20 END OF THE PROCEEDINGS.

21

22

23

24

25

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1 And a shout out to Cassandra for

2 being able to understand East Tennessee English.

3 She should get an honorary Ph.D. for that in

4 linguistics and all that stuff.

5 MS. GEORGE: For sure. I've been

6 in her position and it's not an easy one.

7 CHAIRMAN MORELOCK: It's not. But,

8 you know, working with Sam and the Boiler Unit and

9 everybody there, it's just a privilege.

10 And Tom, we're excited to have you

11 come on board with us.

12 And so in that vein, you know, one

13 thing that the Board does need is please put your

14 thinking hats on and be much in thought of some

15 possible candidates to replace Mr. Fox's position

16 on the Board. We do need to provide some names to

17 the State and get that process going. It's a very

18 important role, and we need somebody in that role

19 to balance the Board out and bring great

20 information to the table for us.

21 MR. BAUGHMAN: I have been working

22 on that, personally.

23 CHAIRMAN MORELOCK: Good.

24 MS. BENNETT: And with that said,

25 Mr. Chairman, if one of the board members are not

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C E R T I F I C A T E

2 STATE OF TENNESSEE)

3 COUNTY OF WILLIAMSON)

4 I, Cassandra M. Beiling, a Notary Public

5 in the State of Tennessee, do hereby certify:

6

7 That the within is a true and accurate

8 transcript of the proceedings taken via Zoom

9 videoconference before the Board and the Chief

10 Inspector or the Chief Inspector's Designee,

11 Tennessee Department of Labor & Workforce

12 Development, Division of Workplace Regulations and

13 Compliance, Boiler Unit, on the 16th day of

14 December, 2020.

15 I further certify that I am not related to

16 any of the parties to this action, by blood or

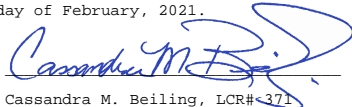
17 marriage, and that I am in no way interested in


18 the outcome of this matter.

19

20 IN WITNESS WHEREOF, I have hereunto set my

21 hand this 16th day of February, 2021.

22 

23 

24 Cassandra M. Beiling, LCR#-371

25 Notary Public State at Large

My commission expires: 3/10/2024

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