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THE NATIONAL BOARD

OF BOILER AND
PRESSURE VESSEL
INSPECTORS

# NATIONAL BOARD INSPECTION CODE COMMITTEE

## **MINUTES**

## Meeting of July 21st, 2016 Columbus, OH

These minutes are subject to approval and are for committee use only. They are not to be duplicated or quoted for other than committee use.

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#### 1. Call to Order

NBIC Committee Chair Mr. Don Cook called the meeting to order at 7:58am local time.

#### 2. Introduction of Members and Visitors

Mr. Cook invited the members and visitors to introduce themselves with their company affiliations. An attendance sheet was passed for the attendees to sign. (Attachment Pages 3-5)

#### 3. Announcements

Before he gave any announcements, Mr. Cook thanked Executive Director Mr. Dave Douin for the National Board's support of the NBIC Committee. Mr. Cook also thanked National Board staff for their contributions to the code. Mr. Cook invited Mr. Douin to speak. Mr. Douin read an excerpt from an article he had previously written in the National Board Bulletin. He highlighted that the NBIC was created by volunteers, and thanked the volunteers at this meeting for their contribution to the code. Mr. Douin presented five service awards. Mr. Domenic Canonico was due to receive a 15 year award, but was unable to attend the meeting. Mr. Douin recognized Mr. Canonico's contribution to the boiler and pressure vessel industry. Mr. Craig Hopkins was recognized for 20 years of service. Mr. Mike Richards was recognized for 15 years of service. Mr. Brian Schulte and Mr. Jim Riley were recognized for 5 years of service.

After the awards presentation, Mr. Cook invited Mr. Gary Scribner to present on the NBIC Public Review process and publication schedule. Mr. Scribner reviewed a document that listed specific dates for various items related to the public review process. (Attachment Page 6) A question was asked if non-members can participate in the WebEx meetings. Mr. Scribner explained the process for a non-member joining these WebEx meetings. Mr. Cook pointed out that is difficult to have a discussion over the WebEx system, so discussion about contentious comments should be held before the WebEx meeting. Mr. Cook explained the four public review comment responses. Additionally, he explained what a substantive change was in the context of the public review process.

Mr. Cook also reported that two roster spots for the NBIC Committee will be filled at the next meeting, and any interested parties should submit their resumes to Mr. Besserman.

## 4. Adoption of the Agenda

The following items were added to the agenda:

- SC PRD Chair Mr. Sid Cammeresi added Bryce Hart to the agenda for membership to SC PRD. He also added items NB16-0809A and NB16-0401 to the agenda. He reported that item NB16-0805 was transferred to SC PRD from SC Installation.
- SC Installation Chair Mr. Mike Richards added items IN16-0701, NB16-0806, NB16-0809C, and NB16-1901 to the agenda.
- SC Inspection Chair Mr. Mark Mooney added Mr. Dave Buechel to the agenda for membership to SC Inspection. He also added items NB16-0807, NB16-0808, NB16-0809D, NB16-0202, NB16- 2301, and NB16-0204 to the agenda.

SC Repairs and Alterations Chair Mr. George Galanes added items NB16-0810, NB16-2401, NB16-0601, NB16-1501, NB15-1203, NB16-2601, NB16-1102, NB-0809B, NB16-0603, NB16-2501, NB16-2502, NB16-2503, NB16-2504, and NB16-2505 to the agenda.

The agenda was approved as modified by a unanimous vote of the NBIC Committee.

## 5. Approval of the Minutes of January 14<sup>th</sup>, 2016 Meeting

It was announced that the minutes from the January 2016 meeting were distributed in January 2016 and were currently posted on the National Board website. These minutes were approved by a unanimous vote of the NBIC Committee.

#### 6. Review of Rosters

## a. Membership Nominations

- Mr. Rex Smith was included on the agenda seeking to join SC Installation. SC Installation Chair Mr.
  Mike Richards withdrew the membership ballot for this meeting. Mr. Smith will be brought forward for
  a membership vote at the January 2017 NBIC meeting.
- SC Inspection Chair Mr. Mark Mooney nominated Mr. Dave Buechel for membership to SC Inspection. Mr. Buechel explained his experience in the industry to the committee. Mr. Buechel was approved for membership to SC Inspection by a unanimous vote of the NBIC Committee. (Attachment Page 7)
- SC PRD Chair Mr. Sid Cammeresi nominated Mr. Bryce Hart for membership to SC PRD. Mr. Hart was approved for membership to SC PRD by a unanimous vote of the NBIC Committee. (Attachment Pages 8-10)

## b. Membership Reappointments

- Mr. Craig Hopkins, Mr. Robert Wielgoszinski, Mr. George Galanes, Mr. James Pillow, Mr. Domenic Canonico, and Mr. Ron Pulliam were noted on the agenda for reappointment to the NBIC Committee. Mr. Domenic Canonico had previously communicated with NBIC Committee Chair Mr. Don Cook that health concerns made him unable to continue on the committee, and requested that the committee allow his membership to expire. Mr. Ron Pulliam had previously retired and resigned to his position on the NBIC Committee. Mr. Craig Hopkins, Mr. Robert Wielgoszinski, Mr. George Galanes, and Mr. James Pillow were approved for reappointment to the NBIC Committee by a unanimous vote of the NBIC Committee. Any appointments are subject to the approval of the Chairman of the Board of Trustees.
- Mr. Venus Newton and Mr. Jason Safarz were noted on the agenda for reappointment to Subcommittee
  Inspection. Mr. Safarz had previously requested that the committee allow his membership to expire.
  Mr. Newton was approved for reappointment to SC Inspection by a unanimous vote of the NBIC
  Committee. Any appointments are subject to the approval of the Chairman of the Board of Trustees.

- Mr. James Pillow and Mr. Ray Miletti were noted on the agenda for reappointment to Subcommittee Repairs and Alterations. Mr. Pillow and Mr. Miletti were approved for reappointment to SC Repairs and Alterations by a unanimous vote of the NBIC Committee. Any appointments are subject to the approval of the Chairman of the Board of Trustees.
- Mr. Kevin Simmons was noted on the agenda for reappointment to Subcommittee PRD. Mr. Simmons
  was approved for reappointment to SC PRD by a unanimous vote of the NBIC Committee. Any
  appointment is subject to the approval of the Chairman of the Board of Trustees.

#### c. Officer Selection

- Mr. Robert Wielgoszinski's appointment as NBIC Committee Vice Chair was due to expire after the meeting. There is no term limit, so Mr. Robert Wielgoszinski was eligible for reappointment to this position. Mr. Cook opened the floor for nominations for vice chair position. Mr. Wielgoszinski was the only member nominated. Mr. Wielgoszinski was approved for reappointment to the position of NBIC Committee Vice Chair by a unanimous vote of the NBIC Committee. Any appointment is subject to the approval of the Chairman of the Board of Trustees.
- Mr. James Pillow's appointment as SC Repairs and Alterations Vice Chair was due to expire after the meeting. There is no term limit, so Mr. James Pillow was eligible for reappointment to this position. SC Repairs and Alterations Chair Mr. George Galanes reported that SC Repairs and Alterations voted unanimously to reappointment Mr. Pillow as SC Repairs and Alterations Vice Chair. Mr. Pillow was approved for reappointment to the position of SC Repairs and Alterations Vice Chair by a unanimous vote of the NBIC Committee. Any appointment is subject to the approval of the Chairman of the Board of Trustees.

#### **7.** NB-240 Update

A new revision of NB-240 was prepared by National Board staff based on the results of an audit by the American National Standards Institute (ANSI). Mr. Cook explained the audit process. Mr. Brad Besserman explained the changes to NB-240 in detail. Mr. Chuck Withers explained that ANSI recognized the National Board for an exceptional audit. He reported that there were no major audit findings findings, only revisions to the procedures and minor administrative findings. Mr. Withers and Mr. Richards recognized Mr. Besserman for his contribution to the successful audit. After discussion, the revision to NB-240 was approved by a unanimous vote of the NBIC Committee. (Attachment Pages 11-31)

## 8. Report of Subcommittees

#### a. Subcommittee on Pressure Relief Devices

Subcommittee on Pressure Relief Devices Chair Mr. Sid Cammeresi reported on the following:

#### i. Interpretations

Item Number: IN16-0301	NBIC Location: Part 4	No Attachment
General Description: Temperature listed on pressure relief valve nameplate		

Task Group: None assigned

**Meeting Action:** Mr. Cammeresi reported that SC PRD voted unanimously to close this item with no action taken. The item was related to ASME code and not the NBIC. Mr Cammeresi requested that the commenter be notified of this decision. The NBIC Committee voted to close this item with no action taken by a unanimous vote.

#### ii. Action Items - Old Business

Item Number: NB12-0901 NBIC Location: Part 3 No Attachment

General Description: Prepare a guide for repair of tank vents

Task Group: D. DeMichael (PM), K. Simmons, B. Donalson, B. Dobbins, K. Beise, B. Nutter

Meeting Action: Mr. Cammeresi gave a progress report.

Item Number: NB14-0602A NBIC Location: Part 1 No Attachment

**General Description:** Improve index in Part 1 relating to pressure relief devices

Task Group: B. Anthony (PM), M. Brodeur, S. Cammeresi

Meeting Action: Mr. Cammeresi gave a progress report.

Item Number: NB14-0602B NBIC Location: Part 2 No Attachment

**General Description:** Improve index in Part 2 relating to pressure relief devices

Task Group: D. DeMichael, B. Dobbins, B. Donalson

**Meeting Action:** Mr. Cammeresi gave a progress report.

Item Number: NB14-0602C NBIC Location: Part 3 No Attachment

**General Description:** Improve index in Part 3 relating to pressure relief devices

Task Group: B. Nutter (PM), R. McCaffrey, T. Patel, K. Simmons

**Meeting Action:** Mr. Cammeresi gave a progress report.

Item Number: NB15-0103 NBIC Location: Part 1, 2.9.6 c) Attachment Page 32

**General Description:** Update requirements for power boiler pressure relief valve mounting and discharge

Task Group: R. McCaffrey (PM), J. Ball, D. Marek

**Meeting Action:** Mr. Cammeresi presented a proposal for code change. This item was approved by SC PRD with a unanimous vote. Mr. Cammeresi explained the change, and that this item would be included in Part 1 and Part 4. Mr. Jim Riley asked a question about vertical mounting of valves, which Mr. Kevin Simmons explained was addressed in an earlier section of the code. This item was approved by a unanimous vote of the NBIC Committee.

Item Number: NB15-0301 NBIC Location: Part 3, 4.5.2 No Attachment

**General Description:** Evaluate backpressure testing requirement for owner/users

Task Group: A. Cox (PM), T. Tarbay, D. DeMichael, B. Dobbins, B. Nutter

**Meeting Action:** Mr. Cammeresi reported that SC PRD voted unanimously to close this item with no action taken. The commenter was requesting an exception to the code related to backpressure testing, but the committee decided that adding this exception to the code would not be justified. The NBIC Committee voted to close this item with no action taken by a unanimous vote.

Item Number: NB15-0304 NBIC Location: Part 3, 5.12.3 Attachment Page 33

**General Description:** Review verification of manufacturer's nameplate information

Task Group: B. Nutter (PM), S. Irvin, D. McHugh

**Meeting Action:** Mr. Cammeresi presented a proposal for code change. This item was approved prior to the meeting by SC PRD with a unanimous vote. This item will be moved to Part 4 and not be included in Part 3. Mr. Venus Newton asked if there was provision for replacing a valve nameplate. Mr. Cammeresi explained that there is a provision for installing a duplicate nameplate. The item was approved by the NBIC Committee with one not voting response

Item Number: NB15-0305 NBIC Location: Part 1 No Attachment

General Description: Create Guidelines for Installation of Overpressure Protection by System Design.

Task Group: B. Dobbins (PM), B. Nutter, A. Renaldo, D. Marek

**Meeting Action:** Mr. Cammeresi gave a progress report.

Item Number: NB15-0307 NBIC Location: Part 3 No Attachment

**General Description:** Create Guidelines for Repair of Pin Devices.

Task Group: D. McHugh (PM), J. Satterthwaite

**Meeting Action:** Mr. Cammeresi gave a progress report.

Item Number: NB15-0308 NBIC Location: Part 1 No Attachment

**General Description:** Create Guidelines for Installation of Pressure Relief Devices for Organic Fluid Vaporizers.

Task Group: T. Patel (PM), K. Beise, B. Dobbins, B. Nutter

**Meeting Action:** Mr. Cammeresi gave a progress report.

Item Number: NB15-0310 NBIC Location: Part 3, 1.7.5.4 No Attachment

**General Description:** Give Guidance as to Which Spring Chart Should be used in Repairs.

Task Group: A. Cox (PM), B. Nutter, M. Brodeur, T. Patel, K. Simmons, R. McCaffrey

**Meeting Action:** Mr. Cammeresi gave a progress report.

Item Number: NB15-0312 NBIC Location: Part 2, 2.57 and 2.5.8 Attachment Page 34

**General Description:** Re-evaluate T&P Valve Inspection Requirements Based on Robert Boiko Presentation.

Task Group: B. Dobbins (PM), R. Boiko, B. Anthony, J. Ball, A. Cox, A. Renaldo

**Meeting Action:** Mr. Cammeresi presented a proposal for code change. Mr. Cammeresi invited Mr. Adam Renaldo to report on this item. Mr. Renaldo explained this item was based on a presentation given by Mr. Robert Boiko at a previous meeting. Mr. Wielgoszinski questioned the difference between the ASME valve rating and the CSA valve rating. The response was that, between the two of them, the CSA rating is a more conservative capacity rating and is preferred to be used when the valve is not an ASME stamped valve or it meets some other standard. This item was approved by SC PRD letter ballot prior to the meeting with one negative. This negative was withdrawn after discussion at the subcommittee meeting. The item was approved by a unanimous vote of the NBIC Committee.

Item Number: NB15-0314 NBIC Location: Part 1, 3.9.4.2 No Attachment

General Description: Review of Y-Base or Valve less Headers for Use in T&P Valve Installations.

Task Group: D. McHugh (PM), B. Nutter, D. Marek

Meeting Action: Mr. Cammeresi gave a progress report.

Item Number: NB15-0315 NBIC Location: Part 1, 4.5.6 and 5.3.6 No Attachment

General Description: Review isolation Valve Requirements.

Task Group: D. DeMichael (PM), B. Nutter, A. Renaldo, D. Marek

**Meeting Action:** Mr. Cammeresi gave a progress report.

Item Number: NB15-0321 NBIC Location: Part 2, 2.5.7 a) No Attachment

**General Description:** Review testing requirements for inservice testing of pressure relief devices

Task Group: A. Cox (PM), A. Renaldo, J. Satterthwaite

Meeting Action: Mr. Cammeresi gave a progress report.

Item Number: NB15-0324 NBIC Location: Part 2 No Attachment

**General Description:** Based on IN15-0301; the Sub-Committee on Pressure Relief Devices recognizes a need to create guidelines for storage and shelf life with respect to inspection and testing frequencies.

Task Group: A. Renaldo (PM), B. Nutter, K. Simmons, D. Marek

**Meeting Action:** Mr. Cammeresi gave a progress report.

Item Number: NB15-1203 NBIC Location: Part 3, Supplement 9 Attachment Pages 35-36

**General Description:** Update language in Part 3 S9 regarding NR

Task Group: NR Task Group

**Meeting Action:** Mr. Cammeresi presented a proposal for code change. This item was approved by SC

PRD letter ballot prior to the meeting with one negative. This negative was withdrawn after discussion at the subcommittee meeting. This item was approved by a unanimous vote of the NBIC Committee.

Item Number: NB15-2401 NBIC Location: Part 3, 4.5.2 No Attachment

General Description: Steam set on air by non owner-user.

Task Group: R. Donalson (PM), T. Patel, A. Cox

**Meeting Action:** Mr. Cammeresi reported that SC PRD voted unanimously to close this item with no action taken. The proposal was to allow an owner/user to contract with a non-code stamp holder (VR) to perform repair work on his own valves. There are no provisions for this now and the committee felt a change to the Code would be counter to culture and intent of accrediting organizations to repair valves. Mr. Cammeresi requested that the commenter be notified that the request was denied along with reasons for the denial of the code change. This item was closed by a unanimous vote of the NBIC Committee.

Item Number: NB15-3201 NBIC Location: Part 2, S8.2 Attachment Page 37

General Description: Address pressure calculations in Part 2, S8.2

Task Group: None assigned

**Meeting Action:** Mr. Cammeresi presented a proposal for code change. This item was approved by SC PRD letter ballot prior to the meeting with a unanimous vote. A clarification was made about the intent of the proposal by Mr. Renaldo. Mr. Wielgoszinski and Mr. Troutt asked for clarification on the math of the proposal. Mr. Wielgoszinski expressed that the examples may cause confusion to a user of the code. Mr. Troutt requested that one of the examples presented in the proposal be removed. The committee agreed to modify the proposal by removing the example. The item was approved as modified by a unanimous vote of the NBIC Committee.

#### iii. Action Items - New Business

Item Number: NB16-0401 NBIC Location: Part 4 No Attachment

General Description: Seals matching VR nameplate

Task Group: S. Irvin, T. Patel, D. Marek, M. Brodeur, B. Nutter

**Meeting Action:** Mr. Cammeresi gave a progress report.

Item Number: NB16-0601 NBIC Location: Part 3, S7 Attachment Page 38

General Description: Clarify definition of rerate, conversion for pressure relief valves; came from item

NB15-1203 from NR task group

Task Group: NR Task Group

**Meeting Action:** Mr. Cammeresi presented a proposal for code change. This item was approved by SC PRD with a unanimous vote. The item was approved by a unanimous vote of the NBIC Committee.

Item Number: NB16-0603 NBIC Location: Part 3, S7 and S9 No Attachment

**General Description:** Add requirements for when the "NR" program is applied to safety related relief valves in nuclear service, came from NR task group

**Task Group:** NR Task Group

**Meeting Action:** Mr. Cammeresi reported that this item will be sent to the subcommittee for letter ballot.

Item Number: NB16-0809A NBIC Location: Part 4 Attachment Pages 39-45

General Description: Add general requirements section to Part 4

**Task Group:** 

**Meeting Action:** Mr. Cammeresi presented a proposal for code change. This item was approved by SC PRD with a unanimous vote. Mr. Cook clarified that the proposal modifies the previously approved NBIC Part 4. The purpose of the item is to maintain consistency with the other parts of the NBIC. The item was approved by a unanimous vote of the NBIC Committee.

Item Number: NB16-0902 NBIC Location: Part 2, 2.5.8 Attachment Page 46

General Description: Adjust requirements to include 400 psi in one of the two options

Task Group: None assigned

**Meeting Action:** Mr. Cammeresi presented a proposal for code change. This item was approved by SC PRD with a unanimous vote. A minor editorial change was noted to the proposal. Mr. Simmons explained the research that was performed, and that this proposal lines up with ASME Section VII. This item was approved as modified by a unanimous vote of the NBIC Committee

Item Number: NB16-1501 NBIC Location: Part 3, 5.7.5 Attachment Page 47

General Description: Revise nameplate for nuclear pressure relief valves

Task Group: NR Task Group

**Meeting Action:** Mr. Cammeresi presented a proposal for code change. This item was approved by SC PRD with a unanimous vote. Mr. Paul Edwards explained NR Task Group discussion on this item to keep Supplement 9 current with changes in the NR Program. This item was approved by a unanimous vote of the NBIC Committee.

#### b. Subcommittee on Installation

Subcommittee on Installation Chair Mr. H. Michael Richards reported on the following:

#### i. Interpretations

Item Number: IN16-0701 NBIC Location: Part 1 No Attachment

**General Description:** Result of NB16-0801; Is it standard operating procedure (per NBIC) to do hydrostatic pressure tests on installed ASME Section IV boilers at 150% of the rated pressure as part of the installation inspection?

Subgroup: Installation

Task Group: None assigned.

**Meeting Action:** Mr. Richards presented a proposed reply to the interpretation question. Mr. Richards explained that the interpretation was opened at the meeting as a result of NB16-0801. The interpretation

response was approved by a unanimous vote of SC Installation. Ms. Melissa Wadkinson explained that a code change was needed due to confusion about whether a second pressure test was required after installation. A suggestion was made to clarify that this interpretation was related to Part 1 requirements rather than Part 3 requirements. Mr. Wielgoszinski requested input from the Jurisdictional Authorities on the committee. Mr. Cook and Mr. Troutt expressed concern of the breadth of this item. The item was moved to a letter ballot by a unanimous vote of the NBIC Committee. The NBIC Committee requested supporting documentation and that the paragraph references be updated in the proposal prior to the ballot.

#### ii. Action Items - Old Business

Item Number: NB11-1901 NBIC Location: Part 1 No Attachment

**General Description:** Add guidance for the safe installation of high pressure composite pressure vessels operating in close proximity to the public

Subgroup: FRP

Task Group: M. Richards (PM), S. Konopacki and D. Patten

Meeting Action: Mr. Richards gave a progress report.

Item Number: NB12-0302 NBIC Location: Part 1 No Attachment

General Description: Add installation requirements for pressure vessels for human occupancy

(PVHOs)

Subgroup: Installation

Task Group: B. Moore (PM), T. Creacy, T. Millette, M. Richards, G. Scribner

**Meeting Action:** Mr. Richards reported that no action had been taken.

Item Number: NB14-0403 NBIC Location: Part 1 No Attachment

**General Description:** Identify terms from Part 1 that need to be added to the index

**Subgroup:** Installation

Task Group: B. Moore (PM), M. Richards, T. Creacy, M. Washington

Meeting Action: Mr. Richards reported that no action had been taken.

Item Number: NB15-0106 NBIC Location: Part 1, 3.7.5.1 Attachment Page 48-53

**General Description:** Address Figure 3.7.5.1

Subgroup: Installation

Task Group: B. Moore (PM), T. Creacy, R. Austin, and M. Washington

**Meeting Action:** Mr. Eddie Wiggins presented a proposal for code change. The proposal showed updates to figure captions that made them consistent with language used elsewhere in the NBIC. This item was approved by SC Installation with a unanimous vote. The item was approved by a unanimous vote of the NBIC Committee.

Item Number: NB15-0108 NBIC Location: Part 1 No Attachment

General Description: Add a supplement to address high temperature hot water boilers

Subgroup: Installation

Task Group: M. Wakdinson (PM) B. Moore, T. Creacy, D. Patten

**Meeting Action:** Mr. Richards gave a progress report.

Item Number: NB15-2104 NBIC Location: Part 1, S3.6 d) Attachment Page 54-58

**General Description:** General technical review of CO2 supplement in NBIC Part 1

**Subgroup:** Installation

Task Group: G. Scribner (PM), M. Richards, T. Creacy, J. Brockman, D. Patten

**Meeting Action:** Mr. Gary Scribner presented a proposal for code change. Mr. Scribner explained discussion with an international working group. This discussion led to changes in signage for CO2 systems and CO2 alarm requirements. Additionally, this item changed a color diagram in the supplement to black and white. This item was approved by SC Installation with a unanimous vote. Mr. Venus Newton expressed his support of the changes to the CO2 alarm requirements. This item was approved by a unanimous vote of the NBIC Committee.

Item Number: NB15-2202 NBIC Location: Part 1 No Attachment

**General Description:** Add checklist for the safe installation of high pressure composite pressure vessels operating in close proximity to the public

Subgroup: FRP

**Task Group:** B. Moore (PM)

**Meeting Action:** Mr. Richards gave a progress report.

Item Number: NB15-2209 NBIC Location: Part 1 No Attachment

General Description: Develop guidance and requirements for installation of graphite pressure

equipment

Subgroup: Graphite

**Task Group:** A. Stupica (PM)

Meeting Action: Mr. Richards gave a progress report.

Item Number: NB15-3301 NBIC Location: Part 1 Attachment Page 59

General Description: Power boiler combustion air

**Subgroup:** Installation

Task Group: M. Wadkinson (PM), G. Halley, J. Brockman, T. Creacy, D. Patten

Meeting Action: Ms. Melissa Wadkinson presented a proposal for code change. She explained that this item was based on NB10-1201, which expanded the general requirements section in Part 1. Information from an NFPA study was used as the basis for this code change. This item was approved by SC Installation with a unanimous vote. Mr. Scribner explained that NFPA-54 code committees responded to the NFPA study in a similar manner as the NBIC Committee. Mr. Troutt expressed concern about this item and how it relates to condensing boilers. Mr. Amato stated that he still believed more work should be done to decrease ventilation opening size without foregoing the absolute minimum size need for combustio. Both Mr. Amato and Mr. Troutt stated that they supported the item as it stood, but would like more investigation on the issue of combustion air. Mr. Wielgoszinski pointed out a minor change to clarify intent. This item was approved as modified by a unanimous vote of the NBIC Committee.

Item Number: NB16-0101 NBIC Location: Part 1 No Attachment

General Description: Result of NB13-1101, address carbon monoxide sensors in equipment rooms

**Subgroup:** Installation

Task Group: E. Wiggins (PM), G. Halley, S. Konopacki, T. Creacy, T. Millette, G. Tompkin

**Meeting Action:** Mr. Richards gave a progress report.

Item Number: NB16-0102 NBIC Location: Part 1 No Attachment

General Description: Result of NB10-1201, address post installation pressure testing

Subgroup: S. Konopacki (PM), E. Wiggins, P. Cole, R. Smith, M. Wadkinson, D. Patten

Task Group: None assigned.

**Meeting Action:** Mr. Patten presented a proposal for code change. This item was approved by SC Installation with a unanimous vote. Mr. Amato and Mr. Troutt requested that the item be sent to letter ballot so more extensive comments can be made on the item. Mr. Mooney asked a question about who was responsible for post-installation pressure testing based on the proposed revision, and how it would be documented. Mr. Cammeresi asked if there were any provisions for protecting pressure relief devices during the pressure test. This item was sent to letter ballot by a unanimous vote of the NBIC Committee.

#### iii. Action Items - New Business

Item Number: NB16-0103 NBIC Location: Part 1 No Attachment

**General Description:** Review footnote 1 in Part 1 for possible removal, review as a result of NB15-2303

Subgroup: Installation

Task Group: M. Washington (PM), T. Creacy

**Meeting Action:** Mr. Richards reported that this item was closed with no action taken by a unanimous vote of SC Installation. This item was deemed editorial, and National Board staff will incorporate the recommendation in the 2017 Edition. The item was closed with no action by a unanimous vote of the NBIC Committee.

Item Number: NB16-0801 NBIC Location: Part 1 No Attachment

**General Description:** Is it standard operating procedure (per NBIC) to do hydrostatic pressure tests on installed ASME Section IV boilers at 150% of the rated pressure as part of the installation inspection?

Subgroup: Installation

Task Group: G. Scribner

**Meeting Action:** Mr. Richards reported that this item was closed with no action taken by a unanimous vote of SC Installation. Mr. Richards explained that this item was closed because an interpretation would better address the comment. This item was closed with no action by a unanimous vote of the NBIC Committee.

Item Number: NB16-0804 NBIC Location: Part 1, 3.7.7.1 Attachment Page 60

General Description: Update table with NPS/DN information, not in./mm

Subgroup: Installation

Task Group: G. Scribner

**Meeting Action:** Ms. Wadkinson presented a proposal for code change to the NBIC Committee. This item was approved by SC Installation with a unanimous vote. This item was approved by a unanimous vote of the NBIC Committee.

Item Number: NB16-0805 NBIC Location: Part 1 No Attachment

General Description: Update language about pipe material able to handle temperature requirements, in

line with IMC

**Subgroup:** Installation

Task Group: G. Scribner

Meeting Action: Mr. Richards gave a progress report. This item was transferred to SC PRD for further

work.

Item Number: NB16-0806 NBIC Location: Part 1, S3 No Attachment

**General Description:** Revise supplement to maintain consistency between the codes as a result of international working group for the International Fire Code.

**Subgroup:** Installation

Task Group: G. Scribner

**Meeting Action:** Mr. Richards reported that this item was closed with no action taken by a unanimous vote of SC Installation. This topic of this item was previously addressed by NB15-2104. This item was closed with no action taken by a unanimous vote of the NBIC Committee.

Item Number: NB16-0809C NBIC Location: Part 1 Attachment Page 61-63

**General Description:** Part 1 Scope Review

**Subgroup:** Installation

Task Group: B. Besserman

**Meeting Action:** Mr. Brad Besserman presented a proposal for code change. The item was approved by SC Installation with a unanimous vote. Mr. Besserman explained that this item was meant to provide consistency between scopes in all four parts. This item was approved by a unanimous vote of the NBIC Committee.

Item Number: NB16-1201 NBIC Location: Part 1, Section 2 and 3 No Attachment

**General Description:** Proper installation of CO monitors in equipment rooms

**Subgroup:** Installation

Task Group: M. Richards (PM), S. Konopacki and D. Patten

**Meeting Action:** Mr. Richards reported that this item was closed with no action taken by a unanimous vote of SC Installation. Mr. Richards explained that this item was combined with NB16-0101. This item was closed with no action by a unanimous vote of the NBIC Committee.

Item Number: NB16-1701 NBIC Location: Part 1 No Attachment

**General Description:** High temp limit control clarification that the limit only needs to shut off fuel prior to max allowable temperature

Subgroup: Installation

Task Group: M. Wadkinson (PM)

**Meeting Action:** Mr. Richards reported that this item was closed with no action taken by a unanimous vote of SC Installation. Ms. Wadkinson explained that she discussed this item with the commenter, and that an item had been passed in January 2016 that addressed his concern to his satisfaction. This item was closed with no action taken by a unanimous vote of the NBIC Committee.

Item Number: NB16-1702 NBIC Location: Part 1, 3.8.1.5 Attachment Page 64

General Description: Result of NB15-1302, update language regarding low water cutoffs to match

NB15-1302

Subgroup: Installation

Task Group: M. Wadkinson (PM)

**Meeting Action:** Ms. Wadkinson presented a proposal for code change to the NBIC Committee. This item was approved by SC Installation with a unanimous vote. This item updated language in the heating boiler section to be consistent with language in the power boiler section and CSD-1. This item was approved by a unanimous vote of the NBIC Committee. New item NB16-0104 will be opened to address low-water fuel cutoffs on vapor-system boilers.

Item Number: NB16-1901 NBIC Location: Part 1 No Attachment

**General Description:** Item closed without topic assigned.

Subgroup: N/A

Task Group: None assigned

**Meeting Action:** Mr. Richards requested that this item be closed with no action taken. The item was discussed at the subcommittee as a result of a miscommunication prior to the meeting. This item was voted to be closed with no action taken by a unanimous vote of SC Installation. This item was closed with no action taken by a unanimous vote of the NBIC Committee.

## c. Subcommittee on Inspection

Subcommittee on Inspection Chair Mr. Mark Mooney reported on the following:

## i. Interpretations

Item Number: IN16-0501 NBIC Location: Part 2 No Attachment

**General Description:** Change of service from Ammonia to LP gas

**Subgroup:** Inspection

Task Group: None assigned.

**Meeting Action:** Mr. Mooney presented a proposed reply to the interpretation question. The interpretation response was approved by a unanimous vote of SC Inspection. A previous code change at the January 2016 meeting (NB15-2103) is the basis for the interpretation response. Discussion was help about the intent of the interpretation response. The item was sent to letter ballot by a unanimous vote of the NBIC Committee.

#### ii. Action Items - Old Business

Item Number: NB13-0903 NBIC Location: Part 2, S2.14 No Attachment

General Description: Add safety requirements for use of liquid or gaseous fuels to fire a historical

boiler

Subgroup: Historical

Task Group: D. Rupert (PM), T. Dillon, J. Larson, R. Bryce

**Meeting Action:** Mr. Mooney gave a progress report.

Item Number: NB13-1002 NBIC Location: Part 2 Attachment Page 65

General Description: Review inspection requirements against ASME B31.1 Power Piping code

**Subgroup:** Inspection

Task Group: M. Schwartzwalder (PM), J. Frey, V. Newton, M. Mooney, D. Canonico, M.

Horbaczewski, B. Dobbins, C. Withers

**Meeting Action:** Mr. Mooney presented a proposal for code change. This item was approved by SC Inspection with a unanimous vote. A change was made in the proposal to reference B31.1 Chapters with Roman numerals. It was also suggested that it be clarified in the proposal that B31.1 is an ASME code. Mr. Mike Webb asked for clarification about who is responsible for reviewing covered piping system assessment programs. Mr. Mooney explained that any interested parties should have access to review any covered piping assessment programs. This item was approved by a unanimous vote of the NBIC Committee.

Item Number: NB13-1406 NBIC Location: Part 2, S1 No Attachment

**General Description:** Add requirements for inspection of superheater units

**Subgroup:** Locomotive

Task Group: P. Welch (PM), R. Stone

Meeting Action: Mr. Mooney gave a progress report.

Item Number: NB13-1409 NBIC Location: Part 2, S1 No Attachment

General Description: Address method for analyzing bulges created by overheating in stayed boiler

surfaces

**Subgroup:** Locomotive

Task Group: P. Welch (PM), M. Mooney, R. Stone

**Meeting Action:** Mr. Mooney reported that no progress was made.

Item Number: NB13-1701 NBIC Location: Part 2, 2.3.6.6 Attachment Pages 66-69

General Description: Review inspection requirements for wire wound pressure vessels

Subgroup: Inspection

Task Group: M. Horbaczewski (PM), M. Mooney, J. Riley, V. Scarcella, G. Galanes

**Meeting Action:** Mr. Mooney presented a proposal for code change. This item was approved by SC Inspection with a unanimous vote. Mr. Mooney explained that the document was updated to address comments received from the previous NBIC Committee letter ballot. This item was approved by a unanimous vote of the NBIC Committee.

Item Number: NB14-0901 NBIC Location: Part 2 No Attachment

General Description: Review inspection requirements for pressure vessels designed for high pressures

**Subgroup:** Inspection

Task Group: M. Horbaczewski (PM), M. Schwartzwalder, D. Graf, G. Scribner, J. Frey

**Meeting Action:** Mr. Mooney gave a progress report.

Item Number: NB14-1101 NBIC Location: Part 2 No Attachment

**General Description:** Diaphragm weld inspection.

**Subgroup:** Locomotive

Task Group: P. Welch (PM), D. Graf, R. Stone

**Meeting Action:** Mr. Mooney gave a progress report.

Item Number: NB14-1801 NBIC Location: Part 2 No Attachment

**General Description:** Ferrules

**Subgroup:** Locomotive

Task Group: P. Welch (PM), R. Stone

**Meeting Action:** Mr. Mooney gave a progress report.

Item Number: NB14-1802 NBIC Location: Part 2 No Attachment

**General Description:** Riveted staybolt head dimensions and Figure S1.2.2-c

**Subgroup:** Locomotive

Task Group: P. Welch (PM), R. Stone

**Meeting Action:** Mr. Mooney gave a progress report.

Item Number: NB15-0201 NBIC Location: Part 2 Attachment Pages 70-71

General Description: Provide consistent language in all areas of the NBIC affected by the closure of

NB13-0701

Subgroup: Inspection

Task Group: J. Riley (PM), M. Mooney, T. Vandini, M. Clark, G. McRae

**Meeting Action:** Mr. Mooney presented a proposal for code change. This item was approved by SC Inspection with a unanimous vote. Mr. Galanes and Mr. Amato requested editorial changes, which were made to the document. The item was approved as modified by a unanimous vote of the NBIC Committee.

## Item Number: NB15-0504 NBIC Location: Part 2, CO2 Sup. No Attachment

**General Description:** Result of PR15-0701, PR15-0702 and PR15-0703, clarify what the National Board Commissioned Inspector's specific duties are when inspecting high pressure composite vessels

**Subgroup:** Inspection

Task Group: E. Brantly (PM), M. Mooney, M. Horbaczewski, E. Brantly, V. Newton

**Meeting Action:** Mr. Mooney reported SC Inspection voted to close this item with no action taken by a unanimous vote. This item was closed with no action taken by a unanimous vote of the NBIC Committee.

Item Number: NB15-1601 NBIC Location: Part 2, S2.11 b) 2) Attachment Page 72

**General Description:** Requirements for the removal of jacketing/lagging insulation for inservice inspections of historical boilers

**Subgroup:** Historical

Task Group: T. Dillon (PM), J. Amato

**Meeting Action:** Mr. Mooney presented a proposal for code change. This item was approved by SC

Inspection with one negative from Mr. Venus Newton. Mr. Newton explained that he disagreed with paragraph b) of the proposal, which makes the Jurisdiction the 'referee' between the owner or user and the Inspector. Mr. Wielgoszinski proposed alternate wording. Mr. Robert Underwood gave the manufacturer's perspective that removing the entire jacketing of a vessel was an unnecessary hardship to the manufacturer. A discussion was held about what the appropriate justification is for removal of insulation and jacketing. This item was approved with two disapproval votes from Mr. Troutt and Mr. Cook.

Item Number: NB15-2204 **NBIC Location: Part 2, S3** No Attachment

General Description: Describe post construction inspection methods specific to graphite pressure

equipment

**Subgroup:** Graphite

Task Group: T. Rudy (PM)

**Meeting Action:** Mr. Mooney gave a progress report.

Item Number: NB15-2206A **NBIC Location: Part 2, S3 Attachment Pages 73-74** 

**General Description:** Review Part 2 graphite supplement to ensure proper use of "shall", "should",

"may"

Subgroup: Graphite

Task Group: T. Rudy (PM)

**Meeting Action:** Mr. Mooney presented a proposal for code change. This item was approved by SC Inspection with a unanimous vote. This item was approved by the NBIC Committee with a unanimous vote.

Item Number: NB15-3501 NBIC Location: Part 2, S2 **Attachment Page75-79** 

**General Description:** Address assorted errors in Part 2, S2

**Subgroup:** Historical

Task Group: R. Bryce

**Meeting Action:** Mr. Mooney presented a proposal for code change. This item was approved by SC Inspection with a unanimous vote. This item was approved by a unanimous vote of the NBIC

Committee.

Item Number: NB16-0201 **NBIC Location: Part 2, S7 Attachment Pages 80-85** 

General Description: Ensure common terminology i.e. "pressure vessel", is used throughout S7

**Subgroup:** Inspection

Task Group: S. Staniszewski (PM), T. Vandini, B. Hart

**Meeting Action:** Mr. Mooney presented a proposal for code change. This item was approved by SC Inspection with a unanimous vote. Mr. Mooney explained that the words "tank" and "container" were changed to "pressure vessel." This item was approved by a unanimous vote of the NBIC Committee.

## iii. Action Items - New Business

Item Number: NB15-1205 NBIC Location: Part 2, S2.14 Attachment Page 86

General Description: Review referencing Wisconson Historical Steam Association writing within the

standard

Subgroup: Historical

Task Group: None assigned.

**Meeting Action:** Mr. Mooney presented a proposal for code change. This item was approved by SC Inspection with a unanimous vote. This item was approved by a unanimous vote of the NBIC

Committee.

Item Number: NB16-0202 NBIC Location: Part 2 Attachment Page 87

General Description: Define CGA (Compressed Gas Association) in glossary

Subgroup: Inspection

Task Group: None assigned.

Meeting Action: Mr. Mooney presented a proposal for code change. This item was approved by SC

Inspection with a unanimous vote. This item was approved by a unanimous vote of the NBIC

Committee

Item Number: NB16-0204 NBIC Location: Attachment Page 88

**General Description:** Referencing ASME Section I 1971 edition

**Subgroup:** Historical

Task Group: None assigned.

**Meeting Action:** Mr. Mooney presented a proposal for code change. This item was approved by SC Inspection with a unanimous vote. Mr. Scribner suggested adding that the National Board can provide out-of-date copies of ASME code to the text of the proposal. The item was approved as modified by a

unanimous vote of the NBIC Committee.

Item Number: NB16-0807 NBIC Location: Part 2, CO2 Supplement Attachment Page 89-94

**General Description:** Revise supplement to maintain consistency between the codes as a result of international working group for the International Fire Code.

Subgroup: Inspection

Task Group: G. Scribner

**Meeting Action:** Mr. Mooney presented a proposal for code change. This item was approved by SC Inspection with a unanimous vote. Mr. Mooney explained that this item was a parallel action to NB16-0606 relating to CO2 alarms and signage requirements. This item was approved by a unanimous vote of the NBIC Committee.

Item Number: NB16-0808 NBIC Location: Part 2, S3 Attachment Pages 95-110

**General Description:** Remove color photographs from FRP supplement

**Subgroup:** FRP

**Task Group:** None assigned.

**Meeting Action:** Mr. Mooney presented a proposal for code change. This item was approved by SC Inspection with a unanimous vote. Mr. Mooney explained that the photographs will be changed to black and white, and the color photographs will be posted on the National Board website. This item was approved by the NBIC Committee with a unanimous vote.

Item Number: NB16-0809D NBIC Location: Part 2 Attachment Pages 111-114

General Description: Part 2 Scope Review

Subgroup: Inspection

Task Group: None

**Meeting Action:** Mr. Mooney presented a proposal for code change. This item was approved by SC Inspection with a unanimous vote. This item was approved by a unanimous vote of the NBIC

Committee.

Item Number: NB16-0901 NBIC Location: Part 2, Section 3 Attachment Page 115

General Description: Update language to be consistent with new name for Section II, Part D

Nonmandatory Appendix A

Subgroup: Inspection

Task Group: None assigned.

**Meeting Action:** Mr. Mooney presented a proposal for code change. This item was approved by SC Inspection with a unanimous vote. This item was approved by a unanimous vote of the NBIC

Committee.

Item Number: NB16-1001 NBIC Location: Part 2, CO2 Supp. No Attachment

General Description: Edit CO2 supplement based on AIA proposed revision

Subgroup: Inspection

**Task Group:** None assigned.

**Meeting Action:** Mr. Mooney reported that SC Inspection voted to close this item with no action taken and open a new item to review the AIA suggestions. Discussion was held about conversation with AIA about the supplement. The history of the item was discussed. Mr. Mooney withdrew his request to close this item. This item will remain open to consider the proposed AIA revision and other suggestions to the supplement.

Item Number: NB16-1401 NBIC Location: Part 2, S10 No Attachment

**General Description:** Revise and update Supplement 10 on Inspection of CRPVs

Subgroup: FRP

**Task Group:** N. Newhouse (PM)

Meeting Action: Mr. Mooney gave a progress report.

Item Number: NB16-1601 NBIC Location: Part 2, S7 and S9 No Attachment

General Description: Address conflict between change of service from Ammonia to LP gas

requirements

Subgroup: Inspection

**Task Group:** None assigned.

**Meeting Action:** Mr. Mooney reported that this item was voted to be closed with no action taken by a unanimous vote of SC Inspection. Mr. Mooney reported that this item was addressed previously by NB15-2103 in January 2016. The change from NB15-2103 was shown on the screen. The item was closed with no action by a unanimous vote of the NBIC Committee.

Item Number: NB16-2201 NBIC Location: Part 2, S1 Attachment Page 116

General Description: Based on NB15-2304, update footnote to reference new Part PL

Subgroup: Inspection

Task Group: M. Mooney (PM), J. Pillow

**Meeting Action:** Mr. Mooney presented a proposal for code change. This item was approved by SC Inspection with a unanimous vote. Discussion was held about whether to reference the 1971 edition of Section I or the 2015 edition of Section I. After discussion, it was held that the code would only reference the 2015 edition for locomotive boilers. The item was approved as modified by a unanimous vote of the NBIC Committee.

Item Number: NB16-2301 NBIC Location: Part 2, S2.9 f) Attachment Pages 117-119

General Description: Update wording in Part 2, S2.9 f) for consistency with ASME B31.1

Subgroup: Historical

Task Group: R. Bryce, T. Dillon

**Meeting Action:** Mr. Mooney presented a proposal for code change. This item was approved by SC Inspection with a unanimous vote. Mr. Wielgoszinski said the information contained in the proposal was supported by B31.1. This item was approved by a unanimous vote of the NBIC Committee.

#### d. Subcommittee on Repairs and Alterations

Subcommittee on Repairs and Alterations Chair Mr. George Galanes reported on the following:

## i. Interpretations

Item Number: IN15-0601 NBIC Location: Part 3, Section 3 No Attachment

General Description: Use of backing strips to install flush patches repair/alteration classification

**Subgroup:** Repairs and Alterations

Task Group: None assigned

Meeting Action: Mr. Galanes presented a proposed response to the interpretation question. This proposed response was approved by SC Repairs and Alterations with a unanimous vote. Mr. Galanes explained that the committee revised the original inquiry's two questions into one question. A discussion was held about joint efficiency. Mr. Cook expressed concern about raising joint efficiency through additional NDE alone, which is prohibited by the NBIC. This proposed interpretation might send the message that it is acceptable to do so, even though the NDE that will be performed is only on the repaired area. Mr. Robert Underwood said that this was a common repair in the field. Ms. Wadkinson asked if this interpretation applied to Section I vessels as well as Section VIII vessels. The intent was clarified that the interpretation only applies to Section VIII vessels and other pressure vessels manufactured to international codes and standards. This item was sent to letter ballot by a unanimous vote of the NBIC Committee.

Item Number: IN15-0901 NBIC Location: Part 3 No Attachment

General Description: Installation of nozzle to the outside of a blind flange repair/alteration

classification

**Subgroup:** Repairs and Alterations

**Task Group:** None assigned

**Meeting Action:** Mr. Galanes gave a progress report.

Item Number: IN15-1101 NBIC Location: Part 3 Attachment Page 120

**General Description:** Is the use of ASME PCC-2 Article 2.12 fillet welded patches an alteration?

**Subgroup:** Repairs and Alterations

**Task Group:** None assigned

**Meeting Action:** Mr. Galanes invited Mr. Pillow to present the proposed response to the interpretation question. This proposed response was approved by SC Repairs and Alterations with one negative. Mr. Galanes reported that an item (NB16-0303) has been opened to address fillet welded patches in the NBIC. This interpretation response was approved by a unanimous vote of the NBIC Committee.

Item Number: IN15-1301 NBIC Location: Part 3 No Attachment

**General Description:** Does changing a bolt material require an "R" form and stamp?

**Subgroup:** Repairs and Alterations

Task Group: None assigned

**Meeting Action:** Mr. Galanes gave a progress report.

Item Number: IN16-0101 NBIC Location: Part 3 Attachment Page 121

**General Description:** Tube plugging with explosive techniques

**Subgroup:** Repairs and Alterations

Task Group: J. Sekely (PM), R. Underwood, E. Cutlip

**Meeting Action:** Mr. Galanes presented a proposed response to an interpretation question. This proposed response was approved by SC Repairs and Alterations with a unanimous vote. Mr. Galanes invited Mr. Bob Underwood to report on this item. Mr. Underwood presented a proposal, NB16-2601, which is a code change related to the topic of this interpretation. Mr. Underwood explained evidence for considering explosive welding of heat exchanger tubes a repair based on the NBIC and ASME Sections VIII and IX. The interpretation response was approved by a unanimous vote of the NBIC Committee.

Item Number: IN16-0201 NBIC Location: Part 3 No Attachment

General Description: Sequence for Stamping and R Report Signing

**Subgroup:** Repairs and Alterations

Task Group: M. Bost (PM)

Meeting Action: Mr. Galanes gave a progress report. A new item, NB16-0301, was opened to make

changes to the code based on the content of this item.

Item Number: IN16-0401 NBIC Location: Part 3 No Attachment

General Description: Certificates of Authorization for companies in a merger or acquisition

**Subgroup:** Repairs and Alterations

Task Group: None assigned.

**Meeting Action:** Mr. Galanes gave a progress report.

Item Number: IN16-0601 NBIC Location: Part 3 Attachment Pages 122-123

**General Description:** Alternate Methods of Verification of Repairs

**Subgroup:** Repairs and Alterations

**Task Group:** None assigned.

**Meeting Action:** Mr. Galanes presented a proposed response to an interpretation question. This proposed response was approved by SC Repairs and Alterations with a unanimous vote. Mr. David Martinez was invited to present on this item. He explained that the question was originally deemed consulting, but after consideration an interpretation response was eventually drafted and approved by the Subcommittee. This item was approved by a unanimous vote of the NBIC Committee.

At this point in the meeting, Mr. Jim Riley and Mr. Paul Edwards left the meeting. They were replaced with alternates Darryl Graf and Ben Schaefer, respectively.

#### ii. Action Items – Old Business

Item Number: NB11-0204B NBIC Location: Part 3, S2 Attachment Pages 124-134

General Description: Review NDE requirements of stayed areas for historical boilers

Subgroup: Historical

Task Group: M. Wahl (PM), J. Larson, F. Johnson

**Meeting Action:** Mr. Galanes invited Mr. Amato to present a proposal for code change. Mr. Amato highlighted the code changes in the proposal. This item was approved by SC Repairs and Alterations with a negative from L. Moedinger and an abstention from J. Pillow. Mr. Pillow expressed his concern that this information would affect Steam Locomotives, and pointed out that experience has shown that volumetric NDE is not required on steam locomotives. Mr. Amato explained that this item was previously balloted to SC Repairs and Alterations, and the negative comments from that ballot were addressed. This item was approved by a unanimous vote of the NBIC Committee.

Item Number: NB12-0801 NBIC Location: Part 3 No Attachment

General Description: Add requirements for repair and alteration of gasketed PHEs in the field

**Subgroup:** Repairs and Alterations

Task Group: R. Cauthon (PM), B. Wielgoszinksi, N. Carter

Meeting Action: Mr. Galanes reported that a proposal for this item will be sent for letter ballot to SC

Repairs and Alterations.

Item Number: NB13-0902 NBIC Location: Part 3, S2 Attachment Pages 135-137

General Description: Review alternate methods of tube sheet repair

**Subgroup:** Historical

Task Group: F. Johnson, T. Dillon, M. Wahl

**Meeting Action:** Mr. Galanes presented a proposal for code change. This item was approved by SC Repairs and Alterations with a unanimous vote. Mr. Amato explained the code changes, and explained the diagrams. Discussion was held about whether it is acceptable to cut through tube sheet holes during a repair. It was determined that it is acceptable. The item was approved by a unanimous vote of the NBIC Committee.

Item Number: NB13-1401 NBIC Location: Part 3, S1.9.2 No Attachment

General Description: Add wording in this section regarding boiler tube welding

**Subgroup:** Locomotive

**Task Group:** R. Stone (PM)

**Meeting Action:** Mr. Galanes gave a progress report.

Item Number: NB13-1405 NBIC Location: Part 3, S1.2.9 No Attachment

General Description: Add requirements for throttle pipes, dry pipes, superheater headers, and front end

steam pipes

**Subgroup:** Locomotive

Task Group: R. Stone (PM)

**Meeting Action:** Mr. Galanes gave a progress report.

Item Number: NB13-1407 NBIC Location: Part 3, S1 No Attachment

General Description: Add requirements for repair and alteration of bolts, nuts, and studs in locomotive

boilers

**Subgroup:** Locomotive

Task Group: R. Stone (PM)

Meeting Action: Mr. Galanes gave a progress report.

Item Number: NB13-1408 NBIC Location: Part 3, S1 No Attachment

**General Description:** Add requirements for repair and alteration of locomotive boilers with threaded

boiler studs of the taper thread and straight thread varieties

**Subgroup:** Locomotive

**Task Group:** R. Stone (PM)

Meeting Action: Mr. Galanes gave a progress report.

Item Number: NB14-0301 NBIC Location: Part 3 Attachment Page 138

General Description: Add requirements for encapsulation

**Subgroup:** Repairs and Alterations

Task Group: B. Boseo, F. Johnson, K. Moore

**Meeting Action:** Mr. Galanes presented a proposal for code change. This item was approved by SC Repairs and Alterations with a unanimous vote. An action item was opened to address encapsulation over cracks (NB16-0302), which was removed from the current proposal after comments from a letter ballot. Mr. Webb explained encapsulation can be performed while the component is still under pressure. Discussion was held whether encapsulation can include nozzles. The proposal was modified to include nozzles. This item was approved as modified by a unanimous vote of the NBIC Committee.

## Item Number: NB15-0511 NBIC Location: Part 3, 5.13.5.1 No Attachment

**General Description:** Result of PR15-0120, how does one fill out "NR" paperwork if the repairs or alterations were performed to an international code other than Section III or Section XI?

**Subgroup:** Repairs and Alterations

Task Group: P. Edwards (PM), B. Schafer, B. Wielgoszinski, C. Withers

**Meeting Action:** Mr. Galanes reported that this item was closed with no action taken by a unanimous vote of SC Repairs and Alterations. This item was addressed under actions from NB16-0605. This item was closed with no action by a unanimous vote of the NBIC Committee.

Item Number: NB15-0512 NBIC Location: Part 3, S3.5.5 b) Attachment Pages 139-140

**General Description:** Result of PR15-0121, should UIG-79 and UIG-80 be referenced in their entirety in this section?

Subgroup: Graphite

**Task Group:** E. Soltow (PM)

**Meeting Action:** Mr. Galanes presented a proposal for code change. This item was approved by SC Repairs and Alterations with a unanimous vote. This item was approved by a unanimous vote of the

NBIc Committee.

Item Number: NB15-1602 NBIC Location: Part 3, S2.7.1 No Attachment

General Description: Revise material list for historical boiler reports to include bolts, studs, nuts and

formed pressure parts

**Subgroup:** Historical

Task Group: T. Dillon (PM), M. Wahl, G. Galanes

Meeting Action: Mr. Galanes gave a progress report.

Item Number: NB15-1703 NBIC Location: Part 3 No Attachment

General Description: Welded staybolt procedures

**Subgroup:** Locomotive

Task Group: None assigned

**Meeting Action:** Mr. Galanes reported that this item was closed with no action taken by a unanimous vote of SC Repairs and Alterations. Mr. Galanes reported that there was no history on the item, so the item was voted to be closed by the subcommittee. This item was closed with no action taken by a unanimous vote of the NBIC Committee.

Item Number: NB15-2206B NBIC Location: Part 3, S3 Attachment Page 141

**General Description:** Review Part 3 graphite supplement to ensure proper use of "shall", "should",

"may"

Subgroup: Graphite

**Task Group:** Tracy Rudy (PM)

**Meeting Action:** Mr. Galanes presented a proposal for code change. This item was approved by SC Repairs and Alterations with a unanimous vote. This item was approved by a unanimous vote of the

NBIC Committee.

Item Number: NB15-2207 NBIC Location: Part 3, S3 Attachment Page142

General Description: Revise requirements for amount plugs needed when tapered plugs are used

**Subgroup:** Graphite

**Task Group:** Aaron Viet (PM)

**Meeting Action:** Mr. Galanes presented a proposal for code change. This item was approved by SC Repairs and Alterations with a unanimous vote. This item was approved by a unanimous vote of the

NBIC Committee.

**NBIC Location: Part 3, S3** Item Number: NB15-2208 No Attachment

General Description: Investigate repair options for graphite block heat exchangers

**Subgroup:** Graphite

**Task Group:** Greg Becherer (PM)

**Meeting Action:** Mr. Galanes gave a progress report.

Item Number: NB15-2210 **NBIC Location: Part 3** No Attachment

**General Description:** Reduce cementing requirements for plugging of tubes

Subgroup: Graphite

**Task Group:** C. Cary (PM)

**Meeting Action:** Mr. Galanes reported that a proposal for this item will be sent for letter ballot to SC

Repairs and Alterations.

Item Number: NB15-2305 **NBIC Location: Part 3 Attachment Pages 143-156** 

General Description: Review NBIC footnotes; remove footnotes that are code language or definitions

**Subgroup:** Repairs and Alterations

**Task Group:** R. Troutt, J. Pillow

Meeting Action: Mr. Galanes presented a proposal for code change that was approved by SC Repairs and Alterations prior to the meeting. Mr. Troutt explained the changes made to the code in the proposal. This item was approved by a unanimous vote of the NBIC Committee.

NBIC Location: Part 3, 4.2 b) **Attachment Pages 157-158** Item Number: NB15-2801

General Description: Change reference standard, "ACCP-189" to "ANSI/ASNT CP-189" and also included reference to the ACCP Program.

**Subgroup:** Repairs and Alterations

**Task Group:** N. Carter (PM)

**Meeting Action:** Mr. Galanes presented a proposal for code change. This item was approved by SC Repairs and Alterations with a unanimous vote. Mr. Nathan Carter explained the rationale for the change to the NBIC based on information from ASNT NDE documents. This item was approved by a unanimous vote of the NBIC Committee.

Item Number: NB15-2901 **NBIC Location: Part 3, S2 Attachment Page 159** 

**General Description:** Review references to 1971 ASME Section I code edition with the recent additions of Part PL and Part PR in the 2015 ASME Section I

**Subgroup:** Historical

Task Group: None assigned

**Meeting Action:** Mr. Galanes presented a proposal for code change. This item was approved by SC Repairs and Alterations with a unanimous vote. This item was approved by a unanimous vote of the NBIC Committee.

#### iii. Action Items - New Business

Item Number: NB16-0602 NBIC Location: Part 3, 1.8.2 Attachment Page 160

**General Description:** Clarify definitions of "NR" program categories relating to repair activities, came

from NR task group

**Subgroup:** Repairs and Alterations

Task Group: NR Task Group

**Meeting Action:** Mr. Galanes invited Mr. Paul Edwards to present a proposal for code change. This item was approved by SC Repairs and Alterations with a unanimous vote. Mr. Edwards explained the confusion with NR program categories, and how the action item remedied this issue. This item was approved by a unanimous vote of the NBIC Committee.

Item Number: NB16-0603 NBIC Location: No Attachment

**General Description:** 

Subgroup: Repairs and Alterations

Task Group:

**Meeting Action:** Mr. Galanes presented a proposal for code change. This item was approved by SC Repairs and Alterations with a unanimous vote. This item will be sent to letter ballot for SC PRD and SC Repairs and Alterations. Mr. Chuck Withers will review the documents prior to submitting them for letter ballot.

Item Number: NB16-0606 NBIC Location: Part 3, 1.8.7.2 n) 5) Attachment Page 161

**General Description:** Add the words "A log shall be maintained in accordance with Part 3, 5.6." at the end of the paragraph, also include in sections in 1.8.6 and 1.8.8

**Subgroup:** Repairs and Alterations

Task Group: C. Withers (PM)

**Meeting Action:** Mr. Galanes invited Mr. Edwards to present a proposal for code change. This item was approved by SC Repairs and Alterations with a unanimous vote. This item was approved by a unanimous vote of the NBIC Committee.

Item Number: NB16-0701 NBIC Location: Part 3, Section 2 Attachment Pages 162-167

**General Description:** Update SWPS to most recent versions, B2.1-1/8-231:2015;

**Subgroup:** Repairs and Alterations

Task Group: J. Sekely (PM)

**Meeting Action:** Mr. Galanes presented a proposal for code change. This item was approved by SC Repairs and Alterations with a unanimous vote. This item was approved by a unanimous vote of the NBIC Committee. A new item (NB16-0504) will be opened to continue to check that SWPSs are updated to most recent versions.

Item Number: NB16-0803 NBIC Location: Part 3, S4.1 No Attachment

General Description: Revise scope statement to remove "RP" letters included on certificate of

authorization

**Subgroup:** Repairs and Alterations

Task Group: None assigned.

**Meeting Action:** Mr. Galanes reported that this item was closed with no action taken by a unanimous vote of SC Repairs and Alterations. This item was closed with no action by a unanimous vote of the NBIC Committee.

Item Number: NB16-0809B NBIC Location: Attachment Pages 168-171

**General Description:** 

**Subgroup:** Repairs and Alterations

**Task Group:** 

**Meeting Action:** Mr. Galanes presented a proposal for code change. This item was approved by SC Repairs and Alterations with a unanimous vote. A question was asked whether a reference to PRD Test-Only administrative programs should be included in NBIC Part 3 scope. This item was approved by a unanimous vote of the NBIC Committee.

Item Number: NB16-0810 NBIC Location: No Attachment

**General Description:** 

**Subgroup:** Repairs and Alterations

Task Group:

Meeting Action: Mr. Galanes gave a progress report.

Item Number: NB16-1101 NBIC Location: Part 3, Grade 91 Attachment Pages 172-190

Supplement

General Description: Minor edits to Part 3, Grade 91 Supplement

**Subgroup:** Repairs and Alterations

Task Group: G. Galanes (PM)

**Meeting Action:** Mr. Galanes presented a proposal for code change. This item was approved by SC Repairs and Alterations with a unanimous vote. Mr. Galanes highlighted the changes to the document. Mr. Scribner requested a change with one "should" to a "shall." This item was approved as modified with one abstention from Mr. Bob Wielgoszinski. Mr. John Siefert gave a brief presentation on the use of NBIC Welding Method 6, which is included in the attachments.

Item Number: NB16-1102 NBIC Location: Part 3, 2.5.3 d) Attachment Page 191

**General Description:** Add the sentence "Welding Method 6 described in paragraph 2.3.5.6 requires use of a controlled bead technique." at the end of NBIC Part 3, 2.5.3 d)

**Subgroup:** Repairs and Alterations

**Task Group:** G. Galanes

**Meeting Action:** Mr. Galanes presented a proposal for code change. This item was approved by SC Repairs and Alterations with a unanimous vote. Mr. Galanes explained the changes to the committee. This item was approved by a unanimous vote of the NBIC Committee.

Item Number: NB16-1301 NBIC Location: Part 3, S3.1 Attachment Page 192

General Description: Update scope of Graphite supplement to include "G" in Certificate of

Authorization

Subgroup: Graphite

Task Group: None assigned

**Meeting Action:** Mr. Galanes presented a proposal for code change. This item was approved by SC Repairs and Alterations with a unanimous vote. This item was approved by a unanimous vote of the NBIC Committee.

Item Number: NB16-1402 NBIC Location: Part 3 No Attachment

**General Description:** Life extension for high pressure vessels above 20 years

Subgroup: FRP

**Task Group:** M. Gorman (PM)

**Meeting Action:** Mr. Galanes reported that no progress was made.

Item Number: NB16-1403 NBIC Location: Part 3, S4 No Attachment

General Description: Add information on repair of high pressure vessels

**Subgroup:** FRP

**Task Group:** N. Sirosh (PM)

**Meeting Action:** Mr. Galanes reported that no progress was made.

Item Number: NB16-1801 NBIC Location: Part 3, S1 No Attachment

General Description: Review Part 3 S1 for revisions based on the publication of ASME Section 1, Part

PL

**Subgroup:** Locomotive

**Task Group:** L. Moedinger (PM)

Meeting Action: Mr. Galanes gave a progress report.

Item Number: NB16-2001 NBIC Location: Part 3, 1.6.1 c) No Attachment

**General Description:** Update language about record maintenance in Table 1.6.1 c)

**Subgroup:** Repairs and Alterations

Task Group: J. Pillow (PM)

Meeting Action: Mr. Galanes gave a progress report.

Item Number: NB16-2101 NBIC Location: Part 3, Section 5 Attachment Pages 193-197

General Description: Update to pressure test requirements for re-rate based on interpretation 98-15

**Subgroup:** Repairs and Alterations

**Task Group:** B. Wielgoszinski (PM)

**Meeting Action:** Mr. Galanes invited Mr. Wielgoszinski to present a proposal for code change. This item was approved by SC Repairs and Alterations with a unanimous vote. Mr. Wielgoszinski explained that this item came from a previous interpretation, and the proposal is meant to update the code based on interpretation 98-15. This item was approved by a unanimous vote of the NBIC Committee.

Item Number: NB16-2401 NBIC Location: Part 3, 5.5.1 No Attachment

General Description: Increase NBIC requirements for registration of repairs

Subgroup: Repairs and Alterations

Task Group: N. Carter

**Meeting Action:** Mr. Galanes reported that the subcommittee voted to close this item with no action taken. There were abstentions from Mr. Troutt and Mr. Amato in the subcommittee vote. This item was closed with no action taken by a unanimous vote of the NBIC Committee.

Item Number: NB16-2501 NBIC Location: Part 3, S1 No Attachment

General Description: Change "radiographic" to "volumetric" to allow for ultrasonic

**Subgroup:** Locomotive

**Task Group:** L. Moedinger (PM)

**Meeting Action:** Mr. Galanes gave a progress report.

Item Number: NB16-2502 NBIC Location: Part 3, S1 Attachment Pages 198-199

**General Description:** Update Table S1.1.3.1 to address patch bolt material

**Subgroup:** Locomotive

Task Group: None assigned

**Meeting Action:** Mr. Galanes presented a proposal for code change. This item was approved by SC Repairs and Alterations with one abstention from Jim Sekely. This item was approved by a unanimous vote of the NBIC Committee.

Item Number: NB16-2503 NBIC Location: Part 3, S1 Attachment Pages 198-199

General Description: Delete Grade B from SA-31, which allows use of Grade A

**Subgroup:** Locomotive

Task Group: None assigned

**Meeting Action:** Mr. Galanes presented a proposal for code change. This item was approved by SC Repairs and Alterations with one abstention from Jim Sekely. This item was approved by a unanimous

vote of the NBIC Committee.

Item Number: NB16-2504 NBIC Location: Part 3, S1 No Attachment

**General Description:** Evaluate adding SA-234 to the piping reference table S1.1.3.1

**Subgroup:** Locomotive

Task Group: D. Griner, M. Janssen

Meeting Action: Mr. Galanes gave a progress report.

Item Number: NB16-2505 NBIC Location: Part 3, S1 Attachment Pages 198-199

**General Description:** Adding SA-696 to hollow cylindrical parts in table S1.1.3.1; staybolts caps and sleeves

**Subgroup:** Locomotive

Task Group: None assigned.

**Meeting Action:** Mr. Galanes presented a proposal for code change. This item was approved by SC Repairs and Alterations with one abstention from Jim Sekely. This item was approved by a unanimous vote of the NBIC Committee.

Item Number: NB16-2601 NBIC Location: Part 3, Section 3 Attachment Pages 200-203

General Description: Revise tube plugging requirements for firetube boilers

**Subgroup:** Repairs and Alterations

Task Group: None assigned

**Meeting Action:** Mr. Galanes invited Mr. Bob Underwood to present on a proposal for code change. This proposal was addressed simultaneously with IN16-0101 related to explosive welding. This item was approved by SC Repairs and Alterations with a unanimous vote. Mr. Underwood explained that welding of heat exchanger tubes will be considered a repair, but not a routine repair. Mr. Wielgoszinski explained the rationale behind routine repairs. This item was approved by a unanimous vote of the NBIC Committee.

#### 9. Liaison Activities

a. American Society of Mechanical Engineers BPV Code (ASME BPV)

Mr. Paul Edwards was not present for the meeting, so Mr. Bob Wielgoszinski gave the report instead. Mr. Wielgoszinski reported on separation of conformity assessment requirements from stamping requirements, authorized inspection agency oversight, coordinating inspection requirements with RCI-1, BPV parts fabrication certificate program, NDE personnel certification, the Wil LaRochelle Conformity Assessment Medal, field site task group, and Certification 360 Workshops. (Attachment Pages 204-209)

## b. American Welding Society (AWS)

Mr. Sekely wasn't present, and no report was given.

## c. American Petroleum Institute (API)

Mr. Jim Riley wasn't present. His report was shown on the projector for the committee members to review. (Attachment Pages 210-211)

## 10. Future Meetings

January 9-12, 2017 – The Westgate Hotel in San Diego, California. Mr. Cook noted that he was organizing a trip to the Vista Steam Museum near San Diego on Sunday, January 8<sup>th</sup>. Anyone interested in attending the museum visit should contact Mr. Cook.

July 17-20, 2017 - Columbus, OH

## 11. Adjournment

Prior to adjournment, Mr. Cook thanked the subgroup, subcommittee, and NBIC Committee secretaries. He also thanked Mr. Mark Clemens for his technical support of the meeting. Mr. Wielgoszinski thanked Mr. Cook for leading a productive meeting. The meeting was adjourned by a unanimous vote of the NBIC Committee at 4:17pm local time.

Respectfully submitted,

Brad Besserman

**NBIC Secretary**