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THE
NATIONAL
BOARD
OF BOILER AND
PRESSURE VESSEL
INSPECTORS

SUBCOMMITTEE REPAIR AND ALTERATION

AGENDA

*Meeting of October 21, 2014
Columbus, Ohio*

The National Board of Boiler & Pressure Vessel Inspectors
1055 Crupper Avenue
Columbus, Ohio 43229-1183
Phone: (614)888-8320
FAX: (614)847-1828

1. **Call to Order – 1:30 p.m.**
2. **Announcements**
3. **Adoption of the Agenda**
4. **Public Review Comments (Attachment 1)**
5. **Part 3 Editorial PR Comments (Commenter Name: Nathan Carter)**

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 3rd 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”.

PR15-0114 - Part 3, 1.8.7.2 q)

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

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.

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

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

1st 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”

7. 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....”

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.

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”.

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.

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

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

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.

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?

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.

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."

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.

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?

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.

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.

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.

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.

8. Part 3 Reject 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".

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

Why are the headings being published with no content?

9. New Business

10. Future Meetings

January 19-22, 2015, Orlando, Florida

July 21-24, 2015, Columbus, Ohio

11. Adjournment

Respectfully Submitted,

Robin Hough

:rh

Nathan Carter

Part 3 Editorial PR Comments

Recommended

“Accepted, changes are incorporated”

Part 3 – 1.8.2 a)

Public Review Comment

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).”

Public Review Document Text

1.8.2 General

a) An organization applying for an “NR” Certificate of Authorization shall have a written Quality Assurance Program (QAP) that details the specific requirements to be met based on the intended category of activities selected by that organization as described below and shown in Table 1.8.2-1. Controls used, including electronic capabilities, in the Quality Assurance Program shall be documented in a Quality Assurance Manual. Controls required to be included within the QAM shall include *who, what, when, where, why* and *how* with an understanding that the *how* can be a reference to an implementation procedure or instruction. Quality activities to be described in the

Suggested Change

Change highlighted “Quality Assurance Manual” to “Quality Assurance Manual (QAM)”

Part 3 – 1.8.4 b)

Public Review Comment

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

Public Review Document Text

b) If the applicant is an ASME “N” type Certificate of Authorization holder, has satisfactorily demonstrated within the last twelve (12) months, the implementation of their Quality Assurance Program and can provide documentation that the organization is capable of implementing its’ Quality Assurance Program as being in compliance with this Section, a further hardware verification implementation may not be necessary.

Suggested Change

Change “its’” to “its”

Part 3 – 1.8.4 d)

Public Review Comment

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.

Public Review Document Text

d) The “NR” Certificate of Authorization holder shall be subject to an audit annually by the Authorized Nuclear Inspection Agency to assure compliance with the Quality Assurance Program.

Suggested Change

Change “assure” to “ensure”

Part 3 – 1.8.5 c)

Public Review Comment

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”.

Public Review Document Text

c) These rules set forth the requirements for planning, managing, and implementing the organization’s Quality Assurance Program to control and assure quality is performed and maintained during repair/replacement activities of components, items, parts, and systems for nuclear facilities. These rules are to be the basis for evaluating such programs prior to the issuance or renewal of the National Board “NR” Certificate of Authorization. Rules identified in paragraphs 1.8.6, 1.8.7 and 1.8.8 of this Section details the Quality Assurance Program requirements for each Category of activity. These rules are established to meet and follow the requirements specified in Table 1.8.2-1 of this Section.

Suggested Change

Change “assure” to “ensure”

Change “details” to “detail”

Part 3 – 1.8.6.2 c)6)

Public Review Comment

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.

Public Review Document Text

6) The “NR” Certificate Holder shall assure that specifications, drawings, procedures and instructions do not conflict with the Owners Design Specifications. A system must be described in the Quality Assurance Manual to resolve or eliminate such conflicts. Resolution shall consider the Design Specification Requirements, as well as, the Owner Requirements, Jurisdictional and Regulatory Authority Requirements as applicable.

Suggested Change

Change “assure” to “ensure”

Part 3 – 1.8.6.2 g)5)

Public Review Comment

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

Public Review Document Text

5) Documentary evidence for items shall conform to the requirements of ASME Section III, NCA and this Section. Materials shall meet the material certification requirements as specified in ASME Section III, NCA-3800 or NCA-3970 as applicable. Documented evidence for ASME stamped items is satisfied by a data report. Utilization of unqualified source material shall meet the requirements of ASME Section III, NCA-3855.5.

Suggested Change

Change highlighted text to “Manufacturer’s Data Report”

Part 3 – 1.8.6.2 j)2)d.

Public Review Comment

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.”.

Public Review Document Text

d. Any procedures including revisions utilized; (i.e.) welding, brazing, heat treat, examination, testing) and material requirements;

Suggested Change

Change highlighted text to “e.g.”

Part 3 – 1.8.6.2 p)

Public Review Comment

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

Public Review Document Text

The system shall include any procedures or instructions necessary to achieve compliance. Procedures shall be provided for the identification of acceptable and unacceptable items and for the control of status indicators. The Authority for Application and removal of status indicators shall also be specified.

Suggested Change

Change “Authority for Application” to “authority for application”

Part 3 – 1.8.7.2 a)

Public Review Comment

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

Public Review Document Text

a) Organization

The Authority and responsibility for individuals involved in activities affecting quality shall be clearly established and documented throughout the Quality Assurance Program and identified on a functional organizational chart contained within the QA Manual.

Suggested Change

Change “Authority” to “authority”

Part 3 – 1.8.7.2 b)1)

Public Review Comment

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

Public Review Document Text

1) Qualification of non-destructive examination personnel shall be as required by the Code or as specified in the Owners Quality Assurance Program.

Suggested Change

Change “Owners” to “Owner’s”

Part 3 – 1.8.7.2 c)1)

Public Review Comment

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.”

Public Review Document Text

1) Repair/replacement activities, Code Edition and Addenda used shall correspond with the Owner’s Inservice Inspection Program unless later Code Editions and Addenda have been accepted by the Owner, Jurisdictional and/or the Regulatory Jurisdiction having authority at the plant site.

Suggested Change

Two possible wording changes:

1.) Repair/replacement activities, Code Edition and Addenda used shall correspond with the Owner’s Inservice Inspection Program unless later Code Editions and Addenda have been accepted by the Owner, the Enforcement and ~~Jurisdictional~~ and/or the Regulatory ~~Jurisdiction~~ authority having ~~authority~~ jurisdiction at the plant site.

2.) Repair/replacement activities, Code Edition and Addenda used shall correspond with the Owner’s Inservice Inspection Program unless later Code Editions and Addenda have been accepted by the Owner, Jurisdiction ~~Jurisdictional~~ and/or the Regulatory ~~Jurisdiction~~ authority having ~~authority~~ at the plant site.

Part 3 – 1.8.7.2 c)2)

Public Review Comment

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

Public Review Document Text

2) The repair/replacement plan [see 1.8.7 j)] shall identify expected life of the item when less than the intended life as specified in the Owner’s requirements and the Owner shall be advised of the condition.

Suggested Change

Change highlighted text to “[see 1.8.7.2 j)]”

Part 3 – 1.8.7.2 n)1)

Public Review Comment

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

Public Review Document Text

1) The Owner is responsible for designating records to be maintained. Measures shall be established for the “NR” Certificate Holder to maintain these records [See NBIC Part 3, 1.8.7 n) 2)] required for Quality Assurance of repair/replacement activities. These shall include

Suggested Change

Change highlighted text to “[See NBIC Part 3, 1.8.7.2 n) 2)]”

Part 3 – 1.8.7.2 n)2)

Public Review Comment

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

Public Review Document Text

2) Records to be maintained as required in NBIC Part 3, 1.8.7 n) 1) above shall include the following, as applicable:

Suggested Change

Change highlighted text to “NBIC Part 3, 1.8.7.2 n) 1)”

Part 3 – 1.8.7.2 n)2)b)

Public Review Comment

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

Public Review Document Text

b. Data reports, properly executed, for each replacement component, part, appurtenance, piping system, and piping assembly, when required by the design specification or the Owner;

Suggested Change

Change “Data reports” to “Manufacturer’s Data Reports”

Part 3 – 1.8.7.2 q)

Public Review Comment

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

Public Review Document Text

g) Nonconforming Materials or Items

Measures shall be established to control materials or items that do not conform to requirements to prevent their inadvertent use, including measures to identify and control the proper installation of items and to preclude nonconformance with the requirements of these rules. These measures shall include procedures for identification, documentation, segregation, and disposition. Nonconforming items shall be reviewed for acceptance, rejection, or repair in accordance with documented

Suggested Change

Change “with” to “within”

Part 3 – 1.8.8.1

Public Review Comment

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.

Public Review Document Text

a minimum, include in their written QAM the specified elements listed in Category 1 and/or 2 (NBIC Part 3, 1.8.6, 1.8.7) QAP requirements. Additional requirements, as specified within this Section, including paragraph 1.8.9, shall be included within the QAP. Also, limitations or additions to ASME NOA-1, as specified for Category 1 or 2 may be incorporated and referenced within the QAM.

Suggested Change

Change the highlighted text to “NBIC Part 3 1.8.8 and 1.8.9”

Part 3 – 1.8.8.2 d)

Public Review Comment

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.

Public Review Document Text

d) Document Control

Documents for procurement of material, equipment and services shall assure regulatory requirements, design bases and other quality requirements and are included or referenced. Procurement documents shall require contractors or subcontractors provide a Quality Assurance Program consistent with the provisions specified in NBIC Part 3, 1.8.8.

Suggested Change

Change “assure” to “ensure”

Part 3 – 1.8.8.2 f)

Public Review Comment

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

Public Review Document Text

f) Document Control

Shall **detect** measures to control the preparation, issuance, use, approval, revisions and distribution of all documents related to quality.

Suggested Change

Change “detect” to “define”

Part 3 – 1.8.8.2 h)

Public Review Comment

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.

Public Review Document Text

h) Identification and Control of Items

Specified controls shall assure only correct and acceptable items, parts and components are used and installed.

Suggested Change

Change “assure” to “ensure”

Part 3 – 1.8.8.2 n)

Public Review Comment

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)”.

Public Review Document Text

n) Records

All quality related records shall be classified, identified, verified, maintained, distributed, retraceable, and accessible. When the “NR” Certificate Holder is the Owner, designated records and reports received by the Owner, shall be filed and maintained in a manner to allow access by the ANII. Suitable protection from deterioration and damage shall be provided by the Owner. These records and reports shall be retained as specified in the Owner’s QAP for the lifetime of the component or system.

Suggested Change

Change “ANII” to “Authorized Nuclear Inservice Inspector (ANII)”

Part 3 – 1.8.9) d)

Public Review Comment

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.

Public Review Document Text

d) The “NR” Certificate Holder shall provide a copy of the signed Form NR-1 or Form NVR-1, as applicable, to the Owner, the Jurisdiction, and the Regulatory Authority if required, and the Authorized Nuclear Inspection Agency. The original Form NR-1 or Form NVR-1, as applicable, shall be registered with the National Board by the “NR” Certificate Holder. A NB registration log shall be maintained by the “NR” Certificate Holder. See NBIC Part 3, Section 5.5 and 5.6.

Suggested Change

Change “Jurisdiction” to “Enforcement”

Part 3 – 5.13.5.1 title block

Public Review Comment

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.

Public Review Document Text

5.13.5.1 GUIDE FOR COMPLETING NATIONAL BOARD FORM NR-1 REPORTS

Title Block: Check **category of activity**, 1, 2, or 3

Check type of activity, repair, replacement, and/or **rerating**, as applicable.

Suggested Change

Change “category of activity” to “Category of Activity”
Change “rerating” to “re-rating”

Part 3 – 5.13.6.1 title block

Public Review Comment

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.

Public Review Document Text

5.13.6.1 INSTRUCTIONS FOR COMPLETING NATIONAL BOARD FORM NVR-1 REPORTS

Title Block: Check **category of activity**, 1, 2, or 3

Check type of activity, repair, replacement, and/or **rerating**, as applicable.

Suggested Change

Change “category of activity” to “Category of Activity”

Change “rerating” to “re-rating”

Accept Nathan Carter's Editorial PR Comments:

PR15-0105

PR15-0101

PR15-0102

PR15-0103

PR15-0131

PR15-0133

PR15-0128

PR15-0106

PR15-0108

PR15-0109

PR15-0129

PR15-0116

PR15-0118

PR15-0137

PR15-0114

PR15-0115

PR15-0117

PR15-0138

PR15-0110

PR15-0113

PR15-0123

PR15-0111

PR15-0112

Alex Garbolevsky
Part 3 Editorial PR Comments

Recommended

“Accepted, changes are incorporated”

Part 3 – 1.8.6.2 b) 2)

Public Review Comment

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

Public Review Document Text

Qualification of non-destructive examination personnel shall be as required by the Code of Construction or as specified in the Owners Quality Assurance Program.

Suggested Change

Change “Owners” to “Owner’s”

Part 3 – 1.8.6.2 c) 6)

Public Review Comment

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

Public Review Document Text

The “NR” Certificate Holder shall assure that specifications, drawings, procedures and instructions do not conflict with the Owners Design Specifications. A system must be described

Suggested Change

Change “Owners” to “Owner’s”

Part 3 – 1.8.8.2 i)

Public Review Comment

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

Public Review Document Text

Documents used to control processes and conform to specified acceptance criteria shall include spaces for signatures, initials, stamps and dates for activities performed by the Certificate Holders Representative and the Authorized Nuclear Inspector.

Suggested Change

Change “Certificate Holders” to “Certificate Holder’s”

Part 3 – 2.5.3.6

Public Review Comment

1st 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.

Public Review Document Text

This welding method provides guidance for welding only Grade 91 tube material within the boiler setting and when it's impracticable to perform local post weld heat treatment (PWHT). This repair method utilizes a controlled fill technique.

This method is limited to butt welds in tubing 5” NPS or less in diameter and ½” or less in wall thickness for which the applicable rules of the original code of construction did not require notch toughness testing.

Suggested Change

Change “post weld” to “postweld”

Change “5” NPS or less in diameter and ½” or less” to “NPS 5 (DN 125) or less in diameter and ½ in. (13 mm) or less”

Part 3 – 5.13.6.1

Public Review Comment

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

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

Public Review Document Text

5. Name and address of the owner nuclear power plant.

40. Signature of Authorized Nuclear Inspector defined in item 34 above.

Suggested Change

Change “owner nuclear” to “owner of the nuclear”.

Change “defined” to “identified”

Accept Alex Garbolevsky's
Editorial PR Comments:

PR15-0322

PR15-0323

PR15-0324

PR15-0325

PR15-0326

Part 3 Substantive PR Comments

Recommended

“Accept in principle, new business item open”

Part 3 – 1.2 (f)

Public Review Comment

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....”

Public Review Document Text

f) For transport tanks, the Competent Authority (DOT) shall be consulted for any requirements which it has established since they take precedence for repairs.

Suggested Change

Open action item to address issue. The acronym DOT is defined in S6.17 of Part 2, but some terms from Part 2 S6 need to be defined in Part 3.

Part 3 – 1.8.7.2 g)

Public Review Comment

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.

Public Review Document Text

g) Control of Purchased Material, Items, and Services

When the Owner performs repair/replacement activities, purchase of materials and small products shall meet the requirements specified in ASME Section XI, IWA 4142.

Measures shall be established to ensure that purchased material, items, and services conform to the Owner's requirements and applicable edition and addenda of the Code of Construction and ASME Section XI. These measures shall include identification for material traceability. Provisions shall be identified for source evaluation and objective evidence shall be provided evidencing quality standards for material examination upon receipt.

Suggested Change

Open action item to address issue

Part 3 – 1.8.7.2 n)2)f) (1/2)

Public Review Comment

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”.

Public Review Document Text

f. Nondestructive examination reports, including results of examinations, shall identify the ASNT, SNT-TC-1A, CP-189, or ACCP certification level of personnel interpreting the examination results. Final radiographs shall be included where radiography has been performed. Radiographs may be microfilmed or digitally reproduced. The accuracy of the reproduction process shall be verified and monitored for legibility, storage, retrievability and reproduction quality:

Suggested Change

Open action item to address issue

Part 3 – 1.8.7.2 n)2)f) (2/2)

Public Review Comment

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 DIGITLA 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.

Public Review Document Text

f. Nondestructive examination reports, including results of examinations, shall identify the ASNT, SNT-TC-1A, CP-189, or ACCP certification level of personnel interpreting the examination results. Final radiographs shall be included where radiography has been performed. Radiographs may be microfilmed or digitally reproduced. The accuracy of the reproduction process shall be verified and monitored for legibility, storage, retrievability and reproduction quality:

Suggested Change

Open action item to address issue

Part 3 – 1.8.8.2 j)

Public Review Comment

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

Public Review Document Text

j) Examinations, Tests and Inspections

A repair / replacement plan shall address all required information for performing examinations, tests and inspections including but not limited to:

- Establishing hold points
- Identifying procedures, methods, acceptance criteria
- Defects identified, removal methods, welding and material requirements, reference points used for identification
- Evaluations of results

Suggested Change

Open action item to address issue

Part 3 – 2.5.3.6 c) (1/2)

Public Review Comment

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 maned), 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.

Public Review Document Text

c) Upon the completion of weld repair, the repair region shall be kept from humid or moist environments until the return to service.

Suggested Change

Open action item to address issue

Part 3 – 2.5.3.6 c) (2/2)

Public Review Comment

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?

Public Review Document Text

c) Upon the completion of weld repair, the repair region shall be kept from humid or moist environments until the return to service.

Suggested Change

Open action item to address issue

Part 3 – 2.5.3.6 c)5) d

Public Review Comment

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.

Public Review Document Text

- d. The filler metal shall be limited to an austenitic, nickel-base filler metal having a designation F-No. 43 and limited to the following consumables: ERNiCr-3 (Filler Metal 82), ENiCrFe-3 (INCONEL Welding Electrode 182), ENiCrFe-2 (INCO-WELD A), ASME B&PV Code Cases 2733 and 2734 (EPRI P87).

Suggested Change

Open action item to address issue – see next slide

Part 3 – 2.5.3.6 c)5)d)

Public Review Comment

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.”

Public Review Document Text

- d. The filler metal shall be limited to an austenitic, nickel-base filler metal having a designation F-No. 43 and limited to the following consumables: ERNiCr-3 (Filler Metal 82), ENiCrFe-3 (INCONEL Welding Electrode 182), ENiCrFe-2 (INCO-WELD A), ASME B&PV Code Cases 2733 and 2734 (EPRI P87).

Suggested Change

Open action item to address issue – see previous slide

Part 3 – 3.3.4.9 b) (1/2)

Public Review Comment

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

Public Review Document Text

b) When the method of plugging is by welding, strength calculations for the size of the weld shall be in accordance with the original code of construction. The "R" Certificate Holder performing this repair shall weld the plug to the tube, or to the tube sheet, or a combination of both.

Suggested Change

Open action item to address issue

Part 3 – 3.3.4.9 b) (2/2)

Public Review Comment

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?

Public Review Document Text

b) When the method of plugging is by welding, strength calculations for the size of the weld shall be in accordance with the original code of construction. The "R" Certificate Holder performing this repair shall weld the plug to the tube, or to the tube sheet, or a combination of both.

Suggested Change

Open action item to address issue

Part 3 – 5.13.5.1 31.

Public Review Comment

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.

Public Review Document Text

31. Indicate ASME Section III or Section XI as applicable to the repair, replacement, alteration/modification, and/or rerating activity performed.

Suggested Change

Open action item to address first issue
Change "rerating" to "re-rating"

Part 3 – S3.5.5 b)

Public Review Comment

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.

Public Review Document Text

b) Tube replacement shall be performed by qualified cementing technicians, using qualified cementing procedures, in accordance with the requirements of the ASME Boiler and Pressure Vessel Code, Section VIII, Division 1, Part UIG-79(b), (e), and UIG-80(b).

Suggested Change

Open action item to address issue

Part 3 – S6.14.1

Public Review Comment

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.

Public Review Document Text

S6.14.1 SPECIFIC “TR” STAMPING AND NAMEPLATE REQUIREMENTS

Replace existing text.

The holder of a “TR” *Certificate of Authorization* is required to affix a stamping or nameplate on the Transport Tank that indicates, as appropriate, that the repair, alteration, or modification has been performed in accordance with the requirements of NBIC Part 3, Supplement 6 and the additional requirements of the code of construction. All repairs, alterations, and modifications, after acceptance by the **Registered Inspector**, shall have the “TR” Symbol affixed to the stamping or the nameplate.

Suggested Change

Open action item to address issue

Part 3 – S6.14.1 f)

Public Review Comment

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.

Public Review Document Text

f) The stamping, when directly on the item or when a nameplate is used shall be applied adjacent to the original manufacturer’s stamping or nameplate. A single repair, alteration, or modification stamping or nameplate may be used for more than one repair to a Transport Tank, provided the repair, alteration, or modification activity is carried out by the same certificate holder;

Suggested Change

Open action item to address issue

Part 3 Reject PR Comments

Recommended

“Rejected for the following reason”

Part 3 – 1.8.6.2 h)2)

Public Review Comment

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

Public Review Document Text

2) Welding, brazing and fusing materials shall be identified and controlled.

Suggested Change

Reject because “materials” is the term used in NCA 4000

Part 3 – S3.5.7 and S3.5.7.1

Public Review Comment

Why are the headings being published with no content?

Public Review Document Text

S3.5.7 REIMPREGNATION OF GRAPHITE PARTS (TUBESHEETS, HEADS, AND BLOCKS)

S3.5.7.1 CONTROL OF IMPREGNATION MATERIAL

Suggested Change

No changes suggested