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THE  
NATIONAL  
BOARD  
OF BOILER AND  
PRESSURE VESSEL  
INSPECTORS

# NATIONAL BOARD INSPECTION CODE COMMITTEE

## *MINUTES*

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*Meeting of October 22, 2014  
Columbus, Ohio*

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**1. Call to Order - 11:00 a.m.**

Chairman Don Cook called the meeting to order at 11:00 a.m.

**2. Roll call**

Mr. Gary Scribner took attendance and a quorum was established.

**3. Announcements**

Mr. Scribner briefly explained the layout of the agenda and how the comments were grouped by commenter and type. The editorial comments will be voted on in these groups. The substantive comments will be voted on individually.

**4. Adoption of the Agenda**

There was a motion to adopt the agenda. The motion was unanimously approved.

**5. Report of Subcommittees**

**a. Subcommittee on Installation**

**Charge:** Responsible for developing new rules, revising, interpreting and maintaining existing rules which address administrative and technical requirements for installing pressure retaining items. This subcommittee also directs, supports, reviews and approves any items forwarded by each subgroup functioning under this subcommittee.

**Membership:** Michael Richards (Chair), Paul Bourgeois, Geoff Halley, Stan Konopacki, Brian Moore, Don Patten, Paul Schuelke, Melissa Wadkinson, Edward Wiggins, and Jeanne Bock (Secretary).

Mr. Richards advised that all of Mr. Carter’s editorial comments would be voted on simultaneously.

**1. Part 1 Editorial PR Comments (Commenter name: Nathan Carter)**

**PR15–0139 – Part 1, S5.3.3**

Second Line. To be consistent, remove the quotation marks that denote inches for “4” and “2” and replace the “with- in. Also include metric equivalent.

**PR15–0160 – Part 1, S5.5.1 a) c)**

In "a)", "assure" is used incorrectly. It should read "ensure". To “assure” a person of something is to make him or her confident of it. To “ensure” that something happens is to make certain that it does. In "c)", add the metric equivalents for the temperature and pressure given.

**PR15–0140 – Part 1, S5.5.5**

Second paragraph, first line. Replace the “1”” with “1 in.”, which is standard notation.

**PR15–0141 – Part 1, S5.5.7 e) 3) b)**

Fifth row down: Add “e.g.” before “1000 deg F”. Also change “deg F” to “°F” in two places on that line. Also insert the metric equivalent.

- There was a motion to approve responding to Mr. Carter with resolution number 1; Accepted, changes are incorporated. The motion was unanimously approved.

## 2. Part 1 Editorial PR Comments (Commenter Name: Alex Garblovsky)

Mr. Richards advised that all of Mr. Garblovsky's editorial comments would be voted on simultaneously.

### PR15-0301 – Part 1, S4.5 a) 3)

The metric conversion of 100 psig to “690 kPa” is converted as “700 kPa” in other portions of the text. A consistent conversion should be used throughout. (I did not check whether 30 psig was being converted consistently. This should be checked.)

### PR15-0302 – Part 1, S4.6 b)

The abbreviation "PLC" is not defined / identified. It is first used here in the text. I am not sure if it is defined or identified elsewhere.

### PR15-0303 – Part 1, 5.3.4 a)

The SI value for “18 in.” should probably be 460 mm. See S5.4.2.c).1). In any event, 457 mm is not a “user friendly” number. SI unit users would be most likely to use a value of 450, 455 or 460.

### PR15-0304 – Part 1 – S5.3.4 b) and S5.3.4 c)

In S5.3.4 b), the value for “60 in.” is incorrectly metricated in S5.3.4 c), the value for “18 in.” is incorrectly metricated.

### PR15-0305 – Part 1 – S5.5.5

Nominal Pipe Size (NPS) is a dimensionless unit. The use of “inches” and “mm” with NPS is incorrect. The value should be expressed as “NPS 1 (DN 25)”.

### PR15-0306 – Part 1 – S5.5.7 e) 3) b)

The chemical symbol for carbon dioxide should be expressed as “CO<sub>2</sub>” rather than “CO<sub>2</sub>”. There is inconsistent use of both versions in the text.

### PR15-0307 – Part 1 – Glossary

Dense phase pneumatic system(s) – Check SI conversion of 30 to 100 psig for consistency with other uses in the text (e.g. 690 kPa or 700 kPa for 100 psig.) Lean phase pneumatic system(s) – Consider changing the phrase “in the region of” to “approximately” since region implies a range and only one value is given.

- There was a motion to reply to Mr. Garblovsky with response #1; “Accepted, changes are incorporated.” The motion was unanimously approved.

## 3. Part 1 Reject PR Comments (Commenter Name: Brian Moore )

### PR15-0203 – Part 1 – 2.1

Part 1 Section 2 is the correct reference for Power Boilers. The change should be deleted.

- There was a motion to reply to Mr. Moore with response #4, “Rejected for the following reason: No change suggested. Part 1 Section2 is the correct reference for power boilers, and that is what the change supports.” The motion was unanimously approved.

b. **SC on Inspection**

**Charge:** Responsible for developing new rules, revising, interpreting and maintaining existing rules which address administrative and technical requirements for inspection of pressure retaining items. This subcommittee also directs, supports, reviews and approves any items forwarded by each subgroup functioning under this subcommittee.

**Membership:** Mark Mooney (Chair), Tim Barker, Domenic Canonico, Mark Horbaczewski, Jim Getter, Greg McRae, Venus Newton, Ralph Pate, Bob Reetz, Jim Riley, Jason Safarz, Mike Schwartzwalder, Stan Staniszewski, and Jodi Metzmaier (Secretary).

Mr. Mooney reported on the following:

Mr. Mooney advised that all of Mr. Garbolevsky's editorial comments would be voted on simultaneously.

**1. Part 2 Editorial PR Comments (Commenter Name: Alex Garbolevsky)**

**PR15-0307 - Part 2, 4.4.8.7 f) 3)**

The SI conversion of "(3200 sq. mm)" should be corrected to "(32000 sq. mm)".

**PR15-0309 – Part 2, S2.10.4.2 c) 3)**

Show an SI conversion for the "(1-inch)" parenthetical reference.

**PR15-0310 – Part 2, S11.10**

I could not find the definition of the abbreviation AE (for acoustic emission). (I did a word search for the entire draft text.)

**PR15-0311 – Part 2, S11.10.4 b)**

The value of "0.5 inches" should be metricated to 13 mm.

**PR15-0312 - Part 2 – S11.10.4 c)**

(1) The units for energy (U) and impedance (Z) should be given for the integral Expression.

(2) In the 3<sup>rd</sup> paragraph, "FFT" is used without explanation or definition

**PR15-0313 - Part 2 – S11.10.4 f)**

For the equation to solve for "U", units for "U" (assumed to be joules, J), "N" (assumed to be "cycles" or "Hz"), "T" (seconds?) and "Z" (impedance) are not provided.

**PR15-0314 - Part 2 – S11.10.4 g)**

"24 inches" and "2 feet" are used in the text. I recommend "2 feet" (with accompanying SI value) be used for consistency.

**PR15-0315 - Part 2 – S11.10.5**

Substitute "in." as the abbreviation for inches rather than quotation marks ("). Also, the value of 24 inches should be metricated.

**PR15-0316 - Part 2 – S11.10.6**

Inch values listed in the first paragraph are converted to "cm". For consistency, the unit should be "mm".

**PR15-0317 - Part 2 – S11.10.8 b)**

In the equation for “UFB”, the numeral “1” is shown after the term “A”. The numeral “1” should actually be a lower case letter “l”. We also need to know the units for “A”, “l”, “E”, and “ε” so that “UFB” can be expressed in joules (J).[NOTE: The letters “FB” above should be subscript]

**PR15-0318 - Part 2 – S11.10.8 c)**

In the equation shown for “UFB”, the numeral “1” is shown after the term “A”. The numeral “1” should actually be a lower case “l”. We also need to know the units for “A”, “l”, “E”, and “ε” so that “UFB” can be expressed in joules (J). In addition, in the example calculation, it is stated that  $A = \pi d^2/4$  and  $l = 4d$ ; however, no consistent units are given for “d”. It appears from the example that “d” is 7μm (micrometers), but when the value is plugged into the formula it is shown as “7(10<sup>-6</sup>)”, in which case the value is expressed as “meters”. [NOTE: FB in the above description should be a subscript. Also “7(10<sup>-6</sup>)” is meant as “7 times 10 exp. 6”]

- There was a motion to approve responding to Mr. Garbolevsky with response # 1; Accepted, changes are incorporated. The motion was unanimously approved.

**2. Part 2 Editorial PR Comments (Commenter Name: Nathan Carter)**

Mr. Mooney advised that all of Mr. Carter’s editorial comments would be voted on simultaneously.

**PR15-0153 - Part 2 – 4.4.8.7 f)**

Line 2) . Replace “inches” with “in.” to be consistent.  
Line 3) . “3200 sq. mm” should be “32000 sq. mm”.

**PR15-0155 - Part 2 – S1.4.2.8.1**

Row 3. Replace “1/4” with “1/4 in.” to be consistent. Also include metric equivalent.

**PR15-0144 - Part 2 – S9.3 b)1) and d) and e)1)**

- b)1). Change “assure” to “ensure”
- d)1). Change “assure” to “ensure”
- d)2). Change “Data Report” to “Manufacturer’s Data Report”
- e)1). Change “assure” to “ensure”

**PR15-0145 - Part 2 – S10.6**

Seventh row. Capitalize “figure”.

**PR15-0146 - Part 2 – S10.7 b)**

Second Row. Is “tank” intended to be written as “vessel”? “Tank” is also used in “a)2)”, “c”, “c)1)”, and the first column in each of the Table S10 (a & b imperial and metric).

**PR15-0151 - Part 2 – S11.10.7 b)2)**

Superscript the “-10”

**PR15-0152 - Part 2 – Table S11.7 a (note 1) and Table 1b (note 1)**

Change “ASME data report” to “Manufacturer’s Data Report”.

- There was a motion to approve responding to Mr. Carter with response #1; Accepted, changes are incorporated. The motion was unanimously approved.

### 3. Part 2 Substantive PR Comments

Mr. Mooney advised that public review comments, PR15-0204, PR15-0401 and PR15-0401 Would be voted on simultaneously as they all deal with the same proposed text.

#### **PR15-0204 - Part 2 – 2.3.6.8 (Brian Moore)**

Do not incorporate the proposed change – Establishing a mandatory (shall) inspection requirement based on another inspection code is beyond the scope of the NBIC. To my knowledge, no other inspection code has ever been made mandatory under the NBIC. If inspection requirements are needed then one of two things should be done:

- 1) let individual jurisdictions set the requirements, or
- 2) within the NBIC include specific inspection requirements consistent with pressure vessels constructed to ASME Section VIII and ASME PVHO-1. An alternative to including specific requirements within the NBIC would be to change the text to: "Inspections may be conducted using ASME PVHO-2 for reference." It must be clear that the requirements of PVHO-2 are not a mandatory part of an NBIC inspection. See for example, PVHO-2 Section 4.0. None of the responsibilities listed include a commissioned boiler inspector. Even Section 7 states that there are various types of inspections. "Operational Inspections" are definitely beyond the scope and capabilities of a commissioned inspector.

#### **PR15-0601 - Part 2 – 2.3.6.8 (Kenneth Stoller)**

While AIA supports the concepts underlying PVHO-2, we oppose its adoption as an in-service inspection standard. The requirements of PVHO-2 are addressed to owner/operators, not inspectors, and go well beyond the normal scope and training of National Board Commissioned Inspectors. Imposing these requirements on special inspectors may also place them in the untenable position of assuming liability beyond the limits of the insurance policies under which they perform inspections. Accordingly, we recommend leaving this section un-amended.

#### **PR15-0401 - Part 2 – 2.3.6.8 (Robert Wielgoszinski)**

Inspections that are specified by the NBIC should be performed in accordance with the NBIC, and not be performed to other Codes or Standards. The specific details for inspection should be extracted from the standard and written into the NBIC. This places the NBIC in control of which inspections they need performed. This paragraph should be withheld from publication in the NBIC until revised to specify the inspections needed.

- There was a motion to approve responding to the commenters with response #3; Accepted in principle and the item will be returned to the committee for action. The motion was approved with one disapproved vote. Action item NB06-0102 was opened to address all three comments.

#### **PR15-0142 - Part 2 - S7.10 h) (Nathan Carter)**

Since a nameplate is required with a "R" stamp for the underground service change, was the requirement for an R-1/R-2 to be completed intentionally left off? Would it not be prudent for an Inspector to verify that the seal welding or flush patch welds comply at least visually comply with code? An "R" Certificate Holder is already required. Why not include an Inspector to verify the weld is acceptable and require a signed R-1/R-2 form, which is to be filed with the NB. There is a risk to life/property if a seal weld or flush patch on a LPG storage vessel is not completed in accordance with code requirements. Paragraph e) also introduces additional welding, which should be verified. Also please consider a new item for Part 3, which would refer the reader to this Supplement for a Change of Service.

- There was a motion to respond to Mr. Carter with response #2; Accept in principle, a new action item will be opened. The motion was unanimously approved. The new item number is NB15-0501.

**PR15-0143 - Part 2 - S7.10 k) (Nathan Carter)**

Part k) is silent concerning qualified welders. I don't believe the intent is for unqualified welders to be seal welding or welding flush patches to close off unused connections (d) as well as welding the nameplate, especially since a qualified WPS is required. Consider requiring that the welder be qualified as specified in NBIC Part 3 2.2.3. Also, Consider providing more guidance to "stamp holder using a qualified welding procedure" by pointing the reader to Part 3. Consider changing this to "stamp holder using a qualified WPS or SWPS as specified in NBIC Part 3 2.2.1 and 2.2.2 respectfully."

- There was a motion to respond to Mr. Carter with response #2; Accept in principle, a new action item will be opened. The motion was unanimously approved. The new item number is NB15-0502.

**PR15-0602 - Part 2 – S10 (Kenneth Stoller)**

AIA believes that several aspects of the proposed requirements are either undefined or otherwise beyond the normal scope and training of National Board Commissioned Inspectors. Imposing these requirements on Special Inspectors may also place them in the untenable position of assuming liability beyond the limits of the insurance policies under which they perform inspections. Items of concern include the failure to define the terms "sufficient clearance" (S10.2b), "safely supported" (S10.2d), "guarded (S10.2f); and "permanent" (S10.3a). We recommend either defining or deleting these terms. Furthermore, Commissioned Inspectors are not qualified to (i) determine whether a CO2 detector is set to alarm at any particular concentration (S10.5); (ii) verify the posting of warning signs and determine the setpoint of any alarms (S10.6); or (iii) determine the length of safety relief/vent lines or verify that the materials selected for valves, piping, tubing, hoses and fittings used in the LCDSV system meet certain requirements. We recommend deleting these sections.

- There was a motion to approve responding to Mr. Stoller with response #2; Accepted in principle, a new action item will be opened. The motion was unanimously approved. Action item NB15-0801 was opened to address this comment further.

Mr. Mooney stated that public review comments PR15-0602, PR15-0402, PR15-0205, PR15-0206, PR15-0207, PR15-0208, PR15-0209, PR15-0210, and PR15-0211 would be voted on simultaneously as they all deal with the same section of text.

**PR15-0402 - Part 2 – S10 (Robert Wielgoszinski)**

Much of Supplement 10 contains requirements for inspection of equipment or systems that are outside the scope of the insurance policies that insurance company's issue. If these inspections are mandated by the Jurisdiction, then the inspectors employed by these insurance companies will be forced to make inspections in where they have no business interest. Further, this puts indefensible liability on the Inspector and his/her employer. I recommend either deleting this Supplement from the 2015 edition and rework it to be more guidance related then requirement based, or add a suitable disclaimer in the Scope paragraph, S10.1, that would exempt Inspector conformance to this supplement if carbon dioxide systems or parts thereof, are not within the employer's scope of activity.

**PR15-0205 - Part 2 – S10.2 b) (Brian Moore)**

Delete S10.2 b). This is unenforceable language and beyond the scope of knowledge of a National Board Commissioned inspector. The word "sufficient" is undefined and beyond the

knowledge of a commissioned inspector to determine.

**PR15-0206 - Part 2 – S10.2 d) (Brian Moore)**

Delete S10.2 b) This is unenforceable language and beyond the scope of knowledge of a National Board Commissioned inspector. The expression “safely supported” is undefined and beyond the knowledge of a commissioned inspector to determine. If “safely supported” means chained to the wall with a lock, then this subparagraph should so state, otherwise there can be no uniform and consistent interpretation of “safety supported”.

**PR15-0207 - Part 2 – S10.2 f) (Brian Moore)**

Delete S10.2 b) This is unenforceable language and beyond the scope of knowledge of a National Board Commissioned inspector. The word “guarded” is undefined and beyond the knowledge of a commissioned inspector to determine. If “guarded” means a 6” diameter steel pipe, filled with concrete, and buried 3’ onto the ground, then this subparagraph should so state, otherwise there can be no uniform and consistent interpretation of “guarded”.

**PR15-0208 - Part 2 – S10.3 a) (Brian Moore)**

Delete S10.3 a) This is unenforceable language and beyond the scope of knowledge of a National Board Commissioned inspector. The word “permanent” is undefined and beyond the knowledge of a commissioned inspector to determine. There can be no uniform and consistent interpretation of “permanent.”

**PR15-0209 - Part 2 – S10.5 (Brian Moore)**

National Board Commissioned inspectors do not inspect to NIOSH or ACGIH documents. It is not appropriate to cite these as mandatory, which is how this subparagraph will be interpreted. Commissioned inspectors are not qualified to determine whether a detector is set to alarm at any particular concentration.

**PR15-0210 - Part 2 – S10.6 (Brian Moore)**

Delete S10.6. Verifying signage is beyond what in-service commissioned inspectors are chartered to do. Such signage is within the purview of OSHA for a safe work environment for employees. Commissioned in-service inspectors do inspect to any requirements of OSHA. In addition, the in-service inspectors are not qualified to determine the set point of any alarms. This entire section should be deleted.

**PR15-0211 - Part 2 – S10.7 (Brian Moore)**

Delete S10.7. The materials specifications are beyond what a commissioned in-service can verify. Valves, piping, tubing, and fittings may not be visibly marked for such verification. Further, the inspector cannot verify S10.7 a)3) "...the working pressure of the applicable circuit in the system..." The caution is not enforceable language for an inspector: "Caution: Company's and or individuals filling or refilling LCDSV's shall be responsible for utilizing fill equipment that is acceptable to the manufacturer to prevent over pressurization of the vessel." In S10.7 d) the length of a vent line cannot be reasonable determined by an in-service inspect. Tracing a line with a tape measure to determine its length is not practical or reasonable. Finally, the tables reference a "Fire Flow Rate" which is a manufacturer/user determined rating under Section VIII. This entire section, including the tables, should be deleted.

- There was a motion to respond to these commenters with response #2; A new business item will be opened to address these comments. The motion was unanimously approved. The new business item number is NB15-0901.

**PR15-0704 - Part 2 – S11.6, S11.7, S11.9 (Nathan Carter)**



The Term “Examination” is used throughout S11.6, S11.7, and S11.9. Was this intended to read “Inspection” instead, which is a duty of the Inspector?

- There was a motion to respond to Mr. Carter with response #2; Accepted in principle, a new business item will be opened. The motion was unanimously approved. The new item number is NB15-0503.

**PR15-0701 - Part 2 – S11.10.2 (Nathan Carter)**

S11.10 specifies very complex, details throughout. Would it not be prudent for the Examiner to prepare a written procedure capturing all of the requirements in S11.10 as well as addressing all of the requirements in ASME Section V, Article 11? Would it also be prudent to require this procedure to be demonstrated to the Inspector also or at a minimum require that the procedure be available for review by the Inspector during his/her inspection cycle?

- There was a motion to respond to Mr. Carter with response #2; Accepted in principle, a new business item will be opened. The motion was unanimously approved. The new item number is NB15-0504.

**PR15-0702 - Part 2 – S11.10.2 and S11.10.6 (Nathan Carter)**

The Title “Test Procedure” is used in both Sections S11.10.2 and S11.10.6 under S11.10 Acoustic Emission Examination. Was it the intent to have “Test Procedure” listed twice for Acoustic Emission? If not, suggest that these two paragraphs be consolidated. The latter is more detailed than the former.

- There was a motion to respond to Mr. Carter with response #2; Accepted in principle, a new business item will be opened. The motion was unanimously approved. The new item number is NB15-0505.

**PR15-0703 - Part 2 – S11.10.3 (Nathan Carter)**

Which Edition of SNT-TC-1A and CP-189? Is any acceptable that addresses Acoustic Emission Examination?

Last Sentence. How is the training and experience quantified? To whose satisfaction? How is this training and experience documented? I assume that the intent is that considerable training and experience be performed and not a 5 minute training session and one examination interval be performed. Without quantifying this, what is there to prevent this from occurring?

- There was a motion to respond to Mr. Carter with response #2; Accepted in principle, a new business item will be opened. The motion was unanimously approved. The new item number is NB15-0506.

**4. Part 2 Reject PR Comments**

Mr. Mooney advised that public review comments PR15-0319, PR15-0308, PR15-0212, PR15-0320 and PR15-0321 would all be voted on simultaneously as they were all rejected by the SC on Inspection.

**PR15-0319 - Part 2 – S1.4.2.8.1 (Alex Garbolevsky)**

Correct the word “radiuses” to “radii”.

- Rejected as this wording could not be located throughout the text.

**PR15-0308 – Part 2, S2.6.3.3 (Alex Garbolevsky)**

Show US Customary Units (i.e., 3.00 in., 2.00 in., 7.50 in.) as well as SI Units of 75 mm, 50 mm, and 187.5 (or 188?) mm, respectively.

- Rejected because this comment is ambiguous, no recommendation possible.

**PR15-0212 - Part 2 – S10 (Brian Moore)**

Lack of transparency – there is no clear and transparent trail from the Subcommittee Inspection agendas and minutes the Jan 2014 or July 2015 meetings showing how this supplement was transformed from a paragraph 2.3.6.8 in the body to a supplement. There are to Subcommittee items addressing the text to the entirety of the new Supplement (NB14-1905 and NB13-0801). There is no evidence tying these two items to a final ballot on the complete text. And finally, there is no evidence that the Main Committee voted on the complete Supplement as shown in the proposed draft.

- Rejected because this comment does not contain a proposal for revisions to the document.

**PR15-0320 - Part 2 – S10.1 (Alex Garbolevsky)**

(1)The term “PH” should be corrected to “pH”.

(2)The chemical symbol for carbon dioxide should be corrected from “CO2” to “CO[<sub>2</sub>]”.

- Rejected for the following reason - No change required; public review already matches suggested changes.

**PR15-0321 - Part 2 – S11.10.8 (Alex Garbolevsky)**

Does “F” (the acoustic emission allowance factor) have units? Its value is shown as 10-4. [10 exp -4]

- Rejected as 4 is a unitless quantity.
- There was a motion to approve responding to the commenters with response #4; Rejected for the following reason. The motion was unanimously approved.

**c. SC on Repairs and Alterations (Attachment 3)**

**Charge:** Responsible for developing new rules, revising, interpreting and maintaining existing rules which address administrative and technical requirements for repairing or altering pressure retaining items. This subcommittee also directs, supports, reviews, and approves any items forwarded by each subgroup functioning under this subcommittee.

**Membership:** George Galanes (Chair), Brian Boseo, Paul Edwards, Craig Hopkins, Wayne Jones, Jim Larson, Lawrence McManoman, Jim Pillow, Bryan Schulte, Jim Sekely, Mike Webb and Bill Vallance (Secretary).

G. Galanes advised that all substantive comments would be voted on individually.

**1. Part 3 Substantive PR Comments**

**PR15-0104 - Part 3, 1.2 (f)**

It is recognized that “DOT” is the US Department of Transportation. “DOT”, however, is used throughout, but is not defined in Part 3. Since the NBIC is an International Standard, in my opinion this should be defined. As this section is the first occurrence of “DOT” in Part 3, this could be handled by the following change, which would also inherently limit the text to the DOT

by the inclusion of “i.e.”. Part 3, 1.2 (f) : “the Competent Authority, i.e. the US Department of Transportation (DOT), shall...”

- There was a motion to respond to Mr. Carter with response #2; Accepted in principle, a new action item will be opened. The motion was unanimously approved. The new item number is NB15-0507.

**PR15-0130 - Part 3, 1.8.7.2 g)**

This section does not address the situation when the Owner subcontracts the repair/replacement for Category 2, only when the Owner performs the repair/replacement activities.

- There was a motion to respond to Mr. Carter with response #2; Accepted in principle, a new action item will be opened. The motion was unanimously approved. The new action number is NB15-0508.

**PR15-0125 - Part 3, 1.8.7.2 n)2)f) (1/2) (Nathan Carter)**

The personnel qualification programs and documents listed do not comply with 2013 Edition Section XI. Only CP-189 and the ACCP Certification program is listed in IWA-2310, with the exception of SNT-TC-1A, which is valid only until recertification is required, which is a 5 year recommended maximum per SNT-TC-1A 2006. As a result, I interpret IWA-2310 to mean SNT-TC-1A is being discontinued and is no longer valid for new Certifications. Also, the ASNT NDT Level II and III programs are not recognized as acceptable for stand alone use by any current ASME BPV Construction Code, but historically, it may have been. I am assuming that is what is inferred by the term “ASNT”.

- There was a motion to respond to Mr. Carter with response #2; Accepted in principle, a new action item will be opened. The motion was unanimously approved. The new action item number is NB15-0509.

**PR15-0127 - Part 3, 1.8.7.2 n)2)f) (2/2) (Nathan Carter)**

Fourth line down. “Radiographs may be microfilmed or digitally reproduced”. Consider making the following addition at the end of the sentence, “in accordance with the requirements listed in the latest Edition of ASME Section V, Article 2, Mandatory Appendix VI.” This Mandatory Appendix is titled, “MANDATORY APPENDIX VI DIGITAL IMAGE ACQUISITION, DISPLAY, INTERPRETATION, and STORAGE OF RADIOGRAPHS FOR NUCLEAR APPLICATIONS.” It provides rules for the proper considerations in digitizing analog radiographs and storage requirements, etc.

- There was a motion to respond to Mr. Carter with response #2; Accepted in principle, a new action item will be opened. The motion was unanimously approved. The new action item is NB15-0510.

**PR15-0126 - Part 3, 1.8.8.2 j) (Nathan Carter)**

In the third bullet, consider adding “brazing and fusing” in addition to welding.

- There was a motion to respond to Mr. Carter with response #2; Accepted in principle, a new action item will be opened. The motion was unanimously approved. The new action item is NB15-0511.

**PR15-0157 - Part 3, 2.5.3.6 c) (1/2) (Nathan Carter)**

Quantify humid environment. Humid is a relative term. What is Humid to an R-Certificate Holder in North Dakota may not be to an R Certificate Holder in southern Georgia. I understand the intent here, but really the R-Certificate holder needs to understand Relative Humidity vs. Dewpoint and the concern for Condensate forming on the post repaired “cold” tubes. Also, the repair may occur during the day when the humidity is acceptable, but during the night (potentially when the repair location is not being manned), the temperature may approach the dewpoint resulting in condensation, which may evaporate off of the tubes before the day shift resumes and nobody knows of the moisture contamination. If you state in the code that a Moisture Barrier Coating is required to be applied after the repair, this concern is mitigated.

- There was a motion to respond to Mr. Carter with response #2; Accepted in principle, a new action item will be opened. The motion was unanimously approved. The new action item is NB15-0512.

**PR15-0158 - Part 3, 2.5.3.6 c) (2/2) (Nathan Carter)**

After the weld repair is completed and the R-1 signed, how is the requirement that the repair region be kept from humid or moist environments to be verified, if for instance there is a delay in the return to service after this specific repair? During consideration of this item, presentations discussed the use of Moisture Barrier Coatings as being adequate to protect the repair region. If this is an adequate solution, which reduces risk, why not list the use of a moisture barrier coating as recommended at the very least, if not requiring its use?

- There was a motion to respond to Mr. Carter with response #2; Accepted in principle, a new action item will be opened. The motion was unanimously approved. The new action item is NB15-0513.

**PR15-0156 - Part 3, 2.5.3.6 c) 5)d (Nathan Carter)**

Filler Metal 82, Inconel Welding Electrode 182, and INCO-WELD A are all Brand names for consumables sold by Special Metals. EPRI P87 is a Brand name, I believe licensed to be sold by Metrode at least. Why are the consumable classifications and Code Cases by themselves not sufficient. Without an “e.g.” in the parenthesis after each classification, it can be read that these Brand names are required, which would restrict trade by not allowing other manufacturers from supplying consumables to those classifications and Code Cases.

- There was a motion to respond to Mr. Carter with response #2; Accepted in principle, a new action item will be opened. The motion was unanimously approved. The new action item is NB15-0514.

**PR15-0501 - Part 3, 2.5.3.6 c) 5)d (Mark Kincs)**

The proposed language references Code Case filler metals acceptable for consideration as F-No. 43 for welding performance qualifications only (ref. Code Cases 2733 & 2734). Also, the accepted F-No. 43 materials, as presented, allow supply by a single manufacturer only. The following alternative language is proposed. “Filler metals shall be austenitic, nickel-based consumables limited to ASME Code Case 2733, Code Case 2734, or one of the following F-No. 43 materials listed in ASME Section IX: ERNiCr-3, ENiCrFe-2, or ENiCrFe-3.”

- There was a motion to respond to Mr. Kincs with response #2; Accepted in principle, a new action item will be opened. The motion was unanimously approved. The new action item is NB15-0515.

**PR15-0119 - Part 3, 3.3.4.9b) (1/2) (Nathan Carter)**

What about for a brazed boiler, should tube plugging by brazing be considered for inclusion? I have no knowledge of its use.

- There was a motion to respond to Mr. Carter with response #2; Accepted in principle, a new action item will be opened. The motion was unanimously approved. The new action item is NB15-0516.

**PR15-0120 - Part 3, 5.13.5.1 31. (Nathan Carter),**

What about Category 3 repairs/alterations, etc? What if it was performed to an International Code other than Section III or XI? Per the instruction, there isn't a way to address this situation. Also, hyphenate "rerating" to "re-rating" to be consistent with the NBIC.

- This comment was divided into 2 separate comments that were voted on together. There was a motion to respond to the first part of the comment as #2, "Accept in principle, a new action item has been opened." and the second part of the comment as #1, Accepted, changes are incorporated. The motion was unanimously approved. The new action item is NB15-0517.

**PR15-0121 - Part 3 – S3.5.5 b) (Nathan Carter)**

My comment refers to Section VIII, Division 1, Part UGI-79 and UGI-80 referenced on the last line. After reading these paragraphs in whole, I do not understand why only some of the subsections are listed and not the whole of UGI-79 and UGI-80. In my opinion, all of UGI-79 and UGI-80 should be included.

- There was a motion to respond to Mr. Carter with response #2; Accepted in principle, a new action item will be opened. The motion was unanimously approved. The new action item is NB15-0518.

**PR15-0136 - Part 3 – S6.14.1 (Nathan Carter)**

Fifth line down. "Registered Inspector" is used but is not defined in Part 3. Use of the term "Inspector" and "Registered Inspector" is also used interchangeably in the current published text not under review. Consistency is needed in this Supplement.

- There was a motion to respond to Mr. Carter with response #2; Accepted in principle, a new action item will be opened. The motion was unanimously approved. The new action item is NB15-0519.

**PR15-0122 - Part 3 – S6.14.1 f) (Nathan Carter)**

I understand the intent for numerous repairs throughout the life of a Transport Tank using one nameplate under the conditions listed. Do you really mean for infinite "alterations and modifications" to be allowed under a single nameplate/stamping? Please reconsider this.

- There was a motion to respond to Mr. Carter with response #2; Accepted in principle, a new action item will be opened. The motion was approved with one negative. The new action item is NB15-0520.

**4. Part 3 Rejected PR Comments (Commenter Name: Nathan Carter)**

**PR15-0134 - Part 3, 1.8.6.2 h) 2)**

Line reads, "Welding, brazing, and fusing materials shall be identified and controlled." To avoid any confusion, consider replacing "materials" with "consumables".

- There was a motion to respond to Mr. Carter with response #4; Comment was rejected for the following reason: Rejected because “materials” is the term used in NCA 4000. The motion was unanimously approved.

**PR15-0114 - Part 3, 1.8.7.2 q)**

Third line down. Replace “with” with “within”. It reads better.

- There was a motion to respond to Mr. Carter with response #4; Comment was rejected for the following reason: Current wording is correct. The motion was unanimously approved.

**PR15-0124 - Part 3, 3.3.4.9b) (2/2) (Nathan Carter)**

If it was found necessary for strength calculations to be performed, why not require for the certificate holder to have the welds examined by at least VT and possibly MT/PT? The welds will be visually examined by the Inspector per NB-263, but why not make the certificate holder also VT them?

- There was a motion to respond to Mr. Carter with response #4; Comment rejected for the following reason: There is no reason to add additional technical requirements.

**PR15-0135 - Part 3 – S3.5.7 and S3.5.7.1**

Why are the headings being published with no content?

- There was a motion to respond to Mr. Carter with response #4, “Rejected for the following reason: The headings that are listed were included in the public review document because they were moved within the text but not changed.” The motion was unanimously approved.

**5. Part 3 Editorial PR Comments (Commenter Name: Nathan Carter)**

Mr. Galanes advised that all of Mr. Carter’s editorial comments would be voted on simultaneously.

**PR15-0105 - Part 3, 1.8.2a)**

On the fifth line down, the term, “Quality Assurance Manual” is shown for the first time in the document. In the next sentence, “QAM” is used. Suggest adding “QAM in Parenthesis right after “Quality Assurance Manual” as shown here: “Quality Assurance Manual (QAM).”

**PR15-0101 - Part 3, 1.8.4 b)**

On the 3<sup>rd</sup> line, “its” is written, but there is not such word. The possessive form of “it” is “its”.

**PR15-0159 – Part 3, 1.8.4 d)**

On the second line, “assure” is used incorrectly. It should read “ensure”. To “assure” a person of something is to make him or her confident of it. To “ensure” that something happens is to make certain that it does.

**PR15-0102 - Part 3, 1.8.5 c)**

On the second line, “assure” is used incorrectly. It should read “ensure”. To “assure” a person of something is to make him or her confident of it. To “ensure” that something happens is to make certain that it does. Also, sixth line down, “details” should be “detail”.

**PR15-0103 - Part 3, 1.8.6.2 c) 6)**

On the first line, “assure” is used incorrectly. It should read “ensure”. To “assure” a person of something is to make him or her confident of it. To “ensure” that something happens is to make

certain that It does.

**PR15-0131 - Part 3, 1.8.6.2 g) 5)**

On the fourth line down, “data report” should read “Manufacturer’s Data Report”

**PR15-0133 - Part 3, 1.8.6.2 j) 2) d**

In parenthesis is listed “i.e.” and you are limiting the list to those listed. What about fusing, forming, bolting procedures? Consider changing the “i.e.” to e.g.”.

**PR15-0128 - Part 3, 1.8.6.2 p)**

Last line, the “Authority for Application” should be lowercase to be consistent with the rest of the NBIC.

**PR15-0106 - Part 3, 1.8.7.2 a)**

First line, “Authority” should be lowercase to be consistent with the rest of the NBIC.

**PR15-0108 - Part 3, 1.8.7.2 b) 1)**

Second Line. “Owners” is possessive. If it is a single Owner, then it should read, “Owner’s”.

**PR15-0109 - Part 3, 1.8.7.2 c) 1)**

Third Line. Should “Jurisdictional” be “Enforcement” instead? Also, change “Regulatory Jurisdiction” to “Regulatory Authorities”? This would then be in compliance with the language found in ASME Section XI, IWA-1310, which reads, “regulatory and enforcement authorities having jurisdiction at the plant site.”

**PR15-0129 - Part 3, 1.8.7.2 c) 2)**

The reference in Brackets “[see 1.8.7 j)]” does not exist.

**PR15-0116 - Part 3, 1.8.7.2 n) 1)**

See the reference in brackets on line two. “[See NBIC Part 3, 1.8.7 n)2)]”. This reference does not exist.

**PR15-0118 - Part 3, 1.8.7.2 n) 2)**

See the reference on line one. “in NBIC Part 3, 1.8.7 n)1)...”. This reference does not exist.

**PR15-0137 - Part 3, 1.8.7.2 n) 2)b)**

First line. “Data reports” should read, “Manufacturer’s Data Reports”.

**PR15-0115 - Part 3, 1.8.8.1**

Third line from the bottom. Rewrite the sentence removing “this Section including paragraph 1.8.9” and replace it with “NBIC Part 3 1.8.8 and 1.8.9,”. It could avoid confusion and reads much cleaner.

**PR15-0117 - Part 3, 1.8.8.2 d)**

On the first line, “assure” is used incorrectly. It should read “ensure”. To “assure” a person of something is to make him or her confident of it. To “ensure” that something happens is to make certain that it does.

**PR15-0138 - Part 3, 1.8.8.2 f)**

On the first line, should “detect” be changed to “define”?

**PR15-0110 - Part 3, 1.8.8.2 h)**

On the first line, “assure” is used incorrectly. It should read “ensure”. To “assure” a person of something is to make him or her confident of it. To “ensure” that something happens is to make certain that it does.

**PR15-0113 - Part 3, 1.8.8.2 n)**

In the fourth line down, “ANII” is used for the first time in Part 3 and is also not defined. It is recommended to type out “Authorized Nuclear In-service Inspector (ANII)”.

**PR15-0123 - Part 3, 1.8.9)d)**

Second line. Consider replacing “Jurisdiction” with “Enforcement” to comply with 2013 Edition of Section XI. A Jurisdiction is a USA State or Canadian Province and doesn’t make sense if repaired internationally.

**PR15-0111 - Part 3, 5.13.5.1 title block**

Capitalize “Category of Activity” to comply with how it is written on the NR-1 Report. Also hyphenate “rerating” to “re-rating” to be consistent with the NBIC.

**PR15-0112 - Part 3, 5.13.6.1 title block**

Capitalize “Category of Activity” to comply with how it is written on the NR-1 Report. Also hyphenate “rerating” to “re-rating” to be consistent with the NBIC.

**2. Part 3 Editorial PR Comments (Commenter Name: Alex Garbolevsky)**

Mr. Galanes advised that all of Mr. Garbolevsky’s editorial comments would be voted on simultaneously.

**PR15-0322 - Part 3, 1.8.6.2 b) 2)**

“Owners” should be “Owner’s” [singular possessive].

**PR15-0323 - Part 3, 1.8.6.2 c) 6)**

“Owners” should be “Owner’s” [singular possessive].

**PR15-0324 - Part 3, 1.8.8.2 i)**

“Certificate Holders” should be “Certificate Holder’s” [singular possessive].

**PR15-0325 - Part 3, 2.5.3.6**

1<sup>st</sup> sentence: “post weld” should be “postweld” to be consistent with ASME Code style and usage. Subparagraph a): “5” NPS” should be “NPS 5” and “1/2” or less” should be “1/2 in. or less”, respectively. Both units should be metricated.

**PR15-0326 - Part 3, 5.13.6.1**

Line 5: Insert “of the” between the words “owner” and “nuclear”. Consider capitalizing “owner”.

Line 40: “defined” should be corrected to “identified”.

There was a motion to respond to Mr. Garbolevsky with response #1, Accepted, changes will be incorporated. The motion was unanimously approved.



## 6. Future Meetings

The following meetings have been scheduled:

December 9, 2014 Webex NBIC Draft approval

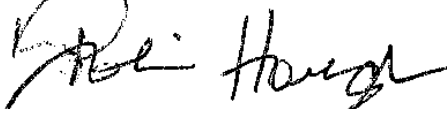
January 19-23, 2015, Orlando, Florida

July 21-24, 2015, Columbus, Ohio

## 7. Adjournment

Mr. Don Cook adjourned the meeting at 2:36 p.m.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Robin Hough". The signature is written in a cursive style with a large initial "R".

Robin Hough  
Secretary, NBIC Committee

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