

FOR THE CASE OF
Board of Boiler Rules

TRANSCRIPT OF
Board of Boiler

March 4, 2015

Stone & George

COURT REPORTING

2020 Fieldstone Pkwy

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

QUARTERLY MEETING OF THE
STATE OF TENNESSEE
BOARD OF BOILER RULES

March 4, 2015

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APPEARANCES:

Brian R. Morelock, Chairman
Owner-User Representative
235 Picadilly Lane
Gray, Tennessee 37615

Eugene Robinson, Board Member
Insurance Representative
1659 Eagle Trace Drive
Mount Juliet, Tennessee 37122

Dr. Domenic Canonico, Board Member
Boiler Manufacturer
1423 East Brow Road
Signal Mountain, Tennessee 37377

David W. Baughman, Board Member
Owner/User Representative
Allied Boiler & Supply, Inc.
4006 River Lane
Milton, Tennessee 37118

Dr. Glen Johnson, Board Member

Sam Chapman, Assistant Chief Boiler Inspector

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

Mark Finks, Esq.
Assistant Administrator, State of Tennessee

Dan Bailey, Esq.
Legal Counsel, State of Tennessee

Carlene Bennett
Board Secretary, State of Tennessee

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A G E N D A

- I. Call to Order
- II. Introductions and Announcements
- III. Adoption of the Agenda
- IV. Assistant Chief's Report
- V. Old Business (none)
- VI. New Business: 15-01, 15-02, 15-03, 15-04,
15-05, 15-06, 15-07, 15-08
- VII. Open Discussion Items
 - * Reorganization of Rule 0800-03-03 - Moving
Code Requirements into Tennessee Rules/
Realigning State rules for ease of use by
Installers and Owners
 - * Fall Conference Update
 - * Boiler Operator Training and
Certification - David Baughman

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VIII. Rule cases & interpretations - There are no rule cases and interpretations.

IX. The next Board of Boiler Rules Meeting is scheduled for 9:00 a.m. (CT), Wednesday, June 10, 2015, at the Department of Labor & Workforce Development office building located at 220 French Landing Drive, Nashville, TN.

X. Adjournment

* * * * *

1
2 CHAIRMAN MORELOCK: Good morning,
3 everybody. Did everybody brave the weather to get
4 here safe and sound, I hope? And we've got even
5 more fun weather coming this afternoon, so we'll
6 try to be very mindful of everybody's time today.

7 I want to welcome you to the March
8 Tennessee Board of Boiler Rules meeting, and I
9 want to call the meeting to order now. I've got
10 9:04. We do have a quorum. Dr. Canonico is on
11 his way, so he'll join the meeting as soon as he
12 can.

13 There are agendas on the back of the
14 table. If you would like one, please make
15 yourself available to get one of those. I would
16 ask that your cell phones be silenced. You can
17 keep them on vibrate, but silence your cell phones
18 during the meeting.

19 And our first item here is we're
20 going to start with some introductions. And
21 before I do that, I certainly want to welcome
22 Dr. Glen Johnson back to the board. He was a
23 board member in the past, and he has rejoined us.
24 And we're tickled to have him back with us today,
25 so we want to welcome him.

1 And so welcome, Dr. Johnson.

2 DR. JOHNSON: Thank you.

3 CHAIRMAN MORELOCK: We'll start with
4 you.

5 THE REPORTER: Cassandra Beiling,
6 Stone & George Court Reporting.

7 MS. BENNETT: Carlene Bennett, Board
8 Secretary.

9 MR. CHAPMAN: Sam Chapman, Assistant
10 Chief.

11 MR. ROBINSON: Eugene Robinson,
12 Tennessee Boiler Board.

13 CHAIRMAN MORELOCK: Brian Morelock
14 representing unfired pressure vessel owner-users.

15 MR. BAUGHMAN: I'm Dave Baughman,
16 board member.

17 DR. JOHNSON: Glen Johnson,
18 representing mechanical engineers.

19 MS. JEFFERSON: Administrator.

20 MR. FINKS: Mark Finks, Assistant
21 Administrator.

22 MR. BAILEY: Dan Bailey. I'm an
23 attorney for the Department of Labor.

24 MR. MORRISON: Steve Morrison. I'm
25 the power and recovery manager for Domtar Paper

1 Company.

2 MR. FISH: Gary Fish. I'm with
3 Steve, with Nalco Chemical.

4 THE REPORTER: I'm sorry. I can't
5 hear.

6 CHAIRMAN MORELOCK: Y'all need to
7 speak up so Cassandra can hear you, please.

8 MS. RHONE: Deborah Rhone, Boiler
9 Office Supervisor.

10 MR. PERRY: Steve Perry, soon-to-be
11 boiler inspector.

12 MR. HOLT: Tim Holt, boiler
13 inspector.

14 MR. GLADSON: Jeff Gladson, Eastman
15 Chemical.

16 MR. ROBERTS: Randy Roberts, Eastman
17 Chemical.

18 MR. LAYNE: Rob Layne, Eastman
19 Chemical.

20 MR. GROSS: Jeremy Gross, Valero
21 Memphis Refinery.

22 MR. ENG: Richard Eng, Wacker
23 Chemical.

24 MR. KASTENBERGER: Thomas
25 Kastenberger, Wacker Chemical.

1 MS. DOWER: Jan Dower, Commissioner
2 Phillips' office.

3 MR. HUBBARD: Rodney Hubbard, MedFac
4 Engineering.

5 MR. HARRIS: Randy Harris, U.S.
6 Nitrogen.

7 MR. CHARLES: Dylan Charles, U.S.
8 Nitrogen.

9 MR. MOON: Martin Moon, U.S.
10 Nitrogen.

11 MR. NEVILLE: James Neville, Neville
12 Engineering.

13 MR. FLOWERS: David Flowers,
14 Combustion and Control Solutions.

15 MR. TRIPP: Allen Tripp, Combustion
16 and Control Solutions.

17 CHAIRMAN MORELOCK: Again, welcome
18 everybody.

19 As far as announcements go, we just
20 want to make you aware, in the event of an
21 emergency or a natural disaster, security
22 personnel in the building will either direct us to
23 a safe location in the building or direct us to
24 the Rosa Parks side of the building for a safe
25 location. And please be careful today out in the

1 weather, as we do have some inclement weather
2 today. So I just wanted to bring that to your
3 attention.

4 Just a point of information, as we go
5 through the agenda, we'll ask representatives to
6 come to the table here and again state your name
7 and position, and then present your item, and then
8 we'll discuss the item and vote on it. So just be
9 in mind of that.

10 Our next item, unless there's any
11 other announcements -- are there any other
12 announcements?

13 (No verbal response.)

14 CHAIRMAN MORELOCK: Okay. Our next
15 item is the adoption of the agenda which you have
16 before you. And so do I have a motion to adopt
17 the agenda?

18 MR. ROBINSON: So made.

19 CHAIRMAN MORELOCK: Do I have a
20 second?

21 MR. BAUGHMAN: Second.

22 CHAIRMAN MORELOCK: Okay. Are there
23 any changes, additions, deletions to the agenda?

24 (No verbal response.)

25 CHAIRMAN MORELOCK: Okay. Hearing

1 none, I'm going to call the question. All in
2 favor say, "Aye."

3 (Affirmative response.)

4 CHAIRMAN MORELOCK: Opposed?

5 (No verbal response.)

6 CHAIRMAN MORELOCK: Abstentions, not
7 voting?

8 (No verbal response.)

9 CHAIRMAN MORELOCK: We have an
10 agenda.

11 Next item on the agenda is the
12 assistant chief's report, so Mr. Chapman, I'll
13 turn it over to you.

14 MR. CHAPMAN: Thank you. The number
15 of inspections done for the last quarter from the
16 state inspector was 2,637; insurance agency is
17 5,293, giving us a total of 7,930.

18 Total delinquent from the State is
19 1,007; from the insurance agency is 1,126,
20 bringing us a total of 2,133.

21 Number of code violations found was
22 19, and we had 5 uncorrected.

23 QC review performed was 3 and boiler
24 variance is 1.

25 The interviews for the chief position

1 is going to be performed, scheduled. We have --
2 the Montgomery County inspector has been filled,
3 and we are going to be scheduling interviews for
4 the Boiler Inspector 1 for Davidson County, which
5 will make us have 13 inspectors.

6 CHAIRMAN MORELOCK: Any questions or
7 comments about the chief's report?

8 (No verbal response.)

9 CHAIRMAN MORELOCK: All right, then.
10 Our next item is old business, which we do have no
11 old business.

12 So moving on to new business, our
13 first item is 15-01, Valero Refinery. They're
14 going to present their Risk Based Inspection
15 Program to the board. So, again, if you'll come
16 forward. And before you introduce yourself, let
17 me state one more thing. As we go through these
18 items, if any of the board members have a conflict
19 of interest, they need to express that. Remind me
20 to ask that every time.

21 So are there any conflicts of
22 interest for this item?

23 (No verbal response.)

24 CHAIRMAN MORELOCK: All right.
25 Hearing none, then you can proceed.

1 MR. GROSS: Good morning, Board and
2 guests. I do have copies of the report. If I do
3 need to pass those around, let me know.

4 CHAIRMAN MORELOCK: Is it the same
5 one that we've got today?

6 MR. GROSS: Same one.

7 CHAIRMAN MORELOCK: Okay.

8 THE REPORTER: Please state your
9 name.

10 MR. GROSS: My name is Jeremy Gross.
11 I'm the chief inspector of the Valero refinery in
12 Memphis, Tennessee.

13 Going over our 2014 Risk Based
14 Inspection Program status, I do want to read out
15 the summary of our performance during 2014 for our
16 annual review.

17 The Risk Based Inspection program
18 continues to be active at the Valero Memphis
19 Refinery. This includes conducting inspections
20 per the risk assessments, "Evergreen" activities
21 to keep the RBI program current, adding newly
22 commissioned equipment to the RBI program, and
23 improvements in the software used to maintain the
24 RBI program.

25 The key activities related to the

1 program in 2014 are as follows: The Valero
2 Memphis Refinery continues to maintain an
3 effective Risk Based Inspection program utilizing
4 good engineering practices. Inspections are
5 planned and put in the maintenance schedule per
6 the assignment damage mechanism. Results are
7 documented in the next inspection schedule
8 utilizing the RBI software.

9 We had seven process units that were
10 taken offline for maintenance and inspection in
11 2014. During the outage, we executed inspection
12 activities on 172 pieces of fixed equipment,
13 44 relief valves and other maintenance activities
14 within the refinery.

15 Our routine maintenance activities
16 during 2014 executed 106 internal inspections as
17 well. The site also underwent four corporate
18 audits within this calendar year. A Process
19 Safety Management, Health Safety and
20 Environmental, HF Alkylation Network, and
21 Materials and Inspection Network Team evaluated
22 existing programs of all disciplines within the
23 refinery.

24 Following the assessments, GAP
25 closure plans were set in place with required

1 completion dates. The site is currently pursuing
2 the Voluntary Protection Program certification.
3 We look to possibly pursue that in the 2016
4 calendar year. We're currently preparing for
5 that.

6 As far as the "Inspection Type" and
7 "Performed in 2014" and "Planned for 2015,"
8 internal inspections in 2014 performed were 279,
9 and we have 51 planned for 2015. External
10 inspections completed in 2014 were at 39, and we
11 have 305 scheduled for 2015. Our CUI inspections,
12 we completed 37 in 2014, and we have 24 scheduled
13 for 2015. And then our jurisdictional
14 inspections, we completed 393 of those inspections
15 in 2014, and we have 212 currently scheduled for
16 this calendar year.

17 Our Evergreen activities for the RBI
18 program include:

19 Documenting inspection results based
20 on assigned damage mechanisms.

21 Scheduling the next inspection per
22 RBI methodology. Verifying fluid properties and
23 operating conditions for damage assessment
24 reviews.

25 Non-intrusive inspection techniques

1 are executed and captured during external
2 inspections. Routine corrosion monitoring and
3 specialty non-destructive testing is performed
4 when required. A total of 51 pressure vessels
5 were inspected on-stream utilizing specialty
6 non-destructive techniques for cracking and local
7 thinning damage mechanisms.

8 Revalidation of existing process
9 units is ongoing. We take our PHA exercises and
10 we take our fluid properties and our operation
11 conditions and review those during each PHA that
12 the PSM group administrates at our facility.

13 Considerable internal and external
14 inspection work was conducted during this year
15 along with scheduled CUI inspections.

16 Our jurisdictional inspection
17 activity on registered equipment is maintained.

18 All existing process units have been
19 through review of the RBI program in the last five
20 years. This software integrates all design data,
21 inspection history including equipment inspection
22 reports, thickness monitoring data, evaluation for
23 55 types of corrosion and damage mechanisms, and
24 inspection scheduling integrated with RBI.

25 As you can see in the Table, our Risk

1 Data and Distribution from our low risk to our
2 very high risk, we have had some very good changes
3 made throughout our inspection activities within
4 the calendar year.

5 Our key inspection results, overall
6 278 internal, 136 external, and 12CUI inspections
7 were performed this year in accordance with the
8 RBI program. Jurisdictional inspections are
9 maintained and up to date, but will be handled
10 separately from the RBI program.

11 All equipment has a detailed
12 inspection plan with a risk ranking for each
13 damage mechanism. For each piece of equipment, a
14 unique inspection plan is built to address the
15 proper corrosion and damage mechanisms
16 anticipated.

17 Activities to address issues
18 discovered during inspection may include
19 replacement of equipment, repairs, and increased
20 inspection frequencies. There were five pressure
21 vessels scheduled for replacement during the
22 scheduled 2014 outage that were near end of life.

23 Risk based inspection activities
24 completed this year reduced risk level on
25 102 circuits.

1 Valero is assembling the
2 multidisciplinary procedures and required
3 information to pursue the variance for "Extension
4 of Boiler Internal Inspections."

5 We look to get that manual put
6 together and possibly come back in June after we
7 send that to Mr. Chapman for review. Possibly,
8 may have to move it to the fourth quarter as well.
9 That's our plan for the boiler extension. Any
10 questions for me?

11 CHAIRMAN MORELOCK: Any questions?

12 MR. ROBINSON: I have one.

13 MR. GROSS: Yes, sir.

14 MR. ROBINSON: You had external
15 audits performed on your company's procedures?

16 MR. GROSS: Yes, sir.

17 MR. ROBINSON: Were there any major
18 findings?

19 MR. GROSS: From our findings, we
20 only had two items that were needing to be
21 addressed as far as the GAP closure and the audit
22 process. And those items were in the procedure.
23 They had not been updated, as far as in the
24 database, and we corrected those issues within
25 30 days.

1 MR. ROBINSON: Is it safe to say
2 that they were just editorial?

3 MR. GROSS: That's correct. Yes.

4 MR. ROBINSON: Very well. Thank
5 you. That's all.

6 CHAIRMAN MORELOCK: Any other
7 questions?

8 (No verbal response.)

9 CHAIRMAN MORELOCK: Then can I have
10 a motion to accept Valero's report for continued
11 implementation and use of their RBI program?

12 MR. BAUGHMAN: So moved.

13 MR. ROBINSON: Second.

14 CHAIRMAN MORELOCK: Last call for
15 any questions or discussion.

16 (No verbal response.)

17 CHAIRMAN MORELOCK: Okay. All in
18 favor say, "Aye."

19 (Affirmative response.)

20 CHAIRMAN MORELOCK: Opposed?

21 (No verbal response.)

22 CHAIRMAN MORELOCK: Abstentions, not
23 voting?

24 (No verbal response.)

25 CHAIRMAN MORELOCK: All right.

1 Jeremy, thank you very much for your report.

2 MR. GROSS: Thank you.

3 CHAIRMAN MORELOCK: Our next item is
4 15-02. This is Wacker Polysilicon, and they're
5 going to present their RBI program for the board
6 to consider for approval to allow them to
7 implement their RBI program.

8 So again, gentlemen, if you'll
9 introduce yourself again for Cassandra and for our
10 benefit. And while you guys are getting settled,
11 are there any conflicts of interest from the board
12 members on this item?

13 (No verbal response.)

14 CHAIRMAN MORELOCK: Okay. There are
15 none. Thank you.

16 MR. KASTENBERGER: Thomas
17 Kastenberger, Wacker Chemical Corporation. And
18 I'm the head of engineering.

19 MR. ENG: Richard Eng, Wacker
20 Chemical. Mechanical integrity manager. Good
21 morning.

22 (Board responds.)

23 MR. ENG: Just to take you back on
24 Valero's RBI program, we, too, have selected and
25 implemented an RBI program within our facility.

1 On the document that was presented
2 earlier to Mr. Sam Chapman, we can go over the
3 components of this particular program, and if
4 there's any questions that may come up, please
5 feel free to ask them.

6 On the first tab, there's a
7 description of our mechanical integrity program
8 and policy statement. It's quite extensive. It
9 is a program that entails not only the OSHA PSM MI
10 elements, but also captures some of the
11 requirements for the state of Tennessee and the
12 requirements within the Wacker internal
13 directives. So this program that's outlined for
14 your review and comment contains all of those
15 elements. If you have any questions on this
16 particular aspect of the program, feel free to
17 ask.

18 CHAIRMAN MORELOCK: As far as just
19 covering Section 1 and 2 of your manual?

20 MR. ENG: Section 1 -- it is in the
21 Section 1 part of the manual. Right.

22 CHAIRMAN MORELOCK: Are there any
23 questions in Section 1.

24 (No verbal response.)

25 CHAIRMAN MORELOCK: Richard, I just

1 have a couple of editorials.

2 MR. ENG: Okay.

3 CHAIRMAN MORELOCK: And honestly,
4 you've got the same letter in Section 1 and 2,
5 introducing your RBI program, so these comments
6 will apply to both sections since it's the same
7 letter.

8 MR. ENG: Okay.

9 CHAIRMAN MORELOCK: But on that
10 would be the third page where you talk about State
11 of Tennessee Title 68 Compliance Drivers, Title
12 68, paragraph 3, Title 68 is the safety portion of
13 Tennessee Code Annotated, so the paragraph you've
14 referenced is correct, but it should be Tennessee
15 Code Annotated -- TCA 68-122-110(3).

16 MR. ENG: Okay.

17 CHAIRMAN MORELOCK: Then the second
18 paragraph that you reference will be similar, but
19 that will be 68-122-110(4). Okay?

20 MR. ENG: Okay. I'll make the
21 correction to those.

22 CHAIRMAN MORELOCK: Okay. You may
23 want to include Tennessee Rule 0800-03-03.03
24 administration, parenthetical 1, which covers the
25 construction standards for boilers and pressure

1 vessels in the state of Tennessee under your list
2 of referenced documents there.

3 Moving down to the NBIC references, I
4 have a question. Do you have current additions of
5 the NBIC code?

6 MR. ENG: Yes, we do.

7 CHAIRMAN MORELOCK: Okay. The
8 reason I'm asking is your references haven't
9 appeared in NBIC since 2004. Okay?

10 MR. ENG: Okay.

11 CHAIRMAN MORELOCK: So the NBIC-23
12 is correct, but instead of RB-3237, that would be
13 Part 2, comma, 4.4.7.

14 MR. ENG: I'll make that change.

15 CHAIRMAN MORELOCK: And then going
16 down to the next reference, to the NBIC for
17 RB-3231, that will be Part 2, comma, 2.3.3.

18 And that's the only comments I have
19 for Sections 1 and 2.

20 MR. ENG: Okay. I do have the most
21 recent copy of NB-23.

22 CHAIRMAN MORELOCK: Okay.

23 MR. ROBINSON: My question relates
24 to implementation. When are you guys going to be
25 fully functional?

1 MR. ENG: I'll give you my best
2 forecast right now. Okay? We are still under
3 construction. Parts of the plant are under
4 start-up mode, meaning equipment checkout, lines
5 checking out, P&ID checkout, electrical
6 instrumentation checkout. For non-chemical
7 systems such as compressed air, such as water,
8 potable water, fire protection systems, all of
9 those items are in a start-up mode today.

10 The plan is to have chemical
11 introduced to the facility the second half of this
12 year, third quarter specifically of this year.

13 MR. ROBINSON: Any specific reason
14 for the slippage?

15 MR. ENG: I would say it's
16 construction related and weather related at this
17 point. We've had some, I guess, reallocation of
18 our piping systems to be delivered on site, and
19 there was a strike in Mexico facilities so we have
20 to find new channels to get those on site as
21 quickly as possible.

22 MR. ROBINSON: Any problem with
23 setting the risk based analysis?

24 MR. ENG: That continues independent
25 of the construction activities.

1 MR. ROBINSON: Okay.

2 MR. ENG: We do not couple the two.
3 We lead construction actually.

4 MR. ROBINSON: Okay. Thank you.

5 CHAIRMAN MORELOCK: So any more
6 questions on Section 1?

7 (No verbal response.)

8 CHAIRMAN MORELOCK: All right.
9 We'll let you go through Section 2.

10 MR. ENG: Okay. Section 2 is a
11 system that we had evaluated already. And what I
12 wanted to present to the members is how we
13 systemized our plant. And this is a typical
14 example of how we do it to determine what
15 equipment are in the RBI process and how these
16 equipment are broken out based on damage
17 mechanism, based on operating conditions, based on
18 commonality of materials of construction.

19 We do have approximately, I would say,
20 over 100 P&IDs of this type that we would have to
21 systemize and proceed with the RBI process.

22 If there's no questions on Section 2, we
23 can go to Section 3.

24 CHAIRMAN MORELOCK: Any questions on
25 Section 2?

1 (No verbal response.)

2 CHAIRMAN MORELOCK: I've got some
3 editorials.

4 MR. ENG: Okay. Those are okay for
5 me to take down.

6 CHAIRMAN MORELOCK: On page -- it's
7 labeled page 2 of 14 under Section 2, the Policy
8 and Purpose section. In your list, under the
9 second paragraph in Policy and Purpose --

10 MR. ENG: What page again, please?

11 CHAIRMAN MORELOCK: It's in
12 Section 2, and then the top of the page, it says
13 page 2 of 14.

14 MR. ENG: Okay.

15 CHAIRMAN MORELOCK: And it's titled
16 Section 1, Policy and Purpose.

17 MR. ENG: Uh-huh.

18 CHAIRMAN MORELOCK: When you get to
19 the list under the second paragraph, there's some
20 typos that just need to be cleaned up.

21 MR. ENG: Okay.

22 CHAIRMAN MORELOCK: It's got
23 maintenance requirements and then it's got
24 "Tenseness D" which I'm assuming to be
25 "Tennessee." And, again, when you get to the

1 Rules and Regulations Title 68, you want to go
2 ahead and reference Chapter 122.

3 MR. ENG: Right. Spell it out.

4 CHAIRMAN MORELOCK: And then also
5 reference Rule 0800-03-03 because that's the
6 regulations.

7 And I guess my question is, is your
8 RBI program going to focus solely on the PSM
9 process and identification of highly hazardous
10 chemicals, or would you have pressure vessels at
11 your facility that would not fall under the PSM
12 guidelines, but it would still fall under
13 Tennessee Rule and Law based on volume and
14 pressure where that would -- to not have to be
15 bound to the two-year internal inspection, you
16 want to extend that out.

17 MR. ENG: Our RBI program is not
18 exclusive to comply only with OSHA PSM.

19 CHAIRMAN MORELOCK: Okay.

20 MR. ENG: It's really exclusive to
21 comply with the State of Tennessee first and
22 Wacker internal second.

23 CHAIRMAN MORELOCK: Okay.

24 MR. ENG: So even though they are
25 spelled out as separate programs, but they are

1 combined under the old program. I think that's
2 what you wanted to know.

3 CHAIRMAN MORELOCK: Yes, that's what
4 I wanted to know.

5 I just had a general question on
6 page 4 of 14 with the definitions in your
7 mechanical integrity program. Are all these
8 definitions, are they referenced back to a code or
9 a standard, or is this a Wacker definition?

10 MR. ENG: This is an internal
11 definition.

12 CHAIRMAN MORELOCK: Okay.

13 MR. ENG: Or sometimes an
14 industry-driven definition rather than a code
15 definition.

16 CHAIRMAN MORELOCK: Okay. Then on
17 page 6 of 14, when you're discussing a deficiency,
18 the first bullet says "Operation outside the
19 process design or operating limits as specified by
20 the Process Safety Information." You might want
21 to reference what would permit you to operate
22 outside the process design or operating limits.
23 For example, NBIC Part 3, 3.4.8, would let you
24 return a pressure vessel to service with a known
25 defect, or something like that. To make a

1 statement like that without having a reference
2 just causes a little bit of alarm, so ...

3 MR. ENG: Okay.

4 CHAIRMAN MORELOCK: Going on down
5 into "Operating with a deficiency in place," which
6 kind of falls back on the reference I just
7 provided. If you're going to operate with a
8 deficiency in place, again, you may want to be
9 more descriptive on what will permit that, whether
10 that be a API 579 fitness for service assessment
11 or talking with the jurisdiction, and some things
12 like that.

13 You also discuss "Very minor leaks of
14 PSM-covered materials from process equipment can
15 be exempted from treatment as an MI deficiency if
16 they are completely contained, do not represent an
17 acute toxic health hazard to personnel, nor do
18 they represent a fire explosion hazard."

19 Again, you may want to detail how
20 approval is reached to operate under that
21 condition, again, with a reference to a code or
22 approval by the jurisdiction.

23 MR. ENG: There is one item I can
24 add to this. Even though these are pointed out
25 here in a generic form, each and every component

1 has its own detailed policy to follow up with it.

2 CHAIRMAN MORELOCK: Okay. And I saw
3 the reference.

4 MR. ENG: Yeah. So that's where the
5 details will come out and we'll capture your
6 comments on those.

7 CHAIRMAN MORELOCK: Then you could
8 just add some editorials here to say per Wacker
9 procedure.

10 MR. ENG: Right.

11 CHAIRMAN MORELOCK: That would be
12 fantastic.

13 MR. ENG: Because we wouldn't
14 naturally operate outside of our parameters.

15 MR. ROBINSON: In addition to
16 that -- I had difficulty with that also. And the
17 reason why was because you had one independent
18 person who would take a look at the defect, and he
19 would form an opinion without any subsequent input
20 from other affected departments or experts on the
21 equipment.

22 So what I thought, maybe most
23 companies, what they'll do, they'll formulate an
24 MRB board, material review board, for that
25 particular component. The whole rationale for it

1 is to identify what could, possibilities,
2 everything. It's your P-FEMA. In this case, one
3 guy is making the whole decision. One guy.
4 That's not good.

5 MR. ENG: If I can follow up with
6 that. Do you mean that we would have a --
7 identify a defect and that defect is -- it's
8 outside of our range, and that person would make
9 the call whether we're allowed to operate or not?

10 MR. ROBINSON: Right. Well, in this
11 case, you used the term "minor leaks." I'm not
12 trying to go into massive detail. A leak could be
13 from a loose screw or a loose bolt.

14 MR. ENG: A gasket or something.

15 MR. ROBINSON: Or it could be from a
16 crack, in which case one guy is going to pass
17 judgment on the leak regardless of where it is,
18 the actual root cause of it. That doesn't give me
19 really good comfort.

20 MR. ENG: Well, it doesn't give me
21 the same comfort either. But if I can comment on
22 that?

23 MR. ROBINSON: Sure.

24 MR. ENG: You know, a detailed
25 policy, when these deficiencies are identified in

1 the field, there is a method to convey that
2 information within the group setting, the
3 operations engineer, the operating manager. It's
4 not by that one person alone.

5 MR. ROBINSON: Right. And see, I
6 figured you may have an MRB board, but you didn't
7 say it.

8 MR. ENG: Okay.

9 MR. ROBINSON: So if you say that,
10 then that will help clear me up.

11 MR. ENG: Okay. We'll capture that
12 in the details.

13 MR. ROBINSON: Yeah. It just said
14 plan engineer.

15 MR. ENG: It's usually not the
16 person that identified the defect that makes the
17 call. Usually it's more of a team effort.

18 CHAIRMAN MORELOCK: All right.

19 MR. ROBINSON: It would be great if
20 you had a documented process such as a material
21 review board or something so you could tangibly
22 put your hand on the documentation to say, "Yes,
23 we agree" -- or the corrective action -- "we agree
24 that this is safe to operate."

25 MR. ENG: Okay. And that's probably

1 part of the MOC process that we would include as
2 well.

3 MR. ROBINSON: Very well.

4 CHAIRMAN MORELOCK: Yeah. MOC
5 process would definitely take care of that.

6 MR. ENG: That's right. It would
7 capture all of those concerns.

8 MR. ROBINSON: My apologies.

9 CHAIRMAN MORELOCK: No, no, no.
10 That's good. Good comment.

11 On page 7 of 14, under Good
12 Engineering Practices, and looking through the
13 OSHA requirements, there's a glorious new acronym
14 out there called RAGAGEP, which is "recognized and
15 generally accepted good engineering practice." So
16 I just thought I would throw that in for free.

17 MR. ENG: That's free, yes. Thanks.
18 I'll take it.

19 CHAIRMAN MORELOCK: On page 9 of 14,
20 you're talking about Replacement-in-Kind. And you
21 make the statement in the last sentence of that to
22 state that "Changes involving a
23 replacement-in-kind are not subject to the
24 provisions of the MOC procedure."

25 And this is not something you need to

1 fix, but it's just some food for thought. If you
2 are repairing an ASME code-stamped vessel for the
3 NBIC, in 3.3.3 of the NBIC, it says that you can
4 use a material, a different composition that's
5 equal to or stronger than the material you're
6 replacing, and that's considered a repair. But
7 under the MOC process, that would be considered a
8 change. So just think about that.

9 MR. ENG: Yeah, I understand the
10 path that you're directing. In a situation like
11 that, we would probably need to go through the
12 entire R Stamp Review, more so than just the MOC.

13 CHAIRMAN MORELOCK: I agree. And I
14 think this might be my last comment. On page 10
15 of 14, you begin Section 5 with Responsibilities.
16 And it's very well detailed. I like the detail.
17 But for someone who doesn't work at your facility,
18 it would help me to see an organizational chart to
19 see how all of that flows.

20 MR. ENG: Okay. As you mentioned
21 last time.

22 CHAIRMAN MORELOCK: Yes.

23 MR. ENG: No problem.

24 CHAIRMAN MORELOCK: Okay. And
25 that's all the questions and comments I have on

1 Section 2.

2 MR. ENG: Okay.

3 CHAIRMAN MORELOCK: Any other
4 comments on Section 2?

5 (No verbal response.)

6 CHAIRMAN MORELOCK: Okay. I'll let
7 you proceed.

8 MR. ENG: We talked about the P&ID
9 markups that we used to track and perform our RBI
10 process within the site. Attachment -- if there's
11 no other questions, I'll just continue the process
12 a little bit. Attachment 3 is more detailed
13 information as part of the inspection package that
14 we provide and generate with every piece of
15 equipment that we conduct an RBI assessment on.

16 It is detailed out in the location of
17 the inspection, the type of inspection, the
18 frequency, the procedures involved, and the skills
19 and certifications of the individuals that conduct
20 these inspections.

21 And we will use this document as a
22 historical document to get baseline readings and
23 future comparative readings going forward. This
24 is based so we can calculate our corrosion rates
25 and track our damage mechanisms and any other

1 defects and findings we may find in the inspection
2 reports. And we would have shop joints of this
3 for every component that we have on site.

4 Any questions on this particular
5 aspect of the RBI process?

6 (No verbal response.)

7 MR. ENG: Okay. The next item is a
8 Meridium specific output from an RBI assessment.
9 And this is an example of what we expect from the
10 report, and then we take this and go into the
11 inspection details and generate the inspection
12 package for the field inspectors to follow
13 through.

14 This is an out-of-the-box report that
15 we get from Meridium. And it's a tool that we
16 have available for us quite similar to, perhaps,
17 PCMS MISTRAS that Valero uses.

18 Any questions on this particular
19 component on Tab 4?

20 (No verbal response.)

21 MR. ENG: So for every piece of
22 equipment that we have on site -- and I think at
23 this point it's around 1,000 -- we would have an
24 independent report generated for that piece of
25 equipment.

1 And the last item is -- something
2 that you may not have because I didn't have it
3 available at that time -- is a typical inspection
4 report checklist that complies with API 510 in
5 this particular case. And I have copies of it if
6 you wish to see them. If not, I'll just leave
7 them right here on the table.

8 Again, it's a standard template
9 that's available from the Meridium package, and
10 there's a list of all these inspection reports,
11 API 570, API 653, internal and external. We also
12 have the functionality to generate our own
13 inspection reports that we have been using in
14 Burghauser and Nunchritz for a number of years.
15 So we incorporate those into the software.

16 This summarizes our inspection tools,
17 capabilities, methodologies, and this is what we
18 are implementing as we speak, and the assessment
19 will continue as we speak.

20 So if there's any technical questions
21 or any questions at all, I would like to answer
22 them right now.

23 CHAIRMAN MORELOCK: Any questions of
24 Richard?

25 (No verbal response.)

1 CHAIRMAN MORELOCK: Approval of this
2 RBI program would be similar to what Valero just
3 presented and you would make an annual report to
4 the board and --

5 MR. ENG: More frequent if you wish,
6 but annual for sure.

7 CHAIRMAN MORELOCK: Okay. All
8 right. Any other questions or comments?

9 (No verbal response.)

10 CHAIRMAN MORELOCK: All right. Do I
11 have a motion for this item?

12 DR. JOHNSON: So moved.

13 CHAIRMAN MORELOCK: So we're going
14 to move to approve the RBI program with an annual
15 reporting to the Tennessee Board.

16 And correct me if I'm wrong, Sam.
17 This would also undergo an inspection by the
18 deputy inspector. Would he go out and review this
19 document on site to make sure that what's in the
20 manual is actually what you're doing?

21 MR. CHAPMAN: That's correct.

22 CHAIRMAN MORELOCK: So our approval
23 will be contingent on that inspection.

24 MR. ENG: We think we will be
25 complete with our assessment by the third quarter

1 of this year, so we'll come back in December to
2 submit our conclusions and findings.

3 MR. ROBINSON: Second.

4 CHAIRMAN MORELOCK: All right. Any
5 other questions or comments?

6 (No verbal response.)

7 CHAIRMAN MORELOCK: All right. I'm
8 going to call the question. All in favor say,
9 "Aye."

10 (Affirmative response.)

11 CHAIRMAN MORELOCK: Opposed?

12 (No verbal response.)

13 CHAIRMAN MORELOCK: Abstentions?

14 DR. CANONICO: I'm abstaining.

15 CHAIRMAN MORELOCK: Okay. One
16 abstention.

17 Not voting?

18 (No verbal response.)

19 CHAIRMAN MORELOCK: Okay.

20 Gentlemen, you have an approved RBI.

21 MR. ENG: Thank you very much.

22 CHAIRMAN MORELOCK: Thank you for
23 your time.

24 DR. CANONICO: I apologize for being
25 late. I got caught in that I-24 traffic. The

1 rain just stops everything. It's terrible.

2 CHAIRMAN MORELOCK: Okay. We'll
3 move along to our next item which is 15-03.
4 St. Jude Children's Research Hospital is
5 requesting a variance renewal.

6 So if you will come forward,
7 introduce yourself, we'll get started on that.

8 And are there any conflicts of
9 interest with this item?

10 (No verbal response.)

11 CHAIRMAN MORELOCK: All right. I
12 see no conflicts.

13 MR. HUBBARD: I'm Rodney Hubbard
14 with MedFac Engineering, and I'm here on behalf of
15 St. Jude. Our firm prepared the original variance
16 request, and our firm updated it for this renewal.

17 Under the renewal, we've added a
18 fourth boiler that was a part of the original
19 variance request. The building has effectively
20 doubled in size in the past year, and this new
21 boiler was just added for additional capacity and
22 for summer load.

23 The new boiler is a water tube
24 boiler, 108 horsepower. The existing boilers are
25 fire tube, 300 horsepower, three of them. Also,

1 as a part of the renewal, we're obligated to bring
2 up anything that's changed.

3 CHAIRMAN MORELOCK: Yes.

4 MR. HUBBARD: And I prepared a list
5 of the revisions. The boiler data sheets
6 obviously have changed. We listed Boiler 4
7 originally but we just said "to be determined" for
8 capacity, for everything, because we were not
9 sure, when the original building was built, what
10 the fourth boiler would be.

11 The equipment description,
12 Appendix B, it was updated. Appendix C is -- one
13 request that we would like to make is our original
14 boiler information that was conveyed to the remote
15 monitoring location included every single detail
16 that was available in that particular piece of
17 equipment. It was a CB Hawk controller. And we
18 had found that the remote attendant is just
19 overwhelmed with data. And we have condensed that
20 down to about 25 points that we feel are the most
21 pertinent points.

22 All data is retained and is available
23 to the remote operator, but it is not in the
24 computer, the building automation screen that he
25 views.

1 CHAIRMAN MORELOCK: So can I ask a
2 quick question?

3 MR. HUBBARD: Sure.

4 CHAIRMAN MORELOCK: So those
5 25 points that are now being monitored, is that
6 what we're seeing on page C-3?

7 MR. HUBBARD: Yes, sir.

8 CHAIRMAN MORELOCK: Okay. Because
9 the reason I'm asking is when the deputy inspector
10 goes and does the inspection, he'll want to look
11 at the active fault codes and see if they really
12 work.

13 MR. HUBBARD: Right. That brings me
14 to my next issue.

15 CHAIRMAN MORELOCK: Okay.

16 MR. HUBBARD: I prepared this for
17 the hospital. The hospital reviewed it, and they
18 had me add oxygen monitoring to Boiler 4 with the
19 assumption that O2 trim was a part of Boiler 4.
20 It is not a part of Boiler 4. So we incorporated
21 it, but we do not have a point to monitor. So the
22 hospital recognized they don't have it and they --
23 we want to delete it. I don't know how to do
24 that.

25 CHAIRMAN MORELOCK: Well, you can

1 note that publicly and fix the manual so that when
2 the inspection is made, it will be removed. And
3 we're aware that you're seeking to remove that.

4 MR. HUBBARD: Okay. The piping
5 diagrams were revised to reflect all of the
6 changes as a part of the fourth boiler addition.
7 And, of course, we completed the checklist to show
8 the most current information.

9 There really is no fundamental
10 change. The remote boilers are physically
11 monitored every four hours during second, third,
12 weekend shifts. And they're monitored much more
13 often than that during the first shift. There's
14 an attendant 24 hours a day, 7 days a week in the
15 remote location looking at the screens.

16 CHAIRMAN MORELOCK: Are you ready
17 for questions?

18 MR. HUBBARD: Yes, sir.

19 CHAIRMAN MORELOCK: Okay.
20 Dr. Canonico?

21 DR. CANONICO: Maybe I
22 misunderstand, but under A-1 you have Boiler 4.
23 It's right after the sketch of the layout of the
24 facility.

25 MR. HUBBARD: Yes, sir.

1 DR. CANONICO: Boiler 4 was built in
2 2012. Where has it been for the last three years?

3 MR. HUBBARD: Sitting in its current
4 location.

5 DR. CANONICO: So it's still a new
6 boiler?

7 MR. HUBBARD: The boiler has been
8 there. We have not had the approval to remotely
9 operate it. It has been inspected and approved
10 and operated during the day shift when we've had
11 adequate personnel, but there's been no continuous
12 operation of that boiler.

13 CHAIRMAN MORELOCK: So it's operated
14 under the 20-minute rule, right?

15 MR. HUBBARD: Oh, yeah. Yes, sir.

16 DR. CANONICO: Okay. I was just
17 worried that you were bringing in a used boiler or
18 something like that because of the age.

19 MR. HUBBARD: No. We've been -- the
20 building took three-and-a-half years to construct,
21 so it was a long construction project. And when
22 the tower crane is there is when equipment is
23 lifted into the penthouse.

24 DR. CANONICO: And the other
25 question I have really doesn't pertain to your

1 presentation. But I was going to mention to Kim
2 and Dave because one of our interesting topics is
3 the possibility of having boiler operators
4 registered in the state of Tennessee. And there
5 was one in here that said -- page 3 says the
6 operator is qualified to operate the boilers in
7 accordance with the Shelby County boiler operator
8 licensing regulations. Can we get a copy of that
9 exam or whatever it is that they go through?

10 MS. JEFFERSON: With Shelby County?

11 DR. CANONICO: Yeah. Because it's
12 something Dave has been looking at, I'm interested
13 in. Most of the boiler operating information that
14 we get is very questionable in my mind as far as
15 boiler operators are concerned. I wonder about
16 their background, their education, things like
17 that. So it would be nice if we could lay our
18 hands on that and maybe, you know, you through
19 your office could do it. But it has nothing to do
20 with you.

21 CHAIRMAN MORELOCK: Right. Dave
22 Baughman has a discussion item about
23 boiler/operator licensing. So that would benefit
24 that discussion.

25 MS. JEFFERSON: Okay. Great. We'll

1 look into it.

2 DR. CANONICO: Okay. Thank you.

3 MR. HUBBARD: Southwest Tennessee
4 Technical College routinely has those classes,
5 too.

6 CHAIRMAN MORELOCK: Any other
7 questions on this variance?

8 MR. BAUGHMAN: Yes. It says the
9 monitor boilers are tested each day for failure
10 modes, and that the boiler water column is viewed
11 and tested daily for low-water cut-off operation.

12 How are they testing your low-water
13 cut-off operation? Just describe the procedure.

14 MR. HUBBARD: They valve off the
15 switch, the float, and they drain it down.

16 MR. BAUGHMAN: Okay. So they're
17 physically doing a positive check of the low-water
18 cutoff and shutting the burners off?

19 MR. HUBBARD: Right. Yes, they do.
20 And they check different failure modes. They try
21 not to ever repeat the same test. They test
22 different things all the time.

23 MR. BAUGHMAN: Okay. But the low
24 water cut-off is tested daily.

25 MR. HUBBARD: Yes.

1 MR. BAUGHMAN: Under Emergency
2 Operation, it says, "After the cause of the
3 alarm" -- Emergency Operation, Item C, "After the
4 cause of the alarm has been corrected, the Roving
5 Boiler Attendant shall inform the Central Control
6 Room Boiler Attendant of the cause of the alarm,
7 request the affected boiler shutdown switch be
8 enabled and then restart the affected boiler."

9 Is this boiler being restarted from
10 the central control room?

11 MR. HUBBARD: No. It cannot be. It
12 physically cannot be. It has to be restarted at
13 the boiler. When the rover -- we call them the
14 rover -- when the rover is out there, after he
15 reports to the remote attendant what the cause
16 was, the remote attendant enables the boiler.
17 Then and only then can the rover start the boiler.

18 CHAIRMAN MORELOCK: On page 2,
19 David. It states in the last sentence on page 2,
20 the roving boiler attendant must start the boiler
21 from its factory control panel at each boiler.

22 MR. BAUGHMAN: Very good. Thank
23 you.

24 CHAIRMAN MORELOCK: Any other
25 questions?

1 MR. BAUGHMAN: Do we have an actual
2 list of those personnel?

3 MR. HUBBARD: I did not incorporate
4 a list of all of the names of all the licensed
5 boiler operators that they have.

6 MR. BAUGHMAN: Okay. I'm just
7 interested in turnover, how long these people have
8 been there, what new personnel, you know, the
9 amount of personnel changeover that may occur, and
10 to be able to look at it from one variance to the
11 next to see offhand, but ...

12 MR. HUBBARD: It's probably at least
13 two a year. There's maybe 25 operators. It's
14 just the age. They're retiring out.

15 MR. BAUGHMAN: And all the more so
16 of having training available for new personnel to
17 come in.

18 MR. HUBBARD: Right.

19 MR. BAUGHMAN: Absolutely. Thank
20 you.

21 CHAIRMAN MORELOCK: Any other
22 questions?

23 MR. ROBINSON: Yes, sir. You're
24 going to make changes to the actual setpoints as
25 far as what's reported, 25 setpoints, and remove

1 the low O2?

2 MR. HUBBARD: We're only going to --
3 as far as what this says?

4 MR. ROBINSON: Yes.

5 MR. HUBBARD: The O2 in Boiler 4 is
6 the only item I'm changing.

7 MR. ROBINSON: Right. I agree. I
8 agree. In addition to that, in the back, your
9 Appendix I, I believe, you have a copy of the
10 Tennessee Boiler Rules.

11 MR. HUBBARD: Yes, sir.

12 MR. ROBINSON: In my opinion, you
13 don't have to. It would be wise to take it out.
14 And the only reason why is because if that's
15 revised, guess what you have to do to your manual?
16 You must revise it. My advice would be to use it
17 as a stand-alone document.

18 Let me see if I can explain it a
19 little bit better. In the back, your Appendix I,
20 you have a complete copy of the Tennessee Boiler
21 Rules.

22 MR. HUBBARD: Right.

23 MR. ROBINSON: We are right now, in
24 the present, debating on making revisions to this
25 document. At the bottom of that document, if you

1 look on your page, you'll see --

2 MR. HUBBARD: 2008 revised.

3 MR. ROBINSON: Exactly. If this is
4 approved, you will have an obsolete copy of the
5 boiler rules in your manual, so take it out.

6 MR. HUBBARD: Okay.

7 CHAIRMAN MORELOCK: Yeah. You're
8 not required to have a copy of the rules in your
9 manual.

10 MR. HUBBARD: I did not know that.

11 CHAIRMAN MORELOCK: I mean, it's
12 nice to have, but Eugene is correct. Any changes
13 that would be made to the rules, then you would
14 have to make a revision to your manual. So you
15 don't need to do that.

16 MR. HUBBARD: Okay. Then I would
17 request that you allow me to remove Appendix I
18 from this document.

19 CHAIRMAN MORELOCK: That will be
20 fine.

21 MR. ROBINSON: That's all I had.

22 CHAIRMAN MORELOCK: Anything else?

23 (No verbal response.)

24 CHAIRMAN MORELOCK: Do I have a
25 motion to approve?

1 DR. CANONICO: So made.

2 DR. JOHNSON: Second.

3 CHAIRMAN MORELOCK: Last call for
4 discussion. I'm going to call the question. All
5 in favor say, "Aye."

6 (Affirmative response.)

7 CHAIRMAN MORELOCK: Opposed?

8 (No verbal response.)

9 CHAIRMAN MORELOCK: Abstentions, not
10 voting?

11 (No verbal response.)

12 CHAIRMAN MORELOCK: You have a
13 renewal.

14 MR. HUBBARD: Thank you, sir.

15 CHAIRMAN MORELOCK: Thank you.

16 MS. JEFFERSON: Mr. Chair, if I may.

17 CHAIRMAN MORELOCK: Yes.

18 MS. JEFFERSON: I just wanted to
19 excuse myself from the meeting. I'm going to have
20 to leave now because I have another engagement.
21 But Mr. Finks is going to answer any questions
22 that you-all have on behalf of the Division.

23 CHAIRMAN MORELOCK: Okay.

24 MS. JEFFERSON: And I wanted to
25 address Dr. Canonico before I leave. I just

1 wanted to say I'm not really sure how difficult
2 it's going to be to obtain an exam. I'm not
3 really sure if I'll be able to do that. Will
4 you-all be able to use your curriculum or some
5 other documentation?

6 DR. CANONICO: Any information I
7 think you can get would be useful.

8 Don't you think, Dave?

9 MR. BAUGHMAN: Yes. And that
10 information should be available. I don't think
11 we'll have a problem in obtaining it.

12 MS. JEFFERSON: Great. Well, we'll
13 look into that for you-all. Thank you.

14 MR. BAUGHMAN: Thank you, Kim.

15 CHAIRMAN MORELOCK: Thank you.

16 Our next item is 15-04. W. R. Grace
17 & Company is requesting a modified variance.

18 MR. NEVILLE: I'm James Neville with
19 Neville Engineering.

20 MS. STONE: Kim Stone, W. R. Grace.

21 MR. ALLEN: And I'm Mark Allen,
22 W. R. Grace.

23 MR. NEVILLE: We're here today to
24 present a modification to the variance that was
25 approved. The main modification here is the

1 location of the remote station. Previously, when
2 it was approved, we had six remote stations
3 located at control rooms throughout the facility.
4 And that became an implementation issue,
5 transferring from one remote station to the next
6 and having staffing at each of those stations.

7 So to simplify things in the site
8 plan, Figure 1 of page 2, we're requesting a
9 change be made and have the main guardhouse be the
10 new remote station. And that will be the one
11 remote station for the facility.

12 CHAIRMAN MORELOCK: Are there any
13 conflicts from the board members on this item?

14 (No verbal response.)

15 CHAIRMAN MORELOCK: Hearing none ...

16 So the change from the location of
17 the remote, that's the modification?

18 MR. NEVILLE: That's the
19 modification.

20 CHAIRMAN MORELOCK: Everything else
21 in the manual is --

22 MR. NEVILLE: Everything else has
23 remained the same.

24 CHAIRMAN MORELOCK: Okay.

25 Any questions?

1 DR. CANONICO: (Indicating.)

2 CHAIRMAN MORELOCK: Dr. Canonico?

3 DR. CANONICO: On page 1 you mention
4 one high-pressure boiler under the requirements of
5 Chapter, et cetera. The boiler operates on
6 demand, 24 hours per day, 7 days a week. That
7 means on demand -- I'm having trouble just
8 understanding. But "on demand" means it doesn't
9 run 24/7.

10 MS. STONE: That's correct. It's
11 only when it's necessary for our process. So we
12 operate our plant 24 hours a day, 7 days a week.
13 But we may not be operating the boiler 24 hours a
14 day, 7 days a week.

15 DR. CANONICO: So your boilers,
16 then, are cycling.

17 MS. STONE: Yes. It might run for a
18 week or two and then be shut down for several
19 weeks until we need to get them.

20 DR. CANONICO: And at what
21 temperature do they cycle? Do you know?

22 MR. ALLEN: We run on nominal 80,
23 90PSI.

24 DR. CANONICO: Temperature?

25 MR. ALLEN: Temperature is, you

1 know, 300, plus or minus, Fahrenheit.

2 DR. CANONICO: You're low enough in
3 temperature you don't have to be concerned with
4 creep or anything, but I just wonder if, cycling
5 it like that, if you had any indication if it
6 would grow. It's just a question.

7 MR. ALLEN: This is actually a -- I
8 think you guys would term it a steam generator.
9 They're designed to come up and down quickly.

10 CHAIRMAN MORELOCK: Any other
11 questions?

12 DR. CANONICO: I had a couple more.

13 CHAIRMAN MORELOCK: Okay. Go ahead.

14 DR. CANONICO: Page 5 under Normal
15 Duties, once each shift -- later on when I read
16 this -- I think I read that your boiler attendant
17 will show up at the start of the shift and has to
18 go there at the end of the shift. Is this an
19 additional?

20 MS. STONE: It's not an additional.

21 MR. NEVILLE: No, it's not
22 additional.

23 DR. CANONICO: Then isn't that a
24 misleading statement? Really there are three
25 times each shift, right?

1 MS. STONE: Right.

2 DR. CANONICO: When you start the
3 shift, in the middle of the shift, and at the end
4 of the shift.

5 MS. STONE: Uh-huh.

6 DR. CANONICO: So really that boiler
7 attendant is there three times.

8 MR. NEVILLE: Now, are you talking
9 about when he's contacting the remote station,
10 or ...

11 DR. CANONICO: Yeah.

12 MR. NEVILLE: Is this under Normal
13 Duties on page 5? Is that what you're referring
14 to? "Once each shift, the boiler attendant will
15 contact the remote station"?

16 DR. CANONICO: Okay. Yeah. Thanks.

17 MR. NEVILLE: I believe that's in
18 the alarm. At the beginning of the shift, they're
19 going to contact the remote station and initiate
20 an alarm --

21 MS. STONE: Right --

22 MR. NEVILLE: -- to verify that
23 alarms are getting back to the remote station. So
24 that is once a shift.

25 MS. STONE: Once a shift only.

1 DR. CANONICO: On page 7, under
2 Training, "Boiler attendant shall be familiarized
3 with the emergency procedures through frequent
4 actuation of the alarm service of the boiler."

5 What bothers me, is that the only
6 training that that boiler attendant gets?

7 CHAIRMAN MORELOCK: That's covered
8 in Item 2.

9 DR. CANONICO: What?

10 CHAIRMAN MORELOCK: Item 2 covers
11 the rest of the training.

12 DR. CANONICO: Still not much there
13 in 2.

14 I guess I'm just -- I have a hangup
15 over boiler attendant training. And I don't see
16 anything here that makes me comfortable.

17 MR. NEVILLE: I mean, they are
18 trained to this manual.

19 DR. CANONICO: Excuse me?

20 MR. NEVILLE: They're trained to
21 this manual. I mean, there's a training that they
22 go through to learn the manual, as far as setting
23 alarms from the boiler, getting -- you know,
24 communicating with remote stations, so that's -- I
25 mean, there's more to it than, I guess, just

1 line 1.

2 MS. STONE: They're trained on our
3 operating procedures of the boiler and that's kept
4 in their training records.

5 MR. ROBINSON: And that's performed
6 by the foreman responsible for the training. And
7 you guys keep a current annual record of the log
8 indicating that person has been trained by the
9 foreman?

10 MS. STONE: Yes, sir.

11 CHAIRMAN MORELOCK: G-2 states that
12 the foreman trains the employees on boiler
13 operations.

14 MR. NEVILLE: Right. And a training
15 log is kept. Appendix H is the documentation of
16 that training.

17 MR. BAUGHMAN: But on here,
18 Mr. Neville, on Appendix H, there is nobody -- I
19 see the boiler variance training log, but
20 presently there's nobody listed on it. Is that
21 something that --

22 CHAIRMAN MORELOCK: That's an
23 example.

24 MR. BAUGHMAN: That's just an
25 example.

1 MR. NEVILLE: Well, they haven't
2 been trained to this yet. When this is approved,
3 they would be trained to this manual.

4 MR. BAUGHMAN: I see. So if we
5 implement this today, it would go into effect
6 immediately, but nobody will have been trained
7 already. But that will be enforced once the
8 inspector comes in.

9 MR. NEVILLE: Right. Right.
10 They'll call for the inspector. He'll show up.
11 You know, at that time the employees will have
12 been trained on those procedures.

13 MR. BAUGHMAN: And in the meantime,
14 somebody is attending the boiler.

15 MR. NEVILLE: Absolutely.

16 CHAIRMAN MORELOCK: Under the
17 current variance.

18 MR. NEVILLE: Yes.

19 DR. CANONICO: On page G-1, you have
20 your Leadman Operator duties. I don't see
21 anything in there specifically about experience,
22 education or anything else. Am I missing it?

23 MR. NEVILLE: We can add the
24 qualifications. What were those?

25 MS. STONE: We just require a high

1 school diploma or a GED equivalent.

2 MR. NEVILLE: For education.

3 DR. CANONICO: The training always
4 seems loose to me. And this is as loose as any of
5 them, as far as I'm concerned. You know, most of
6 them will say something about at least a high
7 school education or words to that effect. But I
8 don't see anything here that makes me comfortable
9 that he's trained.

10 MS. STONE: Those are our hiring
11 practices within the organization, but we can add
12 to that.

13 MR. NEVILLE: We'll add more
14 information to these job descriptions, as far as
15 the educational qualifications.

16 DR. CANONICO: That's enough for me.

17 MR. BAUGHMAN: On page 5, Section 2,
18 under Training again, on A, there's a statement
19 that says the shift foreman shall be responsible
20 for training all current and incoming personnel
21 assigned to boiler operations. Instead of just
22 the foreman, it's the shift foreman. And I was a
23 little bit -- I don't quite understand the
24 differentiation between the foreman who has the
25 responsibilities for training and the shift

1 foreman who has responsibilities for training.

2 What's the --

3 MS. STONE: It's the same person.

4 MR. NEVILLE: It probably should
5 just say "foreman."

6 CHAIRMAN MORELOCK: Just clarifying
7 your org chart. It's a common thing we see when
8 we review manuals.

9 Any other questions?

10 (No verbal response.)

11 CHAIRMAN MORELOCK: I just have a
12 couple of typos. On the checklist, you state that
13 the cover letter is in Appendix L but it's really
14 Appendix K. And on page 5, the documentation log,
15 it references Appendix I, but it's really
16 Appendix H.

17 And the only thing I didn't see on
18 the checklist on Item 36, "Does the manual include
19 a test of the following?" And Item B is to test
20 the water column, boiler water column. I don't
21 know that I saw a specific statement in the manual
22 that refers to that, so you may want to add that
23 to those duties that you're going to -- the test
24 that you do once a shift.

25 And that's all the comments I have.

1 Anything else?

2 (No verbal response.)

3 CHAIRMAN MORELOCK: Do I have a
4 motion to approve this modification?

5 DR. JOHNSON: I move we approve the
6 modification as noted.

7 CHAIRMAN MORELOCK: I've got a
8 motion. Do I have a second?

9 MR. ROBINSON: Second.

10 CHAIRMAN MORELOCK: Okay. Last call
11 for discussion. Again, this will be contingent on
12 deputy inspector review at your site. Okay. I'm
13 going to call the question. All in favor say,
14 "Aye."

15 (Affirmative response.)

16 CHAIRMAN MORELOCK: Opposed?

17 (No verbal response.)

18 CHAIRMAN MORELOCK: Abstentions?

19 DR. CANONICO: (Indicating.)

20 CHAIRMAN MORELOCK: One abstention.

21 Not voting?

22 (No verbal response.)

23 CHAIRMAN MORELOCK: You have an
24 approved modification.

25 Our next item is 15-05, which is

1 McKee Foods Corporation requesting a variance.

2 While we're getting ready to go, are
3 there any conflicts of interest on this item?

4 (No verbal response.)

5 CHAIRMAN MORELOCK: All right.
6 Hearing none, then we're ready to go.

7 MR. NEVILLE: Again, I'm James
8 Neville with Neville Engineering.

9 MR. SPENCE: Steve Spence with McKee
10 Foods.

11 MR. NEVILLE: Today we have --
12 really all three -- we have a variance request, a
13 modification, because we are taking out three of
14 the boilers. And McKee has three different
15 facilities, and this systems operation manual
16 basically dictates for all those boilers. So we
17 would like a renewal on the variances that we have
18 in place right now since this document is being
19 updated for these new four boilers.

20 The new boilers are in Plant 2, and
21 they're replacing three boilers that they are
22 taking out of operation.

23 These high-pressure steam boilers are
24 used for potable hot water, space heating, cooling
25 jackets, and processed heating. They're on demand

1 24 hours per day, 7 days a week. And the -- in
2 Appendix A it shows the new boilers in -- that
3 will be in Plant 2, are the new boilers.

4 Those four boilers are all steam
5 generators, one or two steam generators near our
6 boilers. They're the LX-200 models.

7 Are there questions regarding this
8 request?

9 CHAIRMAN MORELOCK: Questions
10 regarding this variance?

11 DR. CANONICO: My first concern, for
12 whatever it's worth, is on page 2, which I think
13 is your layout sketch.

14 MR. NEVILLE: Yes. The site plan?

15 DR. CANONICO: The distance between
16 the boilers and the remote station are just -- one
17 is about a half mile and the other one is almost
18 eight-tenths of a mile. That's a pretty long
19 distance if someone gets a notice here and if your
20 individual you're trying to contact is at the
21 other end of the plant, he's a mile and a half
22 away according to the numbers. If I just prorate
23 it, you're talking about 3960 and 2940.

24 MR. NEVILLE: 3960, correct.

25 DR. CANONICO: 2940 is over half a

1 mile and 3960 is closer to eight-tenths of a mile.
2 That seems like a long way.

3 MR. NEVILLE: Do you have any
4 comment on the --

5 MR. SPENCE: Well, I don't have any
6 comment on the distance. But the system, they can
7 call in with their cell phone and enter a pin
8 number, and there is a emergency shutdown relay
9 that will shut down the boiler, essentially, the
10 same as an e-stop would. That's part of our
11 system.

12 MR. NEVILLE: Right.

13 DR. CANONICO: Okay. Page 5 under
14 training, "Newly assigned personnel will be
15 required to read and be familiar with these
16 procedures."

17 That doesn't look like much training
18 to me.

19 MR. NEVILLE: The facility's
20 maintenance superintendent is responsible for
21 training them to this manual and these procedures.
22 So he signs off on their training, that they are
23 qualified to implement the variance.

24 DR. CANONICO: I had the same
25 problem with Appendix G, G-3. I don't see

1 anything here about experience or education. And
2 if you read his boiler operator duties, you get
3 down far enough, you find out that he serves as
4 the boiler attendant. He seems to be relegated to
5 a rather low position. That's all I have.

6 CHAIRMAN MORELOCK: Okay. Any other
7 comments?

8 MR. BAUGHMAN: Sure. Starting with
9 Boiler Attendant Procedures, Personnel Type, the
10 Clarification, under Number 1, "The individuals
11 who may perform the function of a boiler attendant
12 are classified by McKee as a 'boiler operator'
13 during occupied hours or a 'security officer,
14 monitor' during unoccupied hours."

15 Those unoccupied hours bother me some
16 inasmuch as they're-- in other words, clarify to
17 me how many unoccupied hours we have.

18 MR. SPENCE: It would be sundown
19 Friday to sundown Saturday.

20 MR. BAUGHMAN: Sundown Friday to
21 sundown Saturday.

22 CHAIRMAN MORELOCK: And I guess to
23 add to that, when we reviewed this in 2013, you
24 need to keep a product warm, that if you don't
25 have this attendant during those unoccupied hours,

1 it's going to be a very expensive thing for you to
2 lose that product; is that correct?

3 MR. SPENCE: That's correct.

4 CHAIRMAN MORELOCK: So the purpose
5 of the boiler during that time is just to keep
6 that product warm; is that correct?

7 MR. SPENCE: That's correct.

8 MR. BAUGHMAN: So that security
9 officer --

10 MR. NEVILLE: He's monitoring the
11 boiler but he's not operating the boiler. If
12 there was an alarm or any condition like that, the
13 boiler would be shut down and a boiler operator
14 would be called in.

15 MR. BAUGHMAN: Okay. And the boiler
16 operator is going to be called in from off site?

17 MR. NEVILLE: Yes.

18 MR. BAUGHMAN: Okay. Which he could
19 be doing any and everything that --

20 MR. NEVILLE: Right. I mean, the
21 boiler would be shut down. The remote station
22 would shut down the boiler.

23 MR. BAUGHMAN: Well, is the security
24 officer at the remote station?

25 MR. NEVILLE: Yes.

1 MR. BAUGHMAN: Okay. If there's the
2 standby boiler -- how does the standby boiler go
3 into operation? If a boiler goes down, does the
4 standby boiler start up on its own?

5 MR. SPENCE: I believe so. With the
6 new system, it's a mirror system and it has those
7 capabilities.

8 MR. BAUGHMAN: Okay. So it says if
9 the standby boiler is started, the communication
10 system for that boiler shall be tested in
11 accordance with the boiler attendant procedures
12 normal duty. But it's a security officer -- I
13 guess my concern with it is have we got a security
14 officer, singular?

15 MR. SPENCE: There are several on
16 site.

17 MR. BAUGHMAN: I guess my concern
18 with it would be if that security officer has
19 other duties ...

20 MR. SPENCE: There is always a
21 security officer at the security base where the
22 monitoring takes place.

23 CHAIRMAN MORELOCK: I mean, based on
24 the first sentence on page 5 under remote
25 personnel, regardless of if it's an occupied time

1 or when the facility is operating, that remote
2 station is continuously staffed by a security
3 officer, correct?

4 MR. SPENCE: Correct.

5 CHAIRMAN MORELOCK: And he wouldn't
6 be the only security officer at the facility,
7 right?

8 MR. NEVILLE: Never.

9 CHAIRMAN MORELOCK: But your talking
10 about the boiler starting up on its own brought a
11 question to mind. If that boiler comes online on
12 its own and it can't operate for some reason by
13 the remote monitor, then who's going to attend the
14 boiler every 20 minutes until you correct that
15 problem?

16 MR. NEVILLE: It would be either one
17 of the security officers or they would shut the
18 boiler down.

19 CHAIRMAN MORELOCK: Okay.

20 MR. ROBINSON: But technically, the
21 security officer is not the --

22 MR. SPENCE: There's multiple
23 security officers, though.

24 CHAIRMAN MORELOCK: It would be one
25 of the other security officers, not the remote

1 monitor.

2 MR. NEVILLE: Yes, correct.

3 CHAIRMAN MORELOCK: Because they are
4 trained to remote monitor as well as operate the
5 boiler, is that correct, according to your manual?

6 MR. SPENCE: They would go to the
7 boiler room. Outside the boiler room, we have
8 e-stops. They would press an e-stop for that
9 particular boiler and it would shut down.

10 MR. ROBINSON: Just for the sake of
11 clarification, the security officer could now
12 operate the boiler?

13 MR. SPENCE: They can shut it down.
14 They can shut it down from either the security
15 base or from right outside the boiler room.

16 CHAIRMAN MORELOCK: So if the boiler
17 starts up but it can't be remotely monitored, then
18 the security officer would shut it down.

19 MR. SPENCE: Correct.

20 MR. NEVILLE: Yes.

21 CHAIRMAN MORELOCK: Okay. You might
22 want to clarify that in the manual.

23 MR. ROBINSON: I have the belief
24 that you don't really want to shut the boiler down
25 if it starts up to save product.

1 CHAIRMAN MORELOCK: Right.

2 MR. ROBINSON: So what you need is a
3 contingent plan so that in the event that happens
4 you can continue to run. Because right now you've
5 got a gray spot that's not covered.

6 CHAIRMAN MORELOCK: Yeah. You'd
7 have to get a boiler operator in within 20 minutes
8 to monitor the boiler. You would have to get an
9 off-site boiler operator in within 20 minutes to
10 operate the boiler.

11 MR. ROBINSON: In your Appendix G,
12 it led me to it also, because the security officer
13 duties doesn't say anything specifically about
14 monitoring a boiler operation. Nothing.

15 Now, it does say "when scheduled."
16 But then on page 5 you said "continuously manned."

17 MR. NEVILLE: But now, there's
18 multiple security officers, so there will always
19 be a security officer at the base.

20 MR. ROBINSON: At the monitoring
21 station?

22 MR. NEVILLE: Yes, at the monitoring
23 station.

24 MR. ROBINSON: But it doesn't say
25 it.

1 CHAIRMAN MORELOCK: On page 5 it
2 does.

3 MR. ROBINSON: Yeah, but in the
4 duties it does not say it.

5 CHAIRMAN MORELOCK: Right. Right.

6 MR. ROBINSON: In the duties, it
7 doesn't say that. G-2.

8 MR. NEVILLE: Right. But would we
9 say it in the duties as far as the -- because this
10 is a position, not -- there's multiple positions.

11 MR. ROBINSON: Well, you've got --
12 at the bottom --

13 MR. NEVILLE: Yes.

14 MR. ROBINSON: -- it confused me.
15 What it said was "when scheduled."

16 MR. NEVILLE: Right. Because
17 there's multiple security officers.

18 MR. ROBINSON: But then --

19 MR. NEVILLE: And one of them could
20 be the one that's going to be monitoring the
21 boilers.

22 MR. ROBINSON: Well, split it up if
23 you have to. Make it certain. Because right now,
24 I didn't know who had it.

25 CHAIRMAN MORELOCK: But maybe to add

1 some clarity, Eugene, we asked in 2013 to have the
2 sentence -- the second sentence was added to Item
3 2 on page 7. We specifically asked for this as a
4 board. And it says, "During periods when the
5 plant is unoccupied, security officers in the
6 central security office will monitor and respond
7 to routine and emergency duties and fill out the
8 log sheet for each operating boiler.

9 MR. ROBINSON: Okay.

10 CHAIRMAN MORELOCK: So they're not
11 operating the boiler. They're monitoring the
12 boiler or shutting it down, so now --

13 MR. NEVILLE: That's --

14 CHAIRMAN MORELOCK: -- going back to
15 Eugene's --

16 MR. NEVILLE: And that's an
17 unoccupied --

18 CHAIRMAN MORELOCK: Right. But if
19 you have a situation where your boiler for some
20 reason shuts down while it's unoccupied, and this
21 second boiler starts up on its own and the
22 monitoring system can't operate it properly, I
23 mean, Eugene has got a point. I don't think you
24 want to just let it shut down too and lose your
25 product. So you may want to think about it.

1 We're not going to tell you what to do. But we're
2 just --

3 MR. NEVILLE: A contingency.

4 CHAIRMAN MORELOCK: I mean, you've
5 got -- like you say, you've got a spot there where
6 you have a certain amount of risk of losing that
7 product. So you may want to look at that.

8 Any other questions?

9 MR. BAUGHMAN: Well, it's just more
10 of just clarification again. The security
11 officer, the monitor, if the boiler starts up and
12 the boiler attendant -- and this is during
13 unoccupied times -- but the boiler attendant is
14 going to be summoned via cell phone, and like any
15 human being, he or she is going to have other
16 things going on and so can't get there for an
17 hour, 30 minutes, whatever the case may be, or --
18 and there's multiple people to call. But as we
19 know, cell phones -- my cell phone doesn't always
20 work the way I would anticipate, that I would like
21 it to work.

22 But my end of it is, is that then
23 that security officer, if that boiler gets started
24 and nobody is available, is going to become a
25 boiler attendant. Somebody is going to have to go

1 down and look at that boiler, check it out and
2 what have you.

3 Boiler attendants will be trained in
4 boiler operation and monitoring boiler operations,
5 but they will be trained in boiler operation. I'm
6 interested in that training. How much training do
7 these people actually have? And the reason being,
8 we just experienced some security officers and
9 went through training with them last week, and it
10 scared them to death. And so I'm interested in
11 that aspect of it itself. Because they then
12 become a boiler attendant that's trained in the
13 operation. I'm interested to know exactly what
14 extent do we have them trained.

15 MR. SPENCE: Well, basically, their
16 duty is going to be to shut it off, to e-stop it
17 from either -- from either the remote station at
18 the security base or to go to the boiler room and
19 press e-stop. And then they are to continuously
20 try to get ahold of someone. If they can't get
21 ahold of someone who actually works on boilers,
22 then they go up the line of supervision and
23 superintendents, and expect to get ahold of
24 someone on the phone in a reasonable amount of
25 time.

1 MR. BAUGHMAN: So actually, not
2 really trained in boiler operations but more
3 trained into boiler shutdowns.

4 MR. NEVILLE: Yes. It's mainly
5 monitoring and shutting down and calling.

6 CHAIRMAN MORELOCK: I've just got
7 two things. I know this was accidental, but if I
8 flip to the yellow pages, instead of getting
9 emergency procedures, I get the normal daily
10 duties. So you may want to fix your highlighted
11 pages to be 11 and 12 instead of 8 and 9.

12 MR. NEVILLE: I'll do that.

13 CHAIRMAN MORELOCK: So that's just a
14 minor thing. That's all.

15 MR. BAUGHMAN: How many boiler
16 attendants do we have?

17 MR. SPENCE: I believe there's one
18 per shift.

19 MR. BAUGHMAN: Okay. And so when
20 one comes up for vacation or two of them come down
21 with the flu bug ...

22 MR. SPENCE: They have to work extra
23 hours.

24 CHAIRMAN MORELOCK: And I guess I do
25 have -- again, this is what we see a lot. You've

1 got the term "boiler operator" and "boiler
2 attendant" used interchangeably in the manual.
3 You call that "operator" in G and some other
4 places, and then you've got "boiler attendant" --

5 MR. NEVILLE: Well, boiler operator
6 was the job title that McKee gave to that
7 individual. So, you know, boiler attendant would
8 be that -- could be that security officer at
9 times, unattended. So that's where there's a
10 difference. So I'm not sure how to ...

11 CHAIRMAN MORELOCK: So when you look
12 at the -- you may want to show that on the
13 organizational chart, that the security officer is
14 the boiler attendant, and then the boiler operator
15 is the boiler operator.

16 MR. NEVILLE: Okay.

17 CHAIRMAN MORELOCK: Any other
18 questions?

19 (No verbal response.)

20 CHAIRMAN MORELOCK: Do I have a
21 motion on this item?

22 DR. JOHNSON: I will move to put it
23 on the table.

24 CHAIRMAN MORELOCK: Okay. So I have
25 a motion to approve with the changes we've

1 discussed and contingent on the deputy inspector
2 making a visit to the plant site.

3 Do I have a second?

4 DR. CANONICO: I'll second.

5 CHAIRMAN MORELOCK: Okay. So I do
6 have a second. Any more discussion?

7 (No verbal response.)

8 CHAIRMAN MORELOCK: Okay. I'm going
9 to call the question. All in favor say, "Aye."

10 (Affirmative response.)

11 CHAIRMAN MORELOCK: Opposed?

12 (No verbal response.)

13 CHAIRMAN MORELOCK: Abstentions, not
14 voting?

15 (No verbal response.)

16 CHAIRMAN MORELOCK: All right,
17 gentlemen, you have a renewed variance.

18 I have 10:30, so I'm going to give
19 everybody five minutes, and we're going to come
20 back and jump into 15-06, which is Domtar's boiler
21 inspection variance. So let's take about five
22 minutes.

23 (Recess observed.)

24 CHAIRMAN MORELOCK: All right. Our
25 next agenda item is 15-06, Domtar Paper Company.

1 They are requesting a variance for a six-month
2 extension on their annual operating certificate
3 for the Number 2 recovery power boiler located in
4 Kingsport.

5 So gentlemen, the floor is yours.

6 Before I say that, is there any
7 conflicts of interest on this item?

8 (No verbal response.)?

9 CHAIRMAN MORELOCK: All right.
10 hearing none, you guys may proceed.

11 MR. NEVILLE: Again, I'm James
12 Neville, Neville Engineering.

13 MR. MORRISON: I'm Steve Morrison,
14 power and recovery manager for Domtar Paper
15 Company.

16 MR. FISH: Gary Fish, Nalco
17 Chemical.

18 MR. MORRISON: Okay. What we're
19 talking about now is the recovery boiler. It is
20 Tennessee state registration number 34950. It was
21 commissioned in 2002. Operating pressure is
22 1250 psig, 925 degrees Fahrenheit. Maximum
23 allowable working pressure is 1640. Gage
24 pressure, continuous. Max continuous rate,
25 originally, was 465,000 pounds per hour. It was

1 modified to increase that to 510,000 per hour.
2 Kvaerner Pulping with a furnace volume of
3 54,000 cubic feet and a water volume of
4 22,666 gallons.

5 The boiler is located at the Domtar
6 facility in Kingsport, Tennessee. Currently, we
7 are running the boiler on an annual operating
8 certificate. That operating certificate started
9 the operation on November 7th of 2014. We're
10 looking to extend that out until May 7th of 2016.

11 CHAIRMAN MORELOCK: Okay.

12 MR. MORRISON: We've put a program
13 together to try to address all of the items on the
14 checklist that was received by the boiler board.
15 And rather than go through each one of these, I'm
16 just going to kind of paraphrase each section.
17 And then if you have any questions, we can delve
18 into it.

19 So the first one, the first section,
20 Section 1, talks about the boiler system,
21 basically just overview of the boiler and the
22 history of the boiler, including the support
23 letter from our insurance company. The insurance
24 company is in support of allowing the boiler to go
25 18 months.

1 The next one is the boiler system.

2 The boiler system lines out the specifications of
3 the boiler, includes drawings of the boiler, and
4 describes the controls of the boiler with the ABB
5 and DCS. And then we also included some screen
6 shots of the DCS screen to give everybody an idea
7 of what the operator looks at.

8 And this is a screen where they have
9 a mouse and they can click on each one of the
10 items, the icons, on this screen, and it will
11 bring up the detail on that or they'll bring up
12 the valve. And they can actually operate the
13 valve remotely. If it is a manual valve, then
14 they have an operator that is a field operator
15 that goes out and operates that valve.

16 They communicate through radios
17 between the field operator and the control room
18 operator, and then we also have a crew lead that
19 is over the entire operation of both boilers.
20 There is another boiler on the other side of the
21 railroad tracks that we operate from the same
22 control room, which is a biomass boiler.

23 The next section is the boiler
24 records. It includes the inspection report. What
25 I did was I included the last inspection report

1 that I had available, which was back in 2013 from
2 a company called PSA. They are a company that
3 we've used for multiple years doing these visual
4 inspections as well as the NBE inspection.

5 Since this program was developed, we
6 have gotten the newest report. And I believe you
7 have that available to you also, as the addendum.
8 So this is the --

9 MR. NEVILLE: Well, not the -- this
10 didn't include the new PSA report.

11 MR. ROBINSON: It was in the
12 original submittal. It's dated 7/14.

13 MR. MORRISON: Okay.

14 MR. ROBINSON: It's an original
15 submittal.

16 MR. NEVILLE: Yes. But there's been
17 a --

18 MR. ROBINSON: Another one?

19 MR. NEVILLE: -- a newer report that
20 has come out since we submitted this.

21 CHAIRMAN MORELOCK: Even though it's
22 dated 7/14 at the bottom, it's still a 2013
23 report.

24 MR. NEVILLE: Right. The date on
25 the bottom is actually the program's date.

1 MR. ROBINSON: Okay. I see it. I
2 see it. Okay.

3 MR. NEVILLE: It was requested --
4 not the date of that report.

5 MR. ROBINSON: I thought I read
6 something in the beginning that said 7/20. Okay.
7 Good. Go ahead.

8 MR. MORRISON: But the inspection
9 report -- I'll just summarize it real quick -- it
10 basically said there was no major deficiencies
11 found. There was a lot of little stuff. And as
12 part of our normal procedure during the annual
13 shutdown, a checklist item is developed based on
14 that individual inspection.

15 And we actually have teams scheduled,
16 and their only job is to work with the visual
17 inspector. So as soon as he identifies something,
18 they're able to react to it and get it taken care
19 of before the inspector can leave so that he can
20 verify that that was actually prepared.

21 So we try to take care of those
22 checklist items as quickly as possible.

23 CHAIRMAN MORELOCK: So in that PSA
24 report, all those PL items, those punch list
25 items, they were corrected?

1 MR. MORRISON: Yes.

2 CHAIRMAN MORELOCK: Okay. Thank
3 you.

4 MR. ROBINSON: With the exceptions
5 of the ones that you had to order parts for and
6 were going to push out further, like, the nozzles
7 where you had parts that you had to order for
8 modifications?

9 MR. MORRISON: It depends on whether
10 or not it's identified as a punch list item that
11 can be corrected right away.

12 MR. ROBINSON: Okay.

13 MR. MORRISON: We classify them, but
14 the punch list items are the ones that are
15 actual --

16 MR. ROBINSON: Fixed.

17 MR. MORRISON: Yeah. We need to get
18 done right away.

19 MR. ROBINSON: But do you still have
20 any open items from that last inspection?

21 MR. MORRISON: Yes, we do.

22 MR. ROBINSON: Correct. That's the
23 point I wanted to make.

24 MR. MORRISON: Section 3 is boiler
25 records. So here we talk about any repairs to the

1 boiler, and we include log sheets and data sheets,
2 and any times that the boiler is out of service.
3 We also included inspection reports, monthly
4 reports that are done.

5 I'm trying not to inundate you with
6 information, but at the same time, we wanted to
7 provide you with enough information that you
8 wouldn't have a whole lot of questions. You could
9 just refer to the program.

10 Does anybody have any questions about
11 the boiler records?

12 MR. ROBINSON: One question. Do you
13 guys also do root-cause analysis?

14 MR. MORRISON: Yes, we do. Right
15 now we're actually trying to standardize our
16 root-cause analysis with a corporate-wide push to
17 go with one program so that -- because right now
18 we have multiple sites throughout the U.S., and
19 we're all using different types of root-cause
20 analyses, and we're trying to standardize our
21 root-cause analysis by all using the same program.
22 That hasn't been ruled out yet because they're
23 still evaluating. So we do root-cause analysis,
24 but it's not as structured as it's going to be.

25 MR. ROBINSON: Did you guys find out

1 what happened to that indication on the pipe on
2 page 16?

3 MR. MORRISON: On Section 3?

4 MR. ROBINSON: Yeah. It was just
5 enlarged. Either the pipe buckled or it had a
6 real noticeable crease. You removed it,
7 obviously. But then you had one that actually
8 sprung on you. And I may be getting the two
9 confused.

10 MR. NEVILLE: Is that 3-16,
11 Section 3?

12 MR. ROBINSON: Well -- okay. On
13 page -- let's see. This would be report number --
14 it's page 32. But what had happened, one of the
15 lower loops on the superheater pendant number 21,
16 it actually bowed out. It could have been because
17 of one of the handcuff straps that cracked,
18 but ...

19 MR. MORRISON: I believe that's what
20 it was. I believe it was one of the --

21 MR. ROBINSON: It probably sprung
22 the pipe or something.

23 MR. MORRISON: Yes. One of the
24 clips that hold the tubes in line, typically,
25 we'll see a lot of those that will be destroyed.

1 We actually went to a new design that allows the
2 tubes to slide and to try to keep those tubes in
3 line. And we've had better success with those.

4 MR. ROBINSON: And what kind of
5 corrective action did you guys come up with?

6 MR. MORRISON: We replaced the clip.

7 MR. ROBINSON: So you put the pipe
8 back in place and then replaced the clip?

9 MR. MORRISON: That's correct.

10 MR. ROBINSON: So the springing
11 that's still in the pipe is there.

12 MR. MORRISON: Yes.

13 MR. ROBINSON: And on page 16 it had
14 the crease.

15 MR. NEVILLE: Is that 2-16? Section
16 2, page 16?

17 MR. ROBINSON: Yeah, 2-17.

18 MR. NEVILLE: Oh, 2-17.

19 MR. MORRISON: This was -- I'm not
20 exactly sure of the history behind this crease,
21 but there was a spot that was identified as
22 questionable. And so they inspected it back in
23 2010, and we go back to that same spot every year
24 because we know that something happened there, and
25 we inspect it to make sure that there is nothing

1 that's happening again, that it was just a one
2 time ...

3 MR. ROBINSON: So you repaired it?

4 MR. MORRISON: It was repaired
5 back -- I believe it was 2010, and then we just
6 keep going back there and reviewing that same spot
7 to make sure that we don't have any propagation of
8 any mechanism that had metal loss.

9 MR. ROBINSON: Okay. Back to Number
10 32, where the pipe was actually sprung, you didn't
11 have to do an R stamp on that because it was just
12 a handcuff and not a pressure boundary item.

13 MR. MORRISON: That's correct.

14 CHAIRMAN MORELOCK: So is your
15 question, "Was the mechanism that caused the
16 failure mitigated?"

17 MR. ROBINSON: Right. In reality --

18 CHAIRMAN MORELOCK: Or is it going
19 to break it again?

20 MR. MORRISON: It possibly could
21 break again. It's just a handcuff. We try to use
22 these handcuffs to try to keep the tubes in line
23 as they expand and grow. And as you walk up into
24 the boiler and look up into the boiler, you can
25 see the tubes wave back and forth. This just

1 happened to be one that seemed to be like it was
2 more pronounced than others, so they brought that
3 to our attention.

4 MR. ROBINSON: Now, this came up in
5 the last 2013 inspection, right?

6 MR. MORRISON: 2013, that's correct.

7 MR. ROBINSON: Okay. And you're now
8 scheduled for your next internal approximately
9 18 months from that period of time?

10 MR. MORRISON: No.

11 MR. ROBINSON: May?

12 MR. MORRISON: It was from November
13 7th, 2014, was our last inspection.

14 MR. ROBINSON: Okay.

15 MR. MORRISON: I didn't bring the
16 individual inspection for this. I did bring the
17 NDE inspection report.

18 MR. ROBINSON: Okay. Did you take a
19 look at this area again?

20 MR. MORRISON: I can't answer that.
21 I mean, it's -- I don't remember the specifics on
22 that report, on that particular item.

23 MR. ROBINSON: Okay.

24 MR. BAUGHMAN: I would like to see
25 it.

1 MR. ROBINSON: Yeah. It would be --
2 whenever I've seen a sprung pipe like this, the
3 solution to mitigate -- that pipe is under load --
4 you cut it out and you replace it. That's what
5 I've seen. Now, perhaps Brian has seen different
6 things, but I've only seen where if a pipe is
7 under that much load, I've seen where under load
8 conditions the pipe will actually move several
9 feet. But it's calculated.

10 This is unusual based on what I'm
11 seeing throughout the rest of the boiler. That's
12 why I question it.

13 MR. MORRISON: Yeah, and it may have
14 been presented that it's unusual. But, again, if
15 you look up into the superheater section, there is
16 a lot of deformation.

17 So the boiler tubes are deformed.
18 You know, the superheater tubes do deform here,
19 especially when you go in and, you know, look up.
20 And this just happened to be a little bit more
21 pronounced.

22 MR. ROBINSON: This would just be
23 one spot.

24 MR. MORRISON: Yeah. This one
25 happened to be more pronounced than the others.

1 MR. ROBINSON: Okay. I would be
2 interested to know what the numbers were for this
3 particular item again.

4 MR. MORRISON: I can find out.

5 MR. ROBINSON: Please?

6 MR. MORRISON: So going back to
7 boiler records, Section 3, does anybody have any
8 questions on Section 3?

9 (No verbal response.)

10 MR. MORRISON: All right. We'll go
11 on to Section 4, Section 4 being a boiler water
12 treatment system. And so we've got a synopsis of
13 the water treatment control system here and how we
14 operate, our coordinated phosphate program. It's
15 pretty straightforward. Does anybody have any
16 questions about that? And if you do, I brought
17 somebody along who can answer it.

18 CHAIRMAN MORELOCK: I guess the only
19 comment I have is when we take our renewal for our
20 commissions, we have questions about this. And so
21 NB410 from the national board has guidelines on
22 what your pH and all of that ought to be. And so
23 is your water treatment program kind of going
24 along with the guidelines in NB410?

25 MR. MORRISON: I'm not sure what

1 NB410 is.

2 CHAIRMAN MORELOCK: It's a national
3 board publication code on your water, boiler feed
4 water, and things like that -- it's not a -- it's
5 not a code or a -- it's a guideline. So you just
6 might want to -- you can go out to the national
7 board web site and find it, so it's -- it might
8 provide you some good information.

9 MR. NEVILLE: That's NB410?

10 CHAIRMAN MORELOCK: Yes.

11 MR. MORRISON: Okay. The next
12 section is the Boiler Water Treatment System
13 Records. So here we talk about the log -- it
14 shows the log sheets where the pH conductivity is
15 logged, and we also have monthly reports from our
16 chemical supplier that shows -- we call it the
17 percent in the box, and any issues or concerns
18 with the water chemistry system for the past
19 month. And that happens every month.

20 Does anybody have any questions on
21 Section 5?

22 MR. BAUGHMAN: Gary?

23 MR. FISH: Yes.

24 MR. BAUGHMAN: How long have you
25 been involved there?

1 MR. FISH: About 18 months. In June
2 I'll have been there two years.

3 MR. BAUGHMAN: Okay.

4 MR. MORRISON: Next is Section 6.
5 This is the boiler and boiler water treatment
6 maintenance system. We currently use a computer
7 maintenance management system, SAP, so all the
8 work orders are identified through notifications
9 in SAP. A maintenance coordinator reviews the
10 notifications, and if they are legitimate items
11 that we decide to work on, then he converts them
12 to a work order and then schedules them through
13 planning. And I -- rather than, you know, create
14 a book this big (indicating), because there's
15 hundreds of work orders written each day, I just
16 went ahead and printed a small sample.

17 MR. NEVILLE: In the addendum we
18 also list -- and there's a full page, and I
19 believe this starts the beginning of the year,
20 so ...

21 CHAIRMAN MORELOCK: That makes
22 sense.

23 MR. MORRISON: And this is just the
24 boiler.

25 MR. NEVILLE: This is the water

1 treatment system here.

2 MR. MORRISON: And also in this
3 section we included the R2 forms for the
4 modification of the boiler for increasing the
5 steaming rate.

6 Does anybody have any questions about
7 the maintenance of the boiler and boiler water
8 treatment system?

9 (No verbal response.)

10 MR. MORRISON: All right. Next
11 section, Section 7, is the Pressure Vessel and
12 Tank Inspection Program. We have a separate
13 program for managing our pressure vessels. We
14 grade our pressure vessels, do a risk assessment
15 on it and give it a category, and then based on
16 the chart, where it lands in the chart, that
17 determines our frequency of inspection.

18 This is something that is being
19 rolled out corporate-wide through Domtar. And
20 we're basically the best in Domtar at managing
21 this.

22 CHAIRMAN MORELOCK: So will the
23 pressure vessel side, will that eventually -- will
24 you be coming to the State and to the board
25 seeking to extend your inspection frequency on

1 your pressure vessels?

2 MR. MORRISON: Not at this time,
3 because the boiler being a pressure vessel is
4 classified as a critical P1, and the interval
5 inspection is one to two years, so we're still
6 within that range. So the classification of the
7 boiler won't change. It's just we're going to use
8 18 months instead of 12 months.

9 CHAIRMAN MORELOCK: Okay.

10 MR. MORRISON: But that was
11 definitely something that we looked at during the
12 annual shutdown last year, to look at any pressure
13 vessels that were due for 2015 that would have to
14 be taken offline to have inspected. And so we
15 inspected those in 2015 to restart the clock on
16 those pressure vessels.

17 Any questions about the Pressure
18 Vessel and Tank Inspection Program?

19 (No verbal response.)

20 MR. MORRISON: The next is Position
21 Descriptions. And here we talk about the
22 operators, what their job duties are and where
23 they fit into the organization. We also included
24 the operator certification document. It covers
25 what's expected of a boiler operator and what they

1 have to do to not only be qualified but to stay
2 qualified. There is renewal certifications that
3 they have to go through. So every three years
4 they have to retest.

5 And we did this for -- we call it the
6 first assistant, which is the operator that sits
7 at the panel. I did not include the third
8 assistant, which is the rover, the one that goes
9 out and operates the valves, but --

10 MR. NEVILLE: They're in the
11 addendum.

12 MR. MORRISON: -- we did include
13 them in the addendum.

14 MR. NEVILLE: The third assistant is
15 in the addendum.

16 MR. MORRISON: And then we included,
17 in this same section, the request letter and kind
18 of went through the check list and tried to make
19 sure that we hit all the items.

20 Does anybody have any questions about
21 the position descriptions?

22 CHAIRMAN MORELOCK: Any questions?

23 DR. CANONICO: Have you ever had a
24 failure that resulted in an injury?

25 MR. MORRISON: Well, I've only been

1 there about as long as Gary, so I've been there
2 just about two years. We have had injuries, but
3 most of it is not pressure-part related. We did
4 have, I believe, a chemical burn. We burn the
5 liquor and it's 290 degrees. It's a very high pH,
6 so it's caustic. We have PPE that we wear, but it
7 doesn't quite cover every spot, and so we've had
8 people who have gotten burned and stuff like that,
9 but no major incidents in the boiler house. We
10 had one real close call in 2013. It was not -- it
11 was in the utilities department. It wasn't quite
12 part of this boiler, but in the hog fuel conveyor,
13 feeding the hog fuel boiler, an operator got
14 caught up in the conveyor. Luckily he hit an
15 I-beam and that stopped him from going in and he
16 only broke a couple of ribs. But if he would have
17 gotten onto the conveyor, it could have been a
18 fatality. It most assuredly would have been a
19 fatality.

20 DR. CANONICO: So what you're asking
21 for now is to extend the inspection period?

22 MR. MORRISON: Yes, sir. The
23 internal inspection period. We'll still continue
24 to do the external inspections and all the
25 inspections that can be done.

1 DR. CANONICO: You have a very
2 dangerous combination of your liquor and if water
3 or steam gets in there.

4 MR. MORRISON: Yes, sir, we do. The
5 smelt reaction. And we will continue to do small
6 shutdowns. So every quarter we do shut the boiler
7 down and do maintenance and repairs. In fact,
8 this month, the 25th, we have a scheduled
9 shutdown. And we're actually going to be going in
10 and working -- we'll work on the liquor system.
11 We'll be cleaning the liquor system. We'll be
12 actually putting on a new superheater safety to
13 increase the capacity.

14 So we'll be doing some maintenance on
15 the boiler during these annual shutdowns -- or on
16 these quarterly shutdowns. We just won't be going
17 in and doing the internal inspection every
18 12 months. We're just asking to extend that out
19 to 18 months.

20 MR. BAUGHMAN: So do I understand
21 you that the boiler is shut down quarterly?

22 MR. MORRISON: It is quarterly, yes.

23 MR. BAUGHMAN: Okay. Is there --
24 and I would really have liked it if we had seen
25 the report or had access to have taken a look at

1 the last findings. It would have been great to
2 look at. But I'm interested, is there anything
3 that's on the reports here from PSA, September 24
4 of 2013, any of the recommendations that have not
5 been accomplished?

6 MR. MORRISON: I would have to check
7 with the boiler engineer to find out. His
8 responsibility is to follow up on these items.

9 MR. BAUGHMAN: In particular, the
10 recommendation says plan to remove the smelt bed
11 in its entirety during the 2015 outage. Last done
12 in 2010.

13 MR. MORRISON: I can answer that
14 one. We did do that. What happens is we have a
15 bed of smelt down at the floor, and during a
16 normal shutdown, you just allow the smelt to
17 solidify and you do the boiler inspection. Well,
18 the floor itself underneath that smelt is not
19 inspected except every five years. Well, it was
20 coming up in 2015. We knew that we were going to
21 be asking for this extension, so in 2014, back in
22 October, we went ahead and pulled all of the smelt
23 out and went ahead and did a full inspection on
24 the floor.

25 MR. BAUGHMAN: That's the kind of

1 thing that I would like to see, is just
2 documentation of what recommendations were made
3 versus what actually had been accomplished just so
4 there's no questions in anybody's minds. The
5 accountability versus the liability.

6 CHAIRMAN MORELOCK: Any other
7 questions?

8 (No verbal response.)

9 CHAIRMAN MORELOCK: I've got some
10 editorial things. If you -- the back page of your
11 table of contents is upside down.

12 On page 8 in Section -- well, it's
13 actually before Section 1, you've got this top
14 paragraph called Concern 2 in which you're talking
15 about damage mechanisms.

16 MR. MORRISON: Yes.

17 CHAIRMAN MORELOCK: And then you've
18 got a space, and it says "Since mass flow is
19 constant," colon, zero.

20 Is there an equation that's supposed
21 to be there, or is there something -- it almost to
22 me looked like there was going to be an equation
23 showing the relationship between mass flow and
24 velocity and reduced cross-sectional area and all
25 of that, so ...

1 MR. MORRISON: I believe that zero
2 and that point should just not be in there.

3 CHAIRMAN MORELOCK: Okay.

4 MR. MORRISON: I believe that "Since
5 mass flow is constant," and then the next
6 sentence --

7 CHAIRMAN MORELOCK: Okay.

8 MR. NEVILLE: We'll remove that.

9 CHAIRMAN MORELOCK: Yeah. You just
10 may want to fix that.

11 On page 9, I have not -- and it may
12 be in here and I've just missed it, but I do not
13 see a spelled-out definition of the acronym BFB,
14 in the third paragraph.

15 MR. MORRISON: Okay. Yeah, I think
16 I did.

17 CHAIRMAN MORELOCK: And if it's
18 there, that's fine. I may have missed it.

19 MR. MORRISON: No. I believe what
20 happened, sir, is we included the BFB in the
21 original writeup, and I did spell it out in those
22 pages, but those pages were removed.

23 CHAIRMAN MORELOCK: Okay. You may
24 want to spell that out, the first time at least.

25 And within that same paragraph, it

1 goes on to say that the analysis is then presented
2 as Attachment E. So we didn't know how to find
3 that.

4 And at the end of that paragraph, the
5 next-to-the-last sentence states, "Domtar believes
6 with a high confidence that this magnetite layer
7 can be maintained whether the boilers are
8 inspected every 12 months or every 18 months,"
9 which builds your case for the 18-month extension.
10 But also, does that tie you to a maximum of
11 18 months?

12 MR. MORRISON: Seems to.

13 CHAIRMAN MORELOCK: Yeah.

14 MR. MORRISON: Maybe beyond
15 12 months.

16 CHAIRMAN MORELOCK: Yeah. And you
17 also mentioned a heat-up and cool-down curve as
18 how you control thermal stresses, which I know
19 Dr. Canonico loves to talk about. So he might
20 like to see that heat-up and cool-down curve.

21 MR. MORRISON: We have those in the
22 procedure. They actually are -- they graph that
23 as they're doing the heat-up and cool-down so that
24 they stay underneath that curve.

25 CHAIRMAN MORELOCK: And as far as

1 your RBI, I read through the couple of
2 calculations and followed most of it, but what
3 methodology are you implementing for your program?
4 Are you using a software or are you -- where are
5 you getting your RBI methodology from?

6 MR. MORRISON: This was developed by
7 corporate engineering at Domtar.

8 CHAIRMAN MORELOCK: And the reason
9 I'm asking, I mean, there's companies out there
10 like Aptech and Meridium and others that provide
11 the software to do that, but --

12 MR. MORRISON: We have no software.

13 CHAIRMAN MORELOCK: Okay. So it's
14 all internal corporate, right?

15 MR. MORRISON: Yes, it is. Well,
16 what happens is we sit down once a year and we
17 grade our tanks with the engineering manager, the
18 area engineer, and the operation operating
19 engineer, and then go through the vessels within
20 those areas and then grade each one.

21 CHAIRMAN MORELOCK: Okay. As you
22 just saw from Wacker's report, you know, you're
23 going to be bound to recommended and good
24 engineering practice, that new OSHA acronym. So
25 you may want to add a little more information to

1 that to show that your RBI does satisfy that part
2 of the OSHA requirement, as well as PSM, too.

3 And that's the only comments I had.

4 Any other questions?

5 DR. CANONICO: On page 1.10, you
6 talk about your boiler system. And your 62-2000,
7 you're operating at 900 degrees. Am I reading
8 that correctly?

9 MR. MORRISON: I'm sorry. Where are
10 you at now?

11 DR. CANONICO: 1.10.

12 MR. MORRISON: 900 degrees
13 Fahrenheit. 925 I thought. Yeah, that should be
14 925 degrees.

15 DR. CANONICO: Same thing. What
16 kind of material is that boiler made of? Do you
17 know?

18 MR. MORRISON: Yes. In fact, you
19 asked me last time. And I believe it's an SA120.
20 I mean, there's multiple areas, but most of the
21 boiler is -- it's carbon steel. I'll say 120 is
22 the --

23 DR. CANONICO: You're up in the
24 creep range. Do you cycle this unit?

25 MR. MORRISON: We try not to at all.

1 This is our baseline boiler, and the hog boiler is
2 the one that swings.

3 DR. CANONICO: Once you go above
4 750, roughly, most carbon steels will start to
5 creep.

6 MR. MORRISON: We watch real closely
7 the two temperatures. We actually have
8 thermocouples on all of our superheater 2s.

9 DR. CANONICO: Are you measuring any
10 change in diameter or growth?

11 MR. MORRISON: We don't. We just
12 monitor for the temperature. And then every
13 year -- we started instituting this -- we've taken
14 a scav sample. So we've gone down to the furnace
15 area and cut out a tube and had it analyzed. And
16 one of the analyses, I believe, is creep, and we
17 just did that for the other boiler also, because
18 it operates at the same pressure and temperature.

19 DR. CANONICO: Yeah. Once you go
20 above 750, I like to add a little goodies to it,
21 like, one-and-a-quarter Chrome, half Moly --
22 two-and-quarter Chrome might be too much. But one
23 and a quarter would be useful.

24 MR. MORRISON: Well, the
25 temperature, you know, the 900, 925 degrees,

1 that's the steam outlet temperature. And the
2 tubes in the superheater are made of different
3 metallurgy than just straight carbon steel. I do
4 know that they are different. And I believe in
5 the addendum inspection report it shows the
6 metallurgy for the different components within the
7 boiler. But for the most part, with operating at
8 1250 psi, I believe the saturation temperature is
9 750 degrees. And that's --

10 DR. CANONICO: 750 should be okay.

11 MR. MORRISON: That's where the --

12 DR. CANONICO: Then you've gone --
13 we've had failures that look like creep failures
14 at 750 if you've got a lot of residual junk in the
15 seal.

16 MR. MORRISON: Yeah. I'm trying to
17 remember what we have for those. I have those
18 listed --

19 MR. NEVILLE: It's in the PSI
20 inspection report.

21 DR. CANONICO: Do you have the
22 analysis in the addendum?

23 MR. MORRISON: No, I guess I don't.
24 But I do have the NDE inspection report, and I
25 believe it has it. If you can give me just a

1 second. This (indicating) is why I didn't want to
2 put it in the program.

3 DR. CANONICO: The only reason I
4 mention it is for your own good. And of course
5 our only concern is safety. But for your own
6 good, you might want to be sure that you're not
7 running into any creep damage. But if you're
8 operating at 750 with the carbon steel, you should
9 be okay.

10 MR. MORRISON: Yeah, and it's -- so
11 the material for the majority of the boiler is
12 SA-210-A1. The superheater loops are 213-T11 --

13 DR. CANONICO: Okay. That's good.

14 MR. MORRISON: -- T22 and then
15 209 T1, 210 A1. And so there's different
16 metallurgy for the different superheaters.

17 But I appreciate the comment, and we
18 recognize that creep is a concern. And we're
19 going to continue to do the scav samples and have
20 the tubes analyzed. It allows us to also do
21 verification on our NDE instrumentation and it
22 gives us an idea of the magnetite layer right
23 there at the furnace. We strategically picked
24 that spot. And it also allows us a spot to bore a
25 scope down through the tubes.

1 CHAIRMAN MORELOCK: Any other
2 questions or comments?

3 MR. BAUGHMAN: Have you ever had a
4 leak in the superheater economizer?

5 MR. MORRISON: I was told that we
6 never had a leak. I went back and looked at the
7 reports. We did have a leak during a hydro, but
8 it was identified during the hydrostatic test, and
9 it was repaired before the boiler was put back
10 online.

11 DR. CANONICO: But it hadn't been in
12 service yet.

13 MR. MORRISON: It had not been in
14 service yet.

15 DR. CANONICO: That's when they're
16 supposed to leak.

17 MR. BAUGHMAN: Somewhere in here,
18 Steve, I read that there was mostly routine items
19 that were found during an inspection. And the
20 "mostly" just kind of stands out to me a little
21 bit. And in the absence of the boiler -- last
22 boiler inspection report, which this one is very
23 thorough from 2013 -- but I've just got a
24 little -- I've got some reservations. I'm not
25 holding 2014s for any analysis. And so we're

1 basing information off of a previous. And I would
2 really like to have a copy of the newest
3 inspection report.

4 MR. MORRISON: I can get one
5 tomorrow. I'm sorry.

6 MR. BAUGHMAN: Yeah, I understand.

7 CHAIRMAN MORELOCK: Any other --

8 MR. BAUGHMAN: There again, that
9 item about "mostly," I don't know what else -- I
10 don't know what is -- I don't know what's included
11 in that to be able to analyze it, so I'm relying
12 upon verbal communication here to extrapolate that
13 information.

14 MR. MORRISON: Are you wondering
15 about the scope of the inspection or the
16 inspection results itself?

17 MR. BAUGHMAN: The inspection
18 results itself.

19 MR. MORRISON: Because I can speak
20 about the scope of the results.

21 MR. BAUGHMAN: No. It's the
22 results.

23 MR. MORRISON: And I can tell you,
24 as the power recovery manager, if there was a big
25 problem, they would be coming to me right away.

1 But there's -- typically we have the utilities
2 engineer, and he runs the inspection and nothing
3 was terrible, nothing that couldn't be taken care
4 of that would prevent us from starting or
5 continuing to run.

6 And the inspection company was given
7 the information that we were going to be going
8 18 months, so we told them to expect it like it's
9 going to go 18 months. That way if we do get
10 approval from the boiler board, then we're okay.

11 MR. BAUGHMAN: Sure. Why was that
12 document not able to be produced to us for this
13 meeting?

14 MR. MORRISON: I didn't bring it
15 with me. It's my fault.

16 CHAIRMAN MORELOCK: Well, we can
17 always make that document part of the contingent
18 approval, so it's not a done deal.

19 MR. BAUGHMAN: That's what I would
20 like.

21 MR. MORRISON: Yeah. I didn't think
22 the inspection report, the visual, was as
23 important as the NDE, so I brought the NDE
24 reports. I didn't bring the visual.

25 MR. ROBINSON: If I recall

1 correctly, the last report you submitted had,
2 also, the macros.

3 MR. MORRISON: I'm sorry?

4 MR. ROBINSON: The last report, the
5 last time you came to see us, you had included the
6 macros. They were a part of the inspection
7 report.

8 MR. MORRISON: Macros?

9 MR. ROBINSON: The surface
10 replications for the cut-away sections.

11 MR. MORRISON: Oh, yes, sir. And
12 you're talking about the scav --

13 MR. ROBINSON: Yes, sir.

14 MR. MORRISON: Now, we did have a --
15 the water company also does the inspection. We
16 have three people that really are responsible --
17 three organizations that are responsible for doing
18 inspections on the boiler. We contract out a
19 company to do the inspection as a representative
20 of Domtar. We have the water chemistry company
21 does the inspection to verify that their water
22 chemistry is working and that there's no problems
23 with that. And then we also have the insurance
24 inspector, and he comes in and inspects also,
25 so ...

1 What I did bring is I brought the
2 inspection from the insurance company and the
3 inspection from the water treatment company. I
4 just didn't bring the other ...

5 And so if you'd like to see that, it
6 does talk about the -- I believe the --

7 MR. FISH: Gives the DWD and all
8 that information there. It shows the internal
9 inspection. We do a thorough internal inspection
10 because we're most concerned about the chemistry
11 treatment, so we don't go into the detail that the
12 other inspection would do on the external portions
13 as much.

14 MR. MORRISON: Right there, the
15 lower furnace, too.

16 MR. FISH: That's correct. So
17 here's the inspection report for that piece that
18 was --

19 MR. ROBINSON: Scav piece, okay.
20 Very well.

21 MR. BAUGHMAN: Steve, Nalco has been
22 there two years.

23 MR. MORRISON: Almost.

24 MR. BAUGHMAN: Okay. And --

25 MR. FISH: Well, let me just

1 clarify. We started treating the boilers, I
2 believe, probably in April or May of 2014.

3 MR. BAUGHMAN: Okay. So very
4 recently.

5 MR. FISH: Correct.

6 MR. BAUGHMAN: Okay. The results --
7 I mean, the previous company -- I'm just kind of
8 wondering why the change offhand, if it was --
9 since the previous results had been satisfactory,
10 I hope.

11 MR. MORRISON: They were good. The
12 problem was that there was a corporate initiative
13 to do single-sourcing strategy with water
14 treatment companies. And the water treatment
15 company that we were using was not one of the
16 choices.

17 MR. BAUGHMAN: That's always a fun
18 thing for you guys to deal with. I was just
19 curious to that. Thank you.

20 CHAIRMAN MORELOCK: Any other
21 questions or comments.

22 MR. ROBINSON: No, sir.

23 CHAIRMAN MORELOCK: Okay. So just
24 to kind of recap what we're doing here, Domtar is
25 seeking approval to extend their boiler internal

1 inspection frequency from 12 months to 18 months
2 per the recently passed legislation last year that
3 added paragraph F to 68-122-110.

4 Also, in their manual, they've made
5 it also clear that within that 18-month period,
6 this recovery boiler will be inspected externally
7 every six months. And if this inspection shows
8 any potential problems, leakage or whatever it may
9 be the inspector finds, then the boiler will be
10 shut down for an internal inspection and this
11 variance would be rescinded. So that's what we're
12 voting on today, is to approve this manual.

13 I think you've done an excellent job.
14 It's a very detailed manual. It's very thorough.
15 It took a lot of time, I know, to put all that
16 together. So I thank you for all the effort
17 that's gone into that. So I think you've done a
18 great job.

19 MR. MORRISON: Thank you.

20 CHAIRMAN MORELOCK: So with saying
21 all that, approval of this program obviously would
22 be contingent upon an inspection by the deputy
23 inspector, and it would also be contingent on
24 Mr. Baughman's concerns as far as review of the
25 reports.

1 Would it be satisfactory -- do you
2 want the board to review those reports, or do you
3 want the deputy inspector to review those reports?
4 Both of us?

5 MR. BAUGHMAN: Well, I think the
6 more people that put eyes on it to identify it,
7 the better it would be.

8 CHAIRMAN MORELOCK: Okay. So the
9 board and the deputy inspector would review that
10 latest November 2014 inspection. And I think
11 that's it.

12 So do I have a motion to approve
13 this.

14 DR. CANONICO: Motion.

15 MR. ROBINSON: Second.

16 CHAIRMAN MORELOCK: Okay. I've got
17 a motion and a second.

18 MR. BAUGHMAN: I'm just going to ask
19 one more quick question.

20 CHAIRMAN MORELOCK: Sure.

21 MR. BAUGHMAN: The inspection was
22 actually in September; is that correct? Or when
23 was the inspection performed?

24 MR. MORRISON: Which inspection are
25 you --

1 MR. BAUGHMAN: The last inspection
2 was performed --

3 MR. MORRISON: In October of 2014.

4 MR. BAUGHMAN: -- in October 2014,
5 so this is going to be looking for an extension,
6 but it was -- the new certificate was issued
7 November 7th; is that correct?

8 MR. MORRISON: Yes.

9 MR. BAUGHMAN: Okay.

10 MR. MORRISON: That's when the
11 boiler started back up.

12 MR. BAUGHMAN: Okay. So I was just
13 trying to clarify the dates just offhand just for
14 my own records. So the renewal is going to come
15 up, due presently --

16 MR. MORRISON: May 7th is what I
17 calculated.

18 MR. BAUGHMAN: Well, for the
19 extension renewal. But otherwise, the standard
20 renewal would be scheduled when?

21 MR. MORRISON: November 7th, 2015.

22 MR. BAUGHMAN: Okay. Thank you.

23 MR. MORRISON: And I believe there's
24 a two-month grace period associated with that.

25 CHAIRMAN MORELOCK: Okay. I've got

1 a motion and second. Any more discussion or
2 questions?

3 MR. ROBINSON: Question,
4 Mr. Chairman.

5 CHAIRMAN MORELOCK: Yes, sir.

6 MR. ROBINSON: The best mechanism to
7 deliver the copy of the last inspection report,
8 would it be just to hand it to the acting chief,
9 or perhaps disseminate it through an email.

10 CHAIRMAN MORELOCK: I think for the
11 sake of recordkeeping by the State, if the State
12 can receive it, they can date stamp it, and then
13 they can send us a PDF of that for review. Would
14 that be acceptable, some sort of electronic
15 format?

16 MR. MORRISON: Send it to
17 Mr. Chapman?

18 CHAIRMAN MORELOCK: So send it to
19 Mr. Chapman. That way he can have a date stamp on
20 it and it will go into the records. And that
21 would be better than us getting it in a nebulous
22 email.

23 MR. NEVILLE: Does he need a
24 physical copy or can I send it digital?

25 MR. ROBINSON: PDF.

1 CHAIRMAN MORELOCK: PDF will be
2 fine. If you want to send it to him as well, he
3 can date stamp that as well. Okay.

4 Any other comments or questions?

5 (No verbal response.)

6 CHAIRMAN MORELOCK: All right. I'm
7 going to call the question. All in favor say,
8 "Aye."

9 (Affirmative response.)

10 CHAIRMAN MORELOCK: Opposed?

11 (No verbal response.)

12 CHAIRMAN MORELOCK: Abstentions, not
13 voting?

14 (No verbal response.)

15 CHAIRMAN MORELOCK: Congratulations.
16 You have the first boiler variance, unless there's
17 something in the inspection report.

18 MR. MORRISON: Thank you, sir.

19 CHAIRMAN MORELOCK: Okay. Our next
20 item is 15-07, U.S. Nitrogen. They're requesting
21 an attendant variance.

22 Are there any conflicts of interest
23 with this item?

24 (No verbal response.)

25 CHAIRMAN MORELOCK: All right. I

1 hear none.

2 Gentlemen, you may proceed.

3 MR. NEVILLE: I'm James Neville with
4 Neville Engineering.

5 MR. MOON: Marty Moon, operations
6 manager, U.S. Nitrogen.

7 MR. CHARLES: Dylan Charles, U.S.
8 Nitrogen.

9 MR. NEVILLE: I'll have Mr. Moon
10 briefly describe the company and their operation
11 of the four boilers. I would like to hand out --
12 I do have the new TN numbers for three of the
13 boilers. One of them, they do not have a TN
14 number for, so we will not be asking at this
15 meeting for that as a part of this variance.

16 This will just be National Board
17 Numbers 29, 30, and 31. Those are the three
18 boilers that -- in Appendix -- and I do have an
19 updated Appendix A I would like to hand out.

20 CHAIRMAN MORELOCK: So we're
21 amending this to three boilers instead of four?

22 MR. NEVILLE: That is correct. And
23 that's -- we will be back as far as when they do
24 receive TN numbers for that boiler. But at this
25 time, they do not have it.

1 MR. MOON: So it's a Greeneville
2 facility. We will be engaged in the production of
3 ammonium nitrate for industrial use as a component
4 to explosive for Austin Powder's.

5 THE REPORTER: I'm sorry. I can't
6 hear you.

7 MR. MOON: Am I not talking loud
8 enough? I'm very sorry.

9 Industrial facility engaged in the
10 production of ammonium nitrate for Austin Powder's
11 for explosives. The 85,000-pound boiler is for
12 the use of auxiliary steam. The two 35,000-pound
13 boilers are waste heat boilers. They'll be
14 involved in our ammonia plants for the methane
15 reformers.

16 The facility is not currently in
17 operation. Our expectation is that we may see the
18 auxiliary boiler in operation as early as two
19 months, and the waste heat boilers sometime this
20 summer for the ammonia plants, the two
21 35,000-pound units.

22 As far as our operators, we've had them
23 on staff for about a year and have done as much
24 training as we possibly can without having
25 operating units to train them in, including -- we

1 brought a gentleman down from Illinois who
2 actually, literally wrote a book on boilers to do
3 boiler training with them.

4 And in addition, we'll have -- when we
5 have the procedures completely developed, they'll
6 be required to understand those procedures, be
7 able to verify knowledge, and then to be annually
8 certified after that. We are a process safety
9 management facility, in addition.

10 CHAIRMAN MORELOCK: So the annual
11 certification will be an internal process for your
12 company?

13 MR. MOON: Yes, sir. I've never
14 done this before, so I don't know much more what
15 to say.

16 CHAIRMAN MORELOCK: If you're ready
17 for questions ...

18 MR. MOON: Yes.

19 CHAIRMAN MORELOCK: All right. Just
20 to start it off, again, these are just editorial,
21 but on page 1 it's stated that Randall Harris will
22 be responsible for the implementation of this
23 variance. In Appendix K, it states that you,
24 Marty, will be responsible for implementation of
25 the variance and keeping the manual updated. So

1 you may just want to clarify who it really is.

2 Honestly, when I get into A, B, and
3 C, there's a lot of information in here. And it's
4 good. I'm not knocking that aspect of it, but for
5 someone to take your manual and to go and readily
6 see what alarm codes need to be monitored and how
7 it actually works, it needs a little more detail
8 as far as -- the volume of information is great,
9 but we need some concise descriptions like we
10 typically see as to what the alarm codes are and
11 things that are auditable by the deputy inspector
12 when he visits your facility.

13 MR. MOON: Okay.

14 MR. BAUGHMAN: It's totally lacking.

15 CHAIRMAN MORELOCK: Also, on line 20
16 of the checklist, it asks if the remote monitoring
17 system can prevent unauthorized access. And I
18 just didn't see anywhere where that was clearly
19 stated in the manual.

20 In Appendix G, for the job
21 description for the operating shift supervisor, I
22 don't see within his duties as being a boiler
23 attendant. There's no verbiage pertaining to
24 that. And you've already addressed my concern
25 about no TN numbers for the boilers. So that's

1 the extent of my comments.

2 MR. NEVILLE: As far as those alarm
3 codes, we can add those.

4 CHAIRMAN MORELOCK: I mean, like I
5 said, the information is fantastic. I'm not
6 knocking that, but you need, like, cover pages in
7 there where someone can get a quick picture of,
8 you know, what you are monitoring, what the alarm
9 codes are, what the fault codes are, how you
10 protect it from unauthorized access.

11 Any other questions or comments?

12 DR. CANONICO: (Indicating.)

13 CHAIRMAN MORELOCK: Dr. Canonico?

14 DR. CANONICO: On page 1 you state
15 that this facility is currently under
16 construction. On your boiler data sheet, the
17 fourth one in line has a date built of 1987,
18 slash, 1973.

19 MR. MOON: Yeah, that's correct.

20 DR. CANONICO: Where have those
21 boilers been all this time?

22 MR. MOON: That particular one, we
23 purchased it in Louisiana and brought it up here
24 to be refurbished and reused at our site. It was
25 actually kind of a victim of Hurricane Katrina.

1 The facility that was next to it that supplied it
2 ammonia was taken out by the hurricane and they
3 decided not to restart it. So we purchased the
4 facility and brought it up here to use here.
5 That's why that boiler has an older date to it.
6 It is still not currently in operation right now.

7 DR. CANONICO: Now, is that a used
8 unit?

9 MR. MOON: Used unit but
10 refurbished.

11 DR. CANONICO: Excuse me?

12 MR. MOON: Retubed. Used unit but
13 it's retubed.

14 DR. CANONICO: And I think my other
15 question on that page, page 1, the young lady
16 earlier answered it and it probably is the same,
17 "Operated on demand 24 hours per day, 7 days per
18 week." So it's not steady operation.

19 MR. MOON: Oh, it's certainly steady
20 operation. Yeah, absolutely.

21 DR. CANONICO: We have two different
22 definitions of "demand."

23 CHAIRMAN MORELOCK: Well, you're
24 wanting it to say "continuous operation"? Is that
25 what you're wanting it to say?

1 DR. CANONICO: I don't care what he
2 says, but I've got two definitions now.

3 MR. MOON: It's a continuous
4 process. For instance, the ammonia plants, those
5 two 35,000-pound waste heat boilers, our hope is
6 they'll be in continuous operation for 18 months
7 at a time.

8 The auxilliary boiler, we will use it
9 as needed, but it will be required to be, at the
10 very least, idled continuously. We can't not have
11 it running.

12 DR. CANONICO: I would be inclined
13 to remove the word "on demand" and say
14 "continuously operated."

15 MR. MOON: Absolutely.

16 CHAIRMAN MORELOCK: Yes. Or just
17 clarify how you really are going to operate it.

18 MR. MOON: Okay.

19 DR. CANONICO: And page 7 is Boiler
20 Attendant Procedures. You talk about "trained,
21 qualified individual." Those are -- again, to me,
22 those are words. They don't tell me anything
23 about his training. Down below you talk about
24 training. He's got to read and be familiar with
25 these procedures. Is that the extent of his

1 training?

2 MR. MOON: No. That's not the
3 extent of his training. They've had basically a
4 week's worth of training on boiler operations.
5 They will be trained to specific equipment
6 procedures on how to operate those boilers, how to
7 monitor those boilers. In addition to that,
8 they'll be required to go through on-the-job
9 orientation and training from the shift supervisor
10 on down to the attendant.

11 And then those -- the training on the
12 procedures will have to be requalified on those
13 annually. Does that help?

14 CHAIRMAN MORELOCK: You may just
15 want to detail that in the manual.

16 DR. CANONICO: Yeah. Because you're
17 talking about much more than the simple words you
18 have here.

19 MR. NEVILLE: Well, I think the
20 training here is just talking about training to
21 the manual, not all the qualifications and
22 training of a boiler operator. But we can include
23 that. I would put that in the job description and
24 his qualifications of training there. Would that
25 satisfy?

1 CHAIRMAN MORELOCK: Right. That's
2 fair. Sure. You just want to -- you know, we
3 always talk a lot about training and you're right,
4 James, I mean, you do need to differentiate
5 between the training specifically for your
6 variance manual, but you also want to include the
7 training that qualifies them to be that remote
8 monitor or that boiler operator attendant as well.
9 And what you're proposing is a good program, so I
10 would certainly include it.

11 DR. CANONICO: And on page 8 of the
12 normal daily duties, "The boiler attendant shall
13 report to the boiler at the beginning of the
14 shift," and et cetera. And Number 6 is "Boiler
15 attendant will return to the boiler every four
16 hours."

17 MR. MOON: That's correct.

18 DR. CANONICO: So is he at the
19 boiler three times during the shift?

20 MR. MOON: At a minimum, yeah.

21 DR. CANONICO: Okay.

22 MR. MOON: I mean, they're going to
23 have established rounds in their facilities, and
24 those rounds will take them past those units. I
25 mean, there's -- the methane reformer sets right

1 next to it in the ammonia plant, so they'll be in
2 that area, watching fairly carefully. My
3 expectation is that they'll be very close to those
4 boilers and will look up and look at the site
5 glass every once in a while.

6 And the same thing with the auxiliary
7 boiler. It's in our water treatment area, and
8 those areas will be fairly trafficked so they'll
9 be a part of their rounds, too. But at a minimum
10 is what's in here.

11 DR. CANONICO: Also, I see on this
12 P3 form that it was manufactured for S.W.
13 Corporation, Warren, Pennsylvania. It's the page
14 after -- well, it's -- you've got pages -- they're
15 just written in 1 of 4, 2 of 4, 3 of 4, I
16 guess ...

17 MR. NEVILLE: The P3 form is what
18 you're referring to?

19 DR. CANONICO: And they're dated,
20 again, 1975. Who is S.W. Corporation? Is that
21 you people?

22 MR. MOON: No, sir. That is the
23 original manufacturer. Struthers Wells is what it
24 stands for.

25 MR. NEVILLE: And that one, right

1 now, we do not have. That's a waste heat boiler
2 that they do not have a TN number for, and so that
3 one is not a part of this variance until we get
4 that TN number.

5 CHAIRMAN MORELOCK: That's the
6 Struthers Wells unit that came up from --

7 MR. MOON: Louisiana.

8 CHAIRMAN MORELOCK: -- Louisiana.
9 So the '73 on the P3 agrees with the manufacturer
10 date on your boiler data sheet.

11 MR. NEVILLE: Yes.

12 DR. CANONICO: And were they used?

13 MR. MOON: Yes.

14 CHAIRMAN MORELOCK: That was one
15 that was refurbished.

16 MR. BAUGHMAN: The plot plan of the
17 plant, what page is it on? Or am I missing the
18 plot plan?

19 MR. NEVILLE: Page 2.

20 MR. BAUGHMAN: That may be why I'm
21 missing it. There you go. Thank you.

22 MR. NEVILLE: This is an open-air
23 situation.

24 CHAIRMAN MORELOCK: Any other
25 questions or comments?

1 MR. BAUGHMAN: Do the boilers tie
2 into a common header? Are these boilers -- I
3 really couldn't tell real well by the steam piping
4 diagram.

5 MR. MOON: The waste heat boiler
6 that is not part of this variance is a 600-pound
7 boiler. It will tie into the header as well as
8 the auxiliary boiler. In fact, the auxiliary
9 boiler actually gives that plant steam to
10 basically do its startup.

11 MR. BAUGHMAN: Which one is the
12 auxiliary?

13 MR. MOON: It would be 9701, H9701.

14 MR. BAUGHMAN: Okay.

15 MR. MOON: And they would tie into
16 the 600-pound header. And then the other two
17 waste heat boilers would be on a common header,
18 too. Although they could be isolated.

19 MR. BAUGHMAN: So is the one boiler,
20 the 2013 B&W that's rated at 725, does it tie into
21 the same header as the two other B&W's?

22 MR. CHARLES: The high-pressure
23 boiler, the 725, is what we -- our cite is
24 high-pressure steam -- we let that down to a
25 200-pound steam header, which is tied to the other

1 two boilers from Babcock & Wilcox.

2 MR. BAUGHMAN: The O2 boiler?

3 MR. CHARLES: So Boiler Numbers 30
4 and 31 are combination boilers. They're primarily
5 a waste heat boiler used off of a reformation flue
6 gas, but have the ability to be fired in order to
7 bootstrap up or start up the facility.

8 MR. BAUGHMAN: Yes, I understand
9 that. My question was just on the 725 boiler,
10 Number 29, if those three boilers, 30, 31, and 29,
11 are tied in on the same pattern.

12 MR. CHARLES: Those three boilers,
13 the H9701 is at a 600-pound header, which is let
14 down into the 250-pound steam header, which ties
15 into the other two.

16 MR. BAUGHMAN: But it's operating at
17 a higher pressure. It's just reduced down, is
18 what you're saying.

19 MR. CHARLES: It's just reduced
20 down, yes.

21 MR. BAUGHMAN: Okay. Do you know
22 what the relief valve set pressures are on the two
23 boilers that have a lower pressure rating? In
24 case the steam regulator should fail or get
25 bypassed and we have that higher operating

1 pressure going to them, what's the set pressure of
2 those other relief valves?

3 MR. CHARLES: The other relief
4 valves on the boilers themselves?

5 MR. BAUGHMAN: Yes, sir.

6 MR. CHARLES: They're set at
7 300 pounds.

8 MR. BAUGHMAN: Do you know what it
9 is set on the higher pressure boiler?

10 MR. CHARLES: 700 and 720. There's
11 two.

12 CHAIRMAN MORELOCK: So does the
13 header itself have a relief to protect it from
14 overpressure?

15 MR. CHARLES: Yes. The relief, the
16 let-downs, the superheater stations all have at
17 least that.

18 MR. ROBINSON: Are they set lower?

19 MR. CHARLES: Without having the
20 data in front of me, I wouldn't be able to recall.
21 It would be released for the working pressure of
22 the let-down stages at that point.

23 MR. ROBINSON: Good engineering
24 practice, you don't want to overset your relief
25 valves for the lower boilers.

1 MR. CHARLES: Absolutely.

2 CHAIRMAN MORELOCK: Well, I mean,
3 your relief would have to be 300 or less for that
4 200-pound header. I don't know what the maximum
5 for the 200-pound header is, but your two boilers,
6 I mean, they're at least 300, so the reliefs on
7 the boilers and that system couldn't exceed 300 so
8 you don't back pressure -- overpressure the
9 low-pressure boiler.

10 MR. CHARLES: If I recall, the
11 let-down or the relief valves are downstream of
12 the let-down stations and so therefore set the
13 header pressure, which would be 300.

14 CHAIRMAN MORELOCK: Any other
15 questions or comments?

16 (No verbal response.)

17 CHAIRMAN MORELOCK: Hearing none, do
18 I have a motion for approval of this boiler
19 variance with the modifications as noted in the
20 minutes and contingent on a deputy inspector's
21 successful inspection of the facility?

22 (No verbal response.)

23 CHAIRMAN MORELOCK: Is anybody going
24 to take me up on my motion?

25 DR. CANONICO: I'll make a motion.

1 DR. JOHNSON: I'll second it.

2 CHAIRMAN MORELOCK: Okay. So is
3 there any more discussion? I'm going to call the
4 question. All in favor say, "Aye."

5 (Affirmative response.)

6 CHAIRMAN MORELOCK: Opposed?

7 (No verbal response.)

8 CHAIRMAN MORELOCK: Abstentions, not
9 voting?

10 (No verbal response.)

11 CHAIRMAN MORELOCK: All right. The
12 item passes.

13 MR. NEVILLE: Thank you.

14 MR. MOON: Thank you.

15 CHAIRMAN MORELOCK: Our last voted
16 action today is that Administrator Jefferson has
17 requested that the boiler board and the elevator
18 board not meet the same week. So we are proposing
19 to make some alterations for our future board
20 meetings in 2015. Instead of the first Wednesday
21 in March, June, September, and December, we're
22 going to alter those for June, September, and
23 December.

24 And right now, the proposed dates
25 would be June the 10th, September the 9th, and we

1 were going to propose December the 9th, but
2 checking my calendar, I can't do December the 9th.
3 So we would either have to look at December 16th
4 or November the 18th.

5 So I'm opening the floor for
6 discussion. Is everybody okay with June the 10th?

7 DR. CANONICO: Well, it's hard to
8 make a decision until we look at our calendars. I
9 don't have mine with me.

10 CHAIRMAN MORELOCK: Okay.

11 DR. CANONICO: Why don't we have
12 Carlene just send a short email with the suggested
13 dates, and we can get back to her.

14 CHAIRMAN MORELOCK: Okay. All
15 right. So is everybody in agreement with that?

16 MS. BENNETT: How about December.
17 You said you had a conflict?

18 CHAIRMAN MORELOCK: Yes.

19 MS. BENNETT: Do you have an
20 alternate date that would work?

21 CHAIRMAN MORELOCK: Yes. Either
22 December the 16th or November the 18th. I don't
23 think you want to meet during Thanksgiving week.

24 DR. CANONICO: No.

25 MS. BENNETT: We'll shoot for the

1 16th.

2 CHAIRMAN MORELOCK: Okay. So we
3 will table that item and vote, and we will vote on
4 that by sending information back to Carlene.

5 We've got five whopping minutes left.
6 To be mindful of your time, Deborah, do we have an
7 update on the fall conference?

8 MS. RHONE: I think -- Mark, do you
9 have --

10 MR. FINK: I have a brief one.

11 CHAIRMAN MORELOCK: Okay.

12 MR. FINK: The fall conference, as
13 Mr. Chapman mentioned before, we're in the process
14 of interviewing for a boiler chief position. And
15 we were going to bring that boiler chief onboard
16 first, before moving forward with plans for the
17 fall conference. So that's the update.

18 CHAIRMAN MORELOCK: Okay. All
19 right. Very good. We'll look forward to that in
20 the future, then.

21 I can give you a brief update on the
22 reorganization of Rule 0800-3-3. We need to give
23 Eugene an award for patience because we have put
24 him off to address his comments. And we're
25 addressing his comments through email right now.

1 So we will work through that process and see how
2 close we get to maybe having an item -- if nothing
3 else, we'll have a discussion item at the June
4 meeting. I don't know if we'll have a voted item
5 ready or not, but we're in progress of resolving
6 his comments and addressing concerns about
7 tankless water heaters while we're at it. So all
8 of that is in process.

9 And the last discussion item is
10 boiler operator training and certification, which
11 we've talked about quite a bit. With our full
12 agenda today, Dave had sent me an email, and I
13 asked that we just move that to the June agenda to
14 give time to review some information that we've
15 asked Administrator Jefferson for, as far as
16 training and licensing verbiage in programs. So
17 we are proceeding on that. So that's our updates
18 on discussion items.

19 There are no rule cases and
20 interpretations today.

21 Our next board meeting, I can't tell
22 you just yet but we will publish a date for the
23 June meeting as soon as possible.

24 With that, I have no more agenda
25 items. Do I have a motion to adjourn?

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DR. CANONICO: So made.

MR. ROBINSON: Second.

CHAIRMAN MORELOCK: Everybody can
vote with their feet. You can stand up. Travel
safe going home. Thank you for coming today.

(Affirmative Response.)

END OF THE PROCEEDINGS.

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C E R T I F I C A T E

STATE OF TENNESSEE)
COUNTY OF WILLIAMSON)

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

That the within is a true and accurate
transcript of the proceedings taken before the
Board of Boilers and the Chief Inspector or the
Chief Inspector's Designee, Tennessee Department
of Labor & Workforce Development, Division of
Workplace Regulations and Compliance, Boiler Unit,
on the 4th day of March, 2015.

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

IN WITNESS WHEREOF, I have hereunto set my
hand this 22nd day of March, 2015.

Cassandra M. Beiling, CCR, LCR# 371
Notary Public State at Large
My commission expires: 3/12/2016

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