



**THE
NATIONAL
BOARD**
OF BOILER AND
PRESSURE VESSEL
INSPECTORS

**NATIONAL BOARD
TASKGROUP
NR**

MINUTES

Meeting of January 13th, 2020
San Diego, CA

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

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

Chair, Mr. Paul Edwards called the meeting to order at 8:00 AM.

2. Introduction of Members and Visitors

Introductions took place amongst all members and visitors, and an attendance sheet was circulated ([Attachment 1](#)).

3. Announcements

Secretary Hellman announced the reception for all committee members and visitors on Wednesday evening at 5:30pm at The Smoking Gun.

4. Adoption of the Agenda

Adoption of the Agenda was motioned, seconded, and unanimously approved.

5. Approval of the Minutes of July 15th, 2019 Meeting

There was a motion to approve the Minutes of July 15, 2019 as published. The motion was seconded and unanimously approved.

6. Item Status Update:

Mr. Hellman provided a status update of the following Items:

a. Approved by MC (2021 Edition of NBIC):

i. Interpretations:

1. **19-44** – (Int 19-03) – 1.6.6.2, 1.6.7.2, and 1.6.8.2 – ISO/IEC 17025 Revision

ii. Action Items:

1. **19-12** – 1.6.3 – revise text to clarify Quality Assurance Program reqs
2. **19-13** – 1.6.6.2, 1.6.7.2, and 1.6.8.2 – clarify responsibilities for performing audits
3. **19-43** – 1.6.6.2, 1.6.7.2, and 1.6.8.2 – ISO/IEC 17025 Revision

7. Action Items

Item Number: 19-11	NBIC Location: Parts 1,2,3,4, Section 9	Attachment 2
<p>General Description: Review the use of "Authorized Nuclear Inspection Agency" within the NBIC</p> <p>Subgroup: NR Task Group</p> <p>Task Group: P. Edwards – PM</p> <p>January 2019 Meeting Action: Discussion regarding how an ANIA cannot be an Inservice AIA since Endorsements for nuclear inspectors are issued only to new construction AIA's. The 3 requirements for qualified Authorized Nuclear Inspectors/Supervisors are clearly specified in NB-263, RCI-1. Therefore revision to the Glossary definition is needed to clarify this requirement for the NR Accreditation Program. This Action Item (19-11) was created and C. Withers was designated as the PM</p> <p>July 2019 Consideration: Sent to MC Letter Ballot. Failed 8 approved 3 disapproved due to Background info and Location confusion. The attachment has been revised to remove unneeded verbiage.</p> <p>Meeting Action: Chair, P. Edwards presented that the reference NBIC paragraph for 19-11 should be updated to NBIC Part 3, 1.6.3 a), and the reference to changing the glossary should be removed from this action item. New Item 20-15 was created to address potential revision to the glossary separately. The proposed Action Item was unanimously approved as amended.</p>		

New Items:

Item Number: 19-68	NBIC Location: Part 3, 1.6	No Attachment
<p>General Description: Quality System For Qualification For The National Board "R" Certificate</p> <p>Subgroup: Repairs and Alterations</p> <p>Task Group: Bob Wielgoszinski (PM)</p> <p>Explanation of Need: Review of 1.6 for possible requirement for ANI's and ANII's to hold the (R) Endorsement for "NR" activities.</p> <p>Meeting Action: B. Wielgoszinski presented adding "ANIA" as appropriate and adding NR, VR, etc. to paragraphs 1.3.1, 1.4.2, and similar verbiage form all of 1.3 to.1.6. This was a Progress Report, as no proposal has been drafted.</p>		

Item Number: 19-69

NBIC Location: Part 3, 5.12.5.1 8)

Attachment 3

& 5.12.5.1 11)

General Description: Review verbiage in Part 3, 5.12.5.1 8) and 5.12.5.1.11)

Subgroup: Repairs and Alterations

Task Group: Ben Schaefer - PM

Explanation of Need: Review verbiage in Part 3, 5.12.5.1 8) and 5.12.5.1.11) to include "Code Case" and "Code Edition" within the text.

Meeting Action: B. Schaefer presented. Discussion on additional revision to from NR-1 to require Table on page 2 to be completed for any item repaired as referenced on lines 4-9, and editorial changes replacing "Year" with "Edition", etc. **The proposal was unanimously approved as amended.**

8. Update on Promoting NR Accreditation Program

- a. US NRC - Mr. Edwards provided a progress report on the response letter from the NRC letter dated May 1, 2018 ([Attachment 4](#)) regarding requested endorsement of the NR and NRV accreditation programs as stated in the original request letter dated September 9, 2016 ([Attachment 5](#)).
 - (i) **History:** The NRC letter from May, 2018 indicated that they would not endorse the NR and NRV accreditation programs. After discussion, it was decided that a Task Group with Chuck Withers as Project Manager would draft a response letter to the NRC. The CNSC has also indicated that their interest in the NR/NVR programs was contingent with the NRC endorsing the program(s).

In July 2019, Mr. Withers stated that he had discussed the issue with Kerry (NRC) and they would be willing to look at the Program again with the understanding that we (NB) would pay for the review. We (the National Board) would need to send a letter of request. Mr. Withers stated that he did not have time to respond to the previous letter from the NRC. Since the nuclear industry is on hold here in the US they now have some time to review our request which was the real issue before.

We could respond to the letter from the NRC in 2018 and at the same time request in that letter for a complete review and acceptance of the program. Kerry said to send the response (letter) directly to her and she would forward to the upper management since there has been a big overhaul of personnel at the NRC.

Mr. Edwards presented a drafted second response letter for consideration ([Attachment 6](#)). The letter was forwarded to Mr. Gary Scribner to be considered for submittal to the NRC. .

9. New Items Created at NR TG Meeting:

- a. Action Item 20-15: ANIA Definition revision in Section 9 (Glossary) – R. Spuhl (PM)
- b. Action Item 20-16: Review NR Program (1.6) to 20156 NQA-1 Edition

10. Future Meetings

- July 13th-16th, 2020 – Louisville, KY
- January 11th-14th, 2021 – New Orleans, LA

11. Adjournment

There being no further business before the Task Group, the Chair adjourned the meeting at 11:37 am, without objection.

Respectfully submitted,



Terrence Hellman
NR Task Group Secretary

Item 19-11 – Edwards – 01-02-201-13-2020

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Explanation of Need: Review the use of “Authorized Nuclear Inspection Agency” within the NBIC.

Background: An ANIA can not be an Inservice AIA since Endorsements for nuclear inspectors are issued only to new construction AIA’s. The requirements for qualified Authorized Nuclear Inspectors/Supervisors are specified in NB-263, RCI-1. An NBIC revision is therefore needed to clarify reference to ANIAs in Part 3, 1.6.3 a) under the NR Accreditation Program.

This item was unanimously approved at SC-R/A but received 3 negatives on the MC ballot. There was some confusion in the original description of the proposed action in that reference was also made to revising the definition of “Authorized Nuclear Inspection Agency” in the Glossary (NBIC Parts 1, 2, 3, and 4). The MC negatives agreed with the proposal except that the action did not include a revision to the Glossary.

On further review, the current definition of “Authorized Nuclear Inspection Agency” in the Glossary is acceptable and does not require revision. The updated action for Item 19-11 is therefore to reaffirm revision to ¶1.6.3 a), to include reference to repair and alteration acceptance inspections and to delete reference to NB-369, and with no required change to the Glossary.

Upon discussion, the NR TG proposed rewording the proposed verbiage to replace “authorization” with “accreditation” to better align with the scope of the NB-360 Certificate.

Proposed Action: Revise Part 3, ¶1.6.3 a), as follows:

- a) Have and maintain an inspection agreement with an Authorized Nuclear Inspection Agency accepted in accordance with NB-360, *National Board Acceptance of Authorized Inspection Agencies (AIA) Accredited by the American Society of Mechanical Engineers (ASME)*, with accreditation to perform repair and alteration acceptance inspections. ~~or accredited in accordance with NB-369, Accreditation of Authorized Inspection Agencies (AIA) Performing Inservice Inspection Activities and Qualification of Inspectors of Boilers and Pressure Vessels.~~

(Note to NBIC Secretary – The reference NBIC paragraph for Item 19-11 should be updated to reflect “NBIC Part 3, 1.6.3 a)” and the General Description revised to read “Clarify Reference to Authorized Nuclear Inspection Agencies”)

Original Proposal – Information Only

Item 19-11 – Hellman – 7-15-2019

Location: Section 9 of Parts 1, 2, 3 and 4

Explanation of Need: Review the use of “Authorized Nuclear Inspection Agency” within the NBIC.

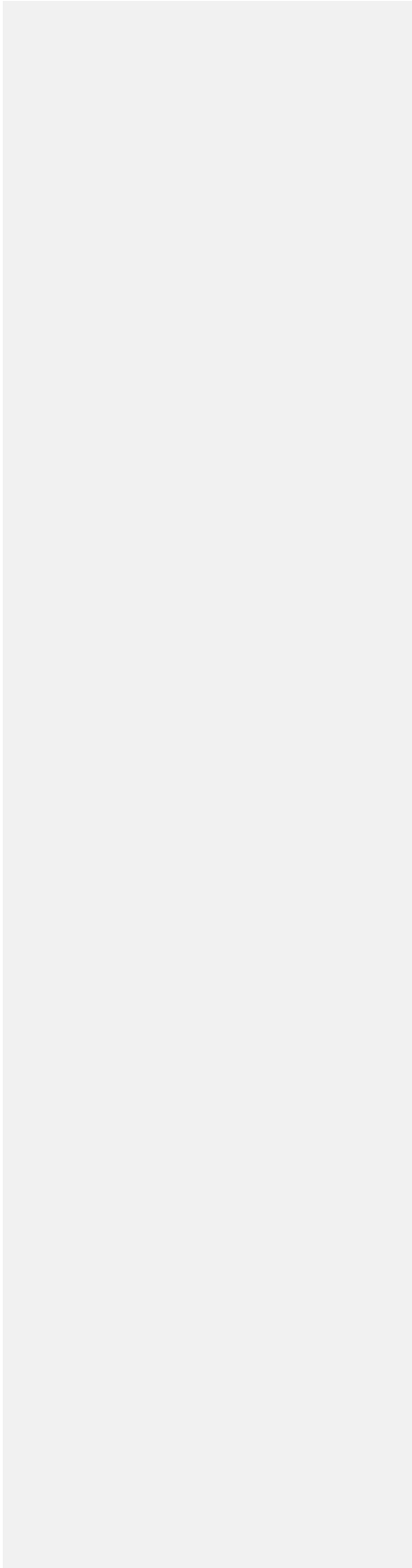
Background: An ANIA can not be an Inservice AIA since Endorsements for nuclear inspectors are issued only to new construction AIA’s. The requirements for qualified Authorized Nuclear Inspectors/Supervisors are clearly specified in NB-263, RCI-1. Therefore revision to the Glossary definition is needed to clarify this requirement for the NR Accreditation Program.

Proposed Revision:

1.6.3 PREREQUISITES FOR ISSUING A NATIONAL BOARD “NR” CERTIFICATE OF AUTHORIZATION

Before an organization can obtain a National Board “NR” Certificate of Authorization, the organization shall:

- a) Have and maintain an inspection agreement with an Authorized Nuclear Inspection Agency accepted in accordance with NB-360, National Board Acceptance of Authorized Inspection Agencies (AIA) Accredited by the American Society of Mechanical Engineers (ASME) with authorization to perform repair and alteration acceptance inspections, or accredited in accordance with NB-369, Accreditation of Authorized Inspection Agencies (AIA) Performing Inservice Inspection Activities and Qualification of Inspectors of Boilers and Pressure Vessels.
- b) Have a written Quality Assurance Program that complies with the requirements of this section and address all controls for the intended category and scope of activities.
- c) Have a current edition of the NBIC.

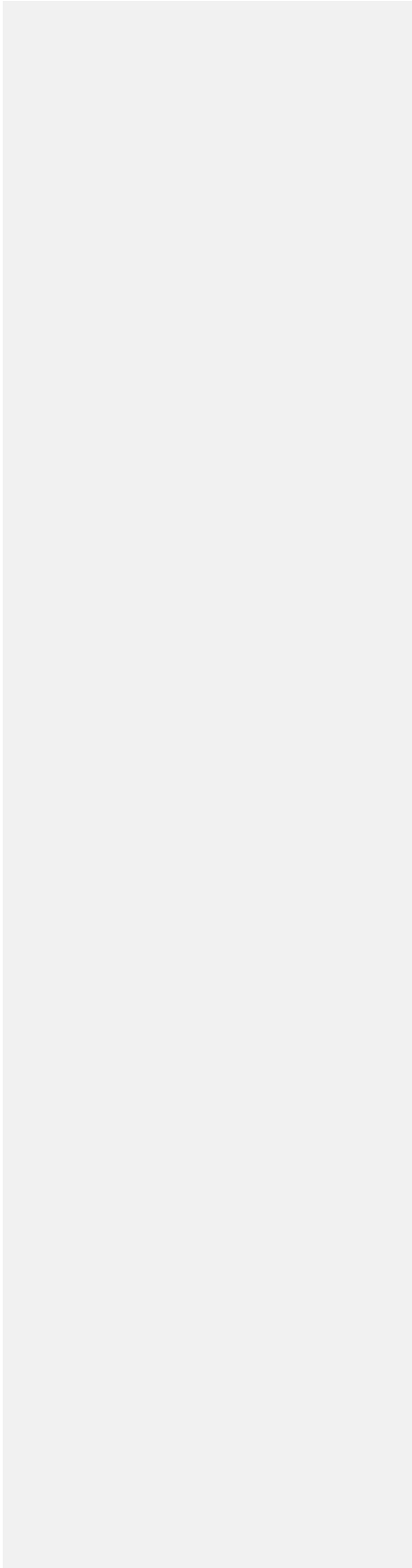


MC Negatives - Information Only

Committee Member: Donnie LeSage **Vote Date:** 2019-11-19 **Vote:** Disapproved **Uploads:** _____
Member Comment: I agree with Mr. Pillow. The Background stated "Therefore revision to the Glossary definition is needed". I don't see the proposed Glossary definition change.

Committee Member: James Pillow **Vote Date:** 2019-10-30 **Vote:** Disapproved **Uploads:** _____
Member Comment: I agree with the proposed revision to 1.6.3, but the proposal does not include a revision to the Glossary as indicated in the Background.

Committee Member: Milton Washington **Vote Date:** 2019-11-22 **Vote:** Disapproved **Uploads:** _____
Member Comment: I agree with Mr. Pillow that the proposal should include the glossary change as well.



NR Task Group “NR”
Task Group 19-69

CURRENT TEXT

5.12.5.1

8) Identify the original construction code, edition/addenda used for the system or component identified in line 4.

PROPOSED REVISION

5.12.5.1

8) Identify the original construction code, section, edition/addenda and applicable code cases used for the system or component identified in line 4.

CURRENT TEXT

5.12.5.1

11) Identify code edition/addenda used for design, when applicable.

PROPOSED REVISION

5.12.5.1

11) Identify code section, edition/addenda and applicable code cases used for design, when applicable.

CURRENT TEXT

5.12.5.1

23) Identify Code section year and/or addenda used to perform work.

PROPOSED TEXT

5.12.5.1

23) Identify Code section ~~year~~ edition and/or addenda used to perform work.

WORK PERFORMED BY:									
①									
_____ (Name of "NR" certificate holder)									
_____ (Address of "NR" certificate holder)									
COMPONENT IDENTIFICATION							<u>Edition/</u>		
No.	Type of Item	Mfg. Name	Serial No.	Nat'l Bd No.	Code Class	Code Section	Year/ Addenda	Code Case	
⑩⑥	⑩⑦	⑩⑧	⑩⑨	⑩⑩	⑩⑪	⑩⑫	⑩⑬	⑩⑭	



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

May 1, 2018

Mr. Gary Scribner
Assistant Executive Director - Technical
The National Board of Boiler and
Pressure Vessel Inspectors
1055 Crupper Avenue
Columbus, OH 43229

SUBJECT: REVIEW OF "RECOGNITION OF NR AND NR-VR NATIONAL BOARD
ACCREDITATION PROGRAM," FOR FINAL U. S. NUCLEAR REGULATORY
COMMISSION ENDORSEMENT

Dear Mr. Scribner:

In a letter dated October 11, 2016 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML16286A162), your organization requested a fee waiver under Title 10 of the *Code of Federal Regulations* (10 CFR) 170.11(a)(1)(ii) for the U.S. Nuclear Regulatory (NRC) staff's review of "Recognition of NR and NR-VR National Board Accreditation Program," for final NRC endorsement. Subsequently, in a letter dated December 6, 2016 (ADAMS Accession No. ML16307A066), the NRC staff concluded that the NRC review of "Recognition of NR and NR-VR National Board Accreditation Program," for final NRC endorsement met all the criteria under 10 CFR 170.11(a)(1)(ii); and approved your fee waiver request.

After careful consideration, the NRC staff has decided not to move forward with the endorsement of the NR and NR-VR National Board Accreditation Program. The decision is based on the following factors:

1. The American Society of Mechanical Engineers Boiler and Pressure Vessel Code already provides several options to repair components under Section III, "Rules for Construction of Nuclear Facility Components," in addition to Code Case N-801-1, "Rules for repair of N-Stamped Class 1, 2, and 3 Components, Section III, Division 1."
2. Stakeholders (e.g., owners, repair organizations, etc.), have not shown any interest in the NRC's endorsement of this program.
3. There are currently only two units under construction with no plans for any new future construction.

Should you have any questions regarding this matter, please contact Mr. Yamir Diaz-Castillo at 301-415-2228, or via electronic mail at Yamir.Diaz-Castillo@nrc.gov.

Sincerely,



Adrian Muñiz, Acting Chief
Licensing Branch 3
Division of New Reactor Licensing
Office of New Reactors

September 9, 2016

Attention: Mr. Joseph Colaccino, Chief,
New Reactor Rulemaking & Guidance Branch,
Division of Engineering Infrastructure and Advanced Reactors,
Office of New Reactors, NRC
Washington, DC 20555

Subject: Request NRC Regulatory Issue Summary to Communicate and Provide Recognition of the National Board Accreditation Program Not Understood By the Nuclear Industry

Reference: National Board NR (Nuclear Repair) and NR-VR (NR Scope Extension for Nuclear Pressure Relief Valve Repair) Accreditation Program

Enclosure: Attachment 1. National Board Inspection Code (NBIC) 2015 Edition, Part 3, Accreditation Program, Section 1.8
Attachment 2. NBIC, NR-1 and NVR-1 Forms
Attachment 3. Quality Assurance Program Requirements Comparison Matrix
Attachment 4. Sample – NR Nameplate, Stamping, Certificate of Authorization
Attachment 5. NB-417, Accreditation of NR Repair Organizations

Dear: Mr. Joseph Colaccino

The National Board of Boiler and Pressure Vessel Inspectors (National Board) is an organization composed of chief inspectors for the states and cities of the United States and provinces of Canada. The National Board was organized in 1919 for the purpose of promoting safety to life and property by maintaining **uniformity** in post-construction activities of pressure-retaining items. The National Board ensures acceptance and interchangeability among jurisdictional authorities responsible for enforcing the safety codes and standards of the American Society of Mechanical Engineers' (ASME) *Boiler and Pressure Vessel Codes* (ASME BPV Code).

The National Board is accredited by the American National Standards Institute as a developer of American National Standards for the publication of the National Board Inspection Code. As noted above, the NBIC contains the requirements for the **NR** accreditation program. The National Board proposes the following for Nuclear Regulatory Commission (NRC) consideration:

- 1) Recognize the National Board **NR** accreditation program for performing post-construction activities (repairs/replacement) to nuclear components and systems, along with the **NR-VR** scope extension for repairs to pressure relief devices in nuclear service. Program activities include inspecting, certifying, documenting and stamping repair or replacement activities in accordance with a written accredited quality assurance program, once new construction conformity assessment requirements are completed. These activities can be performed either before fuel loading or during subsequent nuclear plant operations, and satisfy both Title 10 Code of Federal Regulations (CFR), Part 50 and Part 52 regulatory licensing provisions.
- 2) Support the use of the **NR** accreditation program as an acceptable quality assurance program for the nuclear industry to ensure conformity assessment of code and regulatory requirements as identified and required by 10 CFR Part 52.

The **NR** program specifies that quality assurance program requirements shall comply with ASME BPV Code Section III, “*Rules for the Construction of Nuclear Components;*” and the associated provisions of NQA-1 quality assurance program requirements prescribed by ASME Section III and Section XI, “*Rules for the Inservice Inspection of Nuclear Power Plant Components;* as well as meeting specified criteria of the NRC identified in 10 CFR Part 50, Appendix B and NUREG-0800 Standard Review Plan Section 17.5 (**See Attachment 3**).

The **NR** Accreditation Program follows the same requirements as the ASME Accreditation Program for N Stamp Holders described in ASME Section III, Subsection NCA which is recognized by the NRC as supported by the issuance of Information Notice No. 86-21, Supplements 1 and 2.

After a review of this information, we believe the NRC will recognize that the NR and NR-VR programs present many benefits to owners, enforcement authorities, regulatory authorities, manufacturers, and repair organizations. Use of the **NR** accredited program (and **NR-VR** nuclear pressure relief device scope extension) provides additional confidence that repair, replacement, and alteration activities have been performed in accordance with a recognized quality assurance system and have received appropriate independent oversight during the activity. Therefore, by recognizing and communicating to the nuclear industry the use of the National Board **NR** Program as an acceptable method of performing repair activities either through issuance of a Regulatory Issue Summary or other industry-recognized document, the NRC will promote uniformity in quality and safety.

Background

The **NR** accreditation program became effective January 1, 1979, to meet the requirements of ASME BPV Code Section XI and to assist owners and repair organizations when performing repair/replacement activities (which include repair, replacement, modification, and alteration). Since then, the **NR** program has been effectively utilized in jurisdictions such as Ohio and New Jersey, who mandated these programs through their laws and regulations. The National Board, since inception of this program, has always accredited organizations by performing an onsite survey once every three years and following the same conformity assessment process as ASME, which includes:

- Performance of an onsite survey by a knowledgeable and qualified team consisting of a National Board Team Leader, Authorized Nuclear Inspector Supervisor, Authorized Nuclear Inspector, and a jurisdictional representative when available.
- A complete review of the written quality assurance program including manual and supporting procedures and instructions.
- Verification of the organization’s quality assurance program by witnessing a demonstration of program implementation on actual items.
- Verification of the organization’s repair process and procedures for nuclear pressure relief valves when the **NR-VR** extension will be included in the program scope, including independent test verification of sample repaired valves.
- A *Certificate of Authorization* and conformity assessment mark (steel stamp) that is issued by the National Board upon an acceptable survey of the applicant.

The ASME BPV Code Section III is a new construction code specifying rules for construction of nuclear facility components. Once a component meets all the requirements of conformity assessment, including certification and stamping, there is no allowance for performing repair/replacement activities since Section III is a new construction code. The rules for Category 1 of the **NR** program allows for repair/replacement activities of items or systems that have been certified and code symbol stamped to ASME BPV Code Section III, irrespective of physical location and installation status, prior to fuel loading. Category 2 of the **NR** program allows for repair/replacement activities on items or systems after fuel loading under the scope of ASME BPV Code Section XI, irrespective of physical location.

These scope categories allow owners, users, and manufacturers to use existing components that were constructed, certified, and code symbol stamped many years ago. Owners face many problems when trying to utilize existing code-stamped components previously purchased and installed in systems and that subsequently require repair or modification. For example, The Watts Bar nuclear facility encountered many similar problems. By following the rules of the **NR** program, owners, users, and manufacturers have the flexibility to perform repair/replacement activities meeting code, jurisdictional, and regulatory requirements; or they can contract the work to qualified organizations (**See Attachment 1**).

Benefits

The **NR** program and the **NR-VR** scope extension is an internationally recognized, accredited quality assurance program that ensures Authorized Inspection Agencies, owners, repair organizations, and manufacturers, adhere to and understand code and regulatory requirements. By following these accredited programs, organizations recognize many benefits as characterized by the following attributes:

- Provides a mechanism to identify qualified and accredited repair organizations, whereby a *Certificate of Authorization* and a code symbol stamp is issued (**See Attachment 4**). Stamping is easily recognized as an international conformity assessment symbol.
- Provides recognition of an international accredited program, developed under a consensus process that ensures repair/replacement activities are performed under controlled processes, regardless of location or operation.
- Provides and promotes a recognized uniform program for performing repair/replacement activities before or after fuel loading as specified for 10 CFR Part 52.
- Provides for evaluation of the program initially and every three years thereafter for compliance by a knowledgeable and qualified survey team.
- Requires third party independent inspection and monitoring of the approved quality program utilizing qualified National Board Authorized Nuclear Commissioned Inspectors and Supervisors.
- Provides a means to document and certify repair/replacement activities performed, including records availability, retention, distribution, and retrieval of documentation.
- Provides a means of investigating organizations and inspectors and taking appropriate action when codes or standards are not met.
- Establishes the availability of any organization, including the owner of a nuclear facility, to apply for a National Board **NR** *Certificate of Authorization* and the **NR-VR** extension if applicable.
- Minimizes the time needed for owners or their representatives to survey and audit repair organizations because surveys for accreditations are performed every three years and the program is

continually monitored by the Authorized Inspection Agency to ensure the status and adequacy of the quality program. This one aspect can reduce cost to an organization required to audit and qualify repair organizations.

- Provides for the regulatory agency and jurisdictional representatives, at any time, to participate in the survey process which includes reviewing the applicant's written quality assurance manual, procedures, and instructions; and the required demonstration of implementation to ensure the program is maintained and followed.

There are additional benefits for organizations to reduce cost and ensure quality for repair/replacement activities that include: designing, purchasing, handling, storing, fabricating, installing, inspecting, testing, maintaining, repairing and modifying, documenting, and certifying work performed on nuclear items and systems (**See Attachment 2**).

Formal recognition of the National Board **NR** accreditation program can ensure 10 CFR Appendix B quality program requirements are met as specified in 10 CFR Part 52 as well as the ASME Section III mandated NQA-1 quality assurance program requirements. The multi-faceted **NR** accredited quality assurance program can serve to effectively facilitate and document conformity to codes, standards, and regulatory requirements; and provide a means to unify repair/replacement activities throughout the nuclear industry.

Therefore, the National Board of Boiler and Pressure Vessel Inspectors requests that the NRC formally recognize and communicate to the nuclear industry the availability of the **NR** accreditation program as an acceptable method to follow when performing repair/replacement activities on nuclear components and systems before, during, and after installation within a nuclear facility.

If you have any specific questions, please contact me at 614-431-3201 or Mr. David Douin, NB Executive Director, at 614-431-3206.

Sincerely,

Charles Withers
Assistant Executive Director Technical
National Board of Boiler and Pressure Vessel Inspectors

cc: K. Kavanagh, R. McIntyre, D. Douin, D. Allison

P.S. Representatives from the National Board are available to meet with representatives of the NRC to answer questions and to discuss further steps in the recognition process.

[Date]

Attention: Mr. Joseph Colaccino, Chief,
New Reactor Rulemaking & Guidance Branch,
Division of Engineering Infrastructure and Advanced Reactors,
Office of New Reactors, NRC
Washington, DC 20555

Subject: Request NRC Regulatory Issue Summary to Communicate and Provide Recognition of the National Board Accreditation Program

Reference: National Board NR (Nuclear Repair) and NR-VR (NR Scope Extension for Nuclear Pressure Relief Valve Repair) Accreditation Program

Enclosures: Attachment 1 – NRC Letter to Mr. Gary Scribner, dated May 1, 2018 – Review of “Recognition of NR and NR-VR National Board Accreditation Program,” for Final U.S. Nuclear Regulatory Commission Endorsement
Attachment 2 – National Board Letter to Mr. Joseph Colaccino, dated September 9, 2016 – Request NRC Regulatory Issue Summary to Communicate and Provide Recognition of the National Board Accreditation Program Not Understood by the Nuclear industry
Attachment 3 - National Board Inspection Code (NBIC) 2019 Edition, Part 3, Accreditation Program, Section 1.6
Attachment 4 - Quality Assurance Program Requirements Comparison Matrix
Attachment 5 - NB-417, Accreditation of NR Repair Organizations

Dear Mr. Colaccino:

This letter is offered in follow-up to the Nuclear Regulatory Commission (NRC) correspondence dated May 1, 2018, to Mr. Gary Scribner, (see Attachment 1). As indicated, the National Board request for review of “Recognition of NR and NR-VR National Board Accreditation Program” for final NRC endorsement (see Attachment 2) met the criteria under 10 CFR 170.11(a)(1)(ii), and the National Board fee waiver request was approved. In that correspondence, the NRC also advised that the staff has decided not to move forward with endorsement of the NR and NR-VR National Board Accreditation Program, based on several factors.

In response to these developments, the National Board offers the following for NRC consideration:

NRC Comment: The American Society of Mechanical Engineers Boiler and Pressure Vessel Code already provides several options to repair components under Section III, “Rules for Construction of Nuclear Facility Components,” in addition to Code Case N-80-1, “Rules for Repair of N-Stamped Class 1, 2, and 3 Components, Section III, Division 1.”

NB Response: The National Board NR accreditation program provides additional repair options for ASME Section III components beyond those offered by ASME Section III and Code Case N-801-1. Categories of NR repair/replacement activities include ASME Section III Code certified items or systems irrespective of physical location and installation status prior to fuel loading, and after fuel loading, any item or system under the scope of ASME Section XI irrespective of physical location (see Attachment 3).

NRC Comment: Stakeholders (e.g. owner, repair organization, etc.) have not shown any interest in the NRC's endorsement of this program.

NR Response: Stakeholder interest in the program is acknowledged as limited, based substantially on program visibility and lack of understanding. NRC recognition as an acceptable repair/replacement program would provide industry with additional opportunities and options. The NR program meets the quality assurance program criteria of NQA-1 prescribed by ASME Sections III and XI, as well as meeting specified criteria of the NRC identified in 10 CFR Part 50, Appendix B and NUREG-0800 Standard Review Plan Section 17.5 (see Attachment 4). As an established accreditation program, recognition by the NRC would avoid industry development costs for potential alternatives.

NRC Comment: There are currently only two units under construction with no plans for any new future construction.

NB Response: The NR accreditation program is established for both new construction and operating fleet applications. The program is available on an equal basis to owners, manufacturers, and nuclear repair organizations servicing the industry. In requiring certification and stamping for repair/replacement activities, the NR program also mitigates concerns in recent ASME Section XI efforts to eliminate ASME Section III certification and stamping requirements for replacement parts.

After a review of this information, we believe the NRC will recognize that the NR and NR-VR programs present many benefits to owners, enforcement authorities, regulatory authorities, manufacturers, and repair organizations. Use of the NR accredited program (and NR-VR nuclear pressure relief device scope extension) provides additional confidence that repair, replacement, and alteration activities have been performed in accordance with a recognized quality assurance system and have received appropriate independent oversight during the activity. Therefore, by recognizing and communicating to the nuclear industry the use of the National Board NR Program as an acceptable method of performing repair activities either through issuance of a Regulatory Issue Summary or other industry-recognized document, the NRC will promote uniformity in quality and safety.

Background

The National Board of Boiler and Pressure Vessel Inspectors (National Board) is an organization composed of chief inspectors for the states and cities of the United States and provinces of Canada. The National Board was organized in 1919 for the purpose of promoting safety to life and property by maintaining **uniformity** in post-construction activities of pressure-retaining items. The National Board ensures acceptance and interchangeability among jurisdictional authorities responsible for enforcing the safety codes and standards of the American Society of Mechanical Engineers' (ASME) *Boiler and Pressure Vessel Codes* (ASME BPV Code).

The National Board is accredited by the American National Standards Institute as a developer of American National Standards for the publication of the *National Board Inspection Code* (NBIC). As noted above, the NBIC contains the requirements for the NR accreditation program.

The NR accreditation program became effective January 1, 1979, to meet the requirements of ASME BPV Code Section XI and to assist owners and repair organizations when performing repair/replacement activities (which include repair, replacement, modification, and alteration). Since then, the NR program has been effectively utilized in jurisdictions such as Ohio and New Jersey, who mandated these programs through their laws and regulations. The National Board, since inception of this program, has always accredited organizations by performing an onsite survey once every three years and following the same conformity assessment process as ASME, which includes:

- Performance of an onsite survey by a knowledgeable and qualified team consisting of a National Board Team Leader, Authorized Nuclear Inspector Supervisor, Authorized Nuclear Inspector, and, when available, a jurisdictional representative.
- A complete review of the written quality assurance program including manual and supporting procedures and instructions.
- Verification of the organization's quality assurance program by witnessing a demonstration of program implementation on actual items.
- Verification of the organization's repair process and procedures for nuclear pressure relief valves when the NR-VR extension will be included in the program scope, including independent test verification of sample repaired valves.
- A *Certificate of Authorization* and conformity assessment mark (steel stamp) that is issued by the National Board upon an acceptable survey of the applicant.

The ASME BPV Code Section III specifies rules for construction of nuclear facility components. Once a component meets all the requirements of conformity assessment, including certification and stamping, there is no allowance for performing repair/replacement activities since Section III is a new construction code. The rules for Category 1 of the NR program allows for repair/replacement activities of items or systems that have been certified and code symbol stamped to ASME BPV Code Section III, irrespective of physical location and installation status, prior to fuel loading. Category 2 of the NR program allows for repair/replacement activities on items or systems after fuel loading under the scope of ASME BPV Code Section XI, irrespective of physical location.

These scope categories allow owners, users, and manufacturers to use existing components that were constructed, certified, and code symbol stamped many years ago. Owners face many problems when trying to utilize existing code-stamped components previously purchased and installed in systems and that subsequently require repair or modification. By following the rules of the NR program, owners, users, and manufacturers have the flexibility to perform repair/replacement activities meeting code, jurisdictional, and regulatory requirements; or they can contract the work to qualified organizations (see Attachment 3).

Benefits

The NR program and the NR-VR scope extension are an internationally recognized, accredited quality assurance program that ensures Authorized Inspection Agencies, owners, repair organizations, and manufacturers, adhere to and understand code and regulatory requirements. By following these accredited programs, organizations recognize many benefits as characterized by the following attributes:

- Provides a mechanism to identify qualified and accredited repair organizations, whereby a *Certificate of Authorization* and a code symbol stamp is issued (see Attachment 5). Stamping is easily recognized as an international conformity assessment symbol.
- Provides recognition of an international accredited program, developed under a consensus process that ensures repair/replacement activities are performed under controlled processes, regardless of location or operation.
- Provides and promotes a recognized uniform program for performing repair/replacement activities before or after fuel loading as specified for 10 CFR Part 52.
- Provides for evaluation of the program initially and every three years thereafter for compliance by a knowledgeable and qualified survey team.
- Requires third party independent inspection and monitoring of the approved quality program utilizing qualified National Board Authorized Nuclear Commissioned Inspectors and Supervisors.
- Provides a means to document and certify repair/replacement activities performed, including records availability, retention, distribution, and retrieval of documentation.
- Provides a means of investigating organizations and inspectors and taking appropriate action when codes or standards are not met.
- Establishes the availability of any organization, including the owner of a nuclear facility, to apply for a National Board NR *Certificate of Authorization* and the NR-VR extension if applicable.
- Minimizes the time needed for owners or their representatives to survey and audit repair organizations because surveys for accreditations are performed every three years and the program is continually monitored by the Authorized Inspection Agency to ensure the status and adequacy of the quality program. This one aspect can reduce cost to an organization required to audit and qualify repair organizations.
- Provides for the regulatory agency and jurisdictional representatives, at any time, to participate in the survey process which includes reviewing the applicant's written quality assurance manual, procedures, and instructions; and the required demonstration of implementation to ensure the program is maintained and followed.

There are additional benefits for organizations to reduce cost and ensure quality for repair/replacement activities that include: designing, purchasing, handling, storing, fabricating, installing, inspecting, testing, maintaining, repairing and modifying, documenting, and certifying work performed on nuclear items and systems (see Attachment 3).

Formal recognition of the National Board NR accreditation program can ensure 10 CFR Part 50 Appendix B quality program requirements are met as specified in 10 CFR Part 52 as well as the ASME Section III mandated NQA-1 quality assurance program requirements. The multi-faceted NR accredited quality assurance program can serve to effectively facilitate and document conformity to codes, standards, and regulatory requirements; and provide a means to unify repair/replacement activities throughout the nuclear industry.

Summary

In consideration of the above factors, the National Board requests reconsideration of the NRC decision not to move forward in recognizing and communicating to the nuclear industry the availability of the NR

accreditation program as an acceptable method to follow when performing repair/replacement activities on nuclear components and systems before, during, and after installation within a nuclear facility.

Representatives of the National Board are available to meet with the NRC to answer questions and to discuss further steps in the recognition process. If you have any specific questions, please contact the undersigned at 614-431-3221 or Mr. Joel Amato, National Board Executive Director, at 614-431-3206.

Sincerely,

Gary Scribner
Assistant Executive Director - Technical
National Board of Boiler and Pressure Vessel Inspectors

cc: K. Kavanagh, Y. Diaz-Castillo, J. Amato, M. Pischke