

RulemakingComments Resource

From: Kathryn Hyam <HyamK@asme.org>
Sent: Thursday, June 15, 2023 11:37 AM
To: RulemakingComments Resource
Cc: Adam Maslowski; Tom Vogan; PRESSBURGER, MAURY A; Ronald Lippy; Rick Swayne; Daniel Miro-Quesada; Kathryn Hyam; Oliver Martinez; Mark Ferlisi; Michael Benson; David Rudland; c.n.pendleton@sbcglobal.net; Gowin, Mark Allen; Cardillo, Augi; Dan Lamond (dlamond@tnorthconsulting.com); Tom Roberts (tom@pomo18.com)
Subject: [External_Sender] ASME BNCS Comments on Docket ID NRC-2018-0291
Attachments: ASME Letter Providing Comments on 50.55a RG 1.147 Rule.pdf

To whom it may concern:

ASME is pleased to have the opportunity to provide additional comments and suggestions on Draft Regulatory Guides DG-1406 and DG-1408, and the Proposed Rule Incorporating the Final Revision of Regulatory Guide 1.147 into 10 CFR 50.55a, Docket ID NRC-2018-0291.

Please find the compiled comments from ASME Board on Nuclear Codes and Standards attached, for consideration during this rulemaking.

Sincerely,



Kate Hyam, PE, PMP
Director
Nuclear Codes and Standards
ASME
1828 L St. N.W.,
Washington, DC 20036-5104
Tel 1.212.591.8704
hyamk@asme.org



Two Park Avenue

tel 1.212.591.8500

New York, NY

fax 1.212.591.8501

10016-5990 U.S.A.

www.asme.org

June 15, 2023

Office of the Secretary
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

Attention: Rulemakings and Adjudications Staff

Subject: ASME BNCS Comments on Draft Regulatory Guides DG-1406 and DG-1408, and the Proposed Rule Incorporating the Final Revision of Regulatory Guide 1.147 into 10 CFR 50.55a, Docket ID NRC–2018–0291

- References:
1. Draft Regulatory Guide DG-1406, (Proposed Revision 21 of Regulatory Guide 1.147, dated January 2023), Inservice Inspection Code Case Acceptability, ASME Section XI, Division 1 (ADAMS Accession No. ML22195A284)
 2. Draft Regulatory Guide DG-1408, (Proposed Revision 8 of Regulatory Guide 1.193, dated January 2023), ASME Code Cases Not Approved for Use (ADAMS Accession No. ML22196A065)
 3. Proposed Rule, Federal Register, Vol. 88, No. 43, pp. 13717-13735, Monday, March 6, 2023, 10 CFR 50, [NRC-2018-0291], RIN 3150-AK23, Approval of American Society of Mechanical Engineers Code Cases and Update Frequency
 4. Letter from Thomas Vogan (ASME) to Ms. Louise Lund (NRC), Requesting Specific Code Cases to be Included in Draft Revision 21 of Regulatory Guide 1.147, dated December 22, 2021 ADAMS Accession No. ML22046A112)

Dear Rulemakings and Adjudication Staff:

The American Society of Mechanical Engineers on behalf of the Board on Nuclear Codes and standards, appreciates the opportunity to provide comments on draft Regulatory Guides DG-1406 and DG-1408, and the proposed rule to incorporate by reference Regulatory Guide 1.147, Revision 21 into 10 CFR 50.55a. Comments on the proposed Code of Record update requirements.

The ASME Board on Nuclear Codes and Standards appreciates the USNRC's endorsement of its Nuclear Code Cases and the USNRC's continued effort to complete these updates and rulemakings on a regular basis. To facilitate the USNRC endorsement of Code Cases in Regulatory Guide 1.147, Revision 21, comments in Enclosure 1 are provided for consideration

by the USNRC. Enclosure 2 provides comments on DG-1408 (draft revision 8 of Regulatory Guide 1.193).

Also included are comments on draft 10 CFR 50.55a rule to establish Code of Record update requirements are provided in Enclosure 3.

If you have any questions concerning the contents of this letter, please direct them to Ms. Kathryn Hyam, ASME Director, Nuclear Codes and Standards by telephone at (212) 591-8704 or by e-mail (hyamk@asme.org) and thank you for consideration of our comments.

Very Truly Yours,



Thomas J. Vogan, Chair
ASME Board on Nuclear Codes and Standards
tomvogan45@gmail.com

Enclosures:

1. Comments on Draft Regulatory Guide DG-1406
2. Comments on Draft Regulatory Guide DG-1408
3. Comments on 10 CFR 50.55a Code of Record Update Requirements

cc: Michael Benson, USNRC (michael.benson@nrc.gov)
David Rudland, USNRC (david.rudland@nrc.gov)
ASME Board on Nuclear Codes and Standards
Officers of the ASME Standards Committee on Nuclear Inservice Inspection
Officers of the ASME Standards Committee on Operation and Maintenance of Nuclear Power Plants
Daniel Miro Quesada, Staff Secretary BPVC Section XI
Oliver Martinez, Staff Secretary OM

Enclosure 1

Comments on Draft Regulatory Guide DG-1406, Inservice Inspection Code Case Acceptability, ASME Section XI, Division 1

1. Comments on the request to specifically include selected Code Cases in Regulatory Guide 1.147, Revision 21

We appreciate the action taken by the USNRC to propose the addition of Code Cases N-663-1, N-885-1, and N-921 to Regulatory Guide 1.147, Revision 21. We had specifically requested that these Cases be included in Regulatory Guide 1.147, Revision 21 by letter dated December 22, 2021 (Reference 4).

There are no comments concerning the addition of any of the Code Cases proposed for addition to Table 1 of Regulatory Guide 1.147.

2. Comments on ASME Code Case N-752-1, Risk-Informed Categorization and Treatment for Repair/Replacement Activities in Class 2 and 3 Systems, Section XI, Division 1

Draft Regulatory Guide DG-1406 does not include ASME Code Case N-752-1, which was published in Supplement 0 of the 2021 Edition. This Case should have been included in DG-1406 for the following reasons:

2.1. The ASME BPVC Section XI Standards Committee supported and approved the methodologies in Cases N-752 and N-752-1, as noted below.

- BPVC Section XI Standards Committee voted to approve Case N-752 in ASME Ballot 18-3566RC1, which closed on March 27, 2019.
- BPVC Section XI Standards Committee voted to approve Case N-752-1 with no further comments in ASME Ballot 20-3750RC1, which closed on January 6, 2021.

2.2. The USNRC staff also approved the industry lead plant application of Case N-752 for Arkansas Nuclear One, Units 1 and 2 via relief request on May 19, 2021 (ML21118B039). The USNRC technical evaluation of this request concluded, in part, that "The specified exemptions in Code Case N-752 are consistent with scope of the requirements for RISC-3 and RISC-4 SSCs listed in 10 CFR 50.69(b)(1) that licensees can voluntarily exempt after implementation of 10 CFR 50.69", and that "The USNRC staff finds that the licensee's adherence to the above elements covered in Code Case N-752 for repair/replacement activities provides reasonable confidence that each LSS item will remain capable of performing its safety-related function."

2.3. Additionally, the risk-informed categorization methodology in N-752-1 is the same as that used by plants that have approved License Amendment Requests (LARs) to implement USNRC regulation 10CFR50.69 (Risk-informed categorization and treatment of structures, systems and components for nuclear power reactors). To date, there are approximately 50 plants (units) that have obtained USNRC approval to use this risk-informed categorization methodology.

We respectfully request that USNRC complete the review of ASME BPVC Section XI Code Case N-752-1 and include this Case in Regulatory Guide 1.147, Revision 21. If Code Case N-752-1 is not approved for use in Regulatory Guide 1.147, Revision 21, we respectfully request that USNRC identify the technical and safety concerns supporting USNRC's reason for not approving this Case in this regulatory guide. We request that this information be provided in writing at the earliest opportunity to allow the BPVC Section XI Committee to propose and approve any changes needed to address the USNRC's concerns with the

Enclosure 1

Comments on Draft Regulatory Guide DG-1406, Inservice Inspection Code Case Acceptability, ASME Section XI, Division 1

acceptability of this Case.

3. Comments on proposed changes to Regulatory Guide 1.147, Revision 21, Table 2.

3.1. Comments on ASME Code Case N-880-1, Alternative to Procurement Requirements of IWA-4143 for Nonstandard Welded Fittings, Section XI, Division 1

The USNRC has proposed a new condition that would limit the use of this Case to NPS 2 (DN 50) or smaller fittings.

The USNRC's analysis of the basis for the original Case N-880 is incorrect. When the USNRC approved the original Case N-880, the Case already permitted these fittings on piping larger than RCS makeup capacity. The technical basis for the original Case N-880 stated, "It permits extension of the IWA-4131 provisions from NPS 1 (DN25) or RCS makeup capacity to NPS 2 (DN50)." This NPS 2 limit was indeed arbitrary. Contrary to the proposed new condition, it clearly had nothing to do with RCS makeup capacity. And this basis was accepted by the USNRC in the current R.G. 1.147.

Therefore, the USNRC's proposed condition new condition is arbitrary and without any technical basis. In a request for alternative from a utility, the USNRC was presented a large amount of evidence of testing of such fittings, including sizes larger than NPS 2. These fittings have also been used in many industrial applications in sizes larger than NPS 2, for many years. Therefore, the USNRC should not add any new, arbitrary, conditions on Case N-880-1 that are different from those currently imposed on use of Case N-880.

We recommend that the USNRC delete the proposed condition from Regulatory Guide 1.147, Revision 21.

3.2. N-921, Alternative 12-yr Inspection Interval Duration, Section XI, Division 1

The USNRC has proposed the following condition on the use of Code Case N-921:

"The licensee's code of record for the inservice inspection program must be the 2019 Edition of Section XI or later, in order to apply this code case."

In the draft § 50.55a rule, the USNRC indicates that this condition is being imposed to "ensure that the desired order and predictability in licensee inservice inspection programs is maintained." This position does not provide a safety basis for imposing this condition.

We recommend that the USNRC delete the proposed condition from Regulatory Guide 1.147, Revision 21.

Enclosure 2

Comments on Draft Regulatory Guide DG-1408, ASME Code Cases Not Approved for Use

1. Comments on ASME Code Case N-897, Analytical Evaluation Procedures for Axial Flaws in Partial-Penetration Nozzle Welds, Section XI, Division 1

The USNRC has proposed the addition of Code Case N-897 to Table 2 of Regulatory Guide 1.193, with the following justification:

“Code Case N-897 applies to non-Code repair techniques that have been implemented in the U.S. via relief requests per NRC regulations. The NRC's relief request process allows the staff to review and approve appropriate NDE procedures that otherwise have not been established for these repairs as part of N-897. Application of N-897 allows the Owner to determine that a repaired flaw is acceptable, avoiding the need to submit a relief request to the NRC. In that case, the staff could not review and approve the NDE procedures applied to the repair.”

Comments:

The purpose of this Code Case N-897 is to provide guidance and a general procedure when performing an analytical evaluation for an axial flaw in a J-groove partial penetration weld. The Case provides analytical evaluation procedures for an axial indication detected by a nondestructive examination or by evidence of leakage in a partial-penetration nozzle attachment J-groove weld during an inspection. The analytical evaluation may also be applied for a postulated flaw condition where a flaw is postulated to remain in a J-groove weld following a nozzle repair activity.

The scope only covers the analytical procedure and acceptance criteria consistent with the existing requirements in ASME BPVC Section XI. The Case describes the details for stress analysis modeling, flaw characterization, flaw growth analysis, and flaw stability analysis to demonstrate structural stability for the evaluation period of operation consistent with other code sections (e.g., IWB-3600: Nonmandatory Appendix A, Nonmandatory Appendix C, and Nonmandatory Appendix O). Although the Case may be used to support the justification of continued operation of a weld that has been repaired, it doesn't provide any requirements for conducting an actual weld repair, including the type of weld design, welding methods, materials, inspection frequency, NDE methods, etc. The repair geometries shown in N-897 are only illustrative examples of where the analytical procedure may apply. This Case does not provide acceptance of any repair plan or method, but provides information needed to perform an evaluation of a detected or postulated flaw. For repair/replacement activities that are not compliant with IWA-4000 or a Code Case approved for use in Regulatory Guide 1.147, an Owner would be required to submit a relief request in accordance with 10 CFR 50.55a(z). If an Owner deviates from any of the specific requirements of Code Case N-897, an Owner would also be required to submit a relief request in accordance with 10 CFR 50.55a(z).

As additional background, N-897 was developed jointly by the ASME and JSME organizations and reflects an international cooperative effort that would benefit both code bodies. USNRC approval of this Case may also allow the Japanese regulatory authorities to approve the use of this Case in Japan.

We respectfully request that USNRC identify changes that could be made to N-897 to address the concerns identified in DG-1408. Alternatively, we recommend that the

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**Comments on Draft Regulatory Guide DG-1408, ASME Code Cases Not
Approved for Use**

USNRC consider adding this Case to Regulatory Guide 1.147, Table 2 with appropriate conditions, if necessary, to address the USNRC concerns.

Enclosure 3

Comments on 10 CFR 50.55a Code of Record Update Requirements

1. Comments on proposed changes to § 50.55a(b)(5)(ii) and (iii), and § 50.55a(b)(6)(ii) and (iii)

We support the proposed changes to these § 50.55a paragraphs. Licensees should be permitted to continue using superseded and annulled ASME BPVC Section XI and OM Code Cases that have been listed in their programs (prior to their being superseded or annulled) if they are applicable to their current code of record. If the USNRC has determined that use of a specific ASME BPVC Section XI or OM Code edition is acceptable for a Code of Record Interval as long as 25 years, then Code Cases applicable to that edition should also be permissible to be used for that Code of Record Interval.

2. Comments on proposed changes to 10 CFR 50.55a(y)(1) and (y)(2)

We support the clarification provided by defining the terms “Code of record” and “Code of record interval”. The proposed definitions in 10 CFR 50.55a(y)(1) and (y)(2) are necessary for licensees wishing to use a specific code of record for more than a single inservice inspection or inservice examination and test interval. However, we suggest that the USNRC consider the following comments pertaining to these new provisions:

- 2.1. The provisions in 10 CFR 50.55a(y)(2)(ii) should not be limited to the specified ASME BPVC Section XI editions. Instead, Owners should be permitted to use any editions that are incorporated by reference in 10 CFR 50.55a(a) for their code of record interval, provided all applicable conditions specified in § 50.55a(b)(2) are met. The draft rule did not provide any safety reason to justify limiting the extended code of record interval to the ASME BPVC Section XI, 2019 Edition, or later editions incorporated by reference in paragraph (a) of § 50.55a.

We recommend that the USNRC revise 10 CFR 50.55a(y) to allow licensees to use any editions of Section XI that are incorporated by reference in 10 CFR 50.55a(a) for their code of record interval, provided all applicable conditions specified in § 50.55a(b)(2) are met.

- 2.2. The language proposed in 10 CFR 50.55a(y)(2)(ii) would require a licensee to use the same code of record for two consecutive inspection or examination and test intervals. when using the ASME BPVC Section XI, 2019 Edition and OM Code, 2020 Edition, or later editions incorporated by reference in paragraph (a) of § 50.55a. A licensee should be permitted to continue updating their code of record for their inspection or examination and test intervals every inspection interval, if desired, without having to submit a request to the USNRC in accordance with § 50.55a(f)(4)(iv) and § 50.55a(g)(4)(iv) to do so. The proposed change in § 50.55a(y)(2)(ii) would impose an unnecessary administrative burden on licensees that may wish to update their inspection program to a later edition of the BPVC Section XI or OM Code every inspection interval.

We recommend that the USNRC revise 10 CFR 50.55a(y) to allow the use of a code of record for one inservice inspection (ISI) or examination and test (IST) interval, or two consecutive ISI or IST intervals.

We also recommend that the USNRC revise 10 CFR 50.55a(f)(4)(iv) and 10 CFR 50.55a(g)(4)(iv) to allow licensees to meet the requirements in later Code editions that

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Comments on 10 CFR 50.55a Code of Record Update Requirements

are incorporated by reference in § 50.55a(a) at any time during the Code of Record Interval without having to obtain USNRC approval, provided the later Code edition is used in its entirety, and the applicable conditions in § 50.55a(b) and (c) are met. Requiring licensees to seek regulatory approval to use an entire later Code edition that has been accepted by the USNRC imposes an unnecessary administrative burden on licensees.

3. Comments on proposed changes to 10 CFR 50.55a(y)(3) and (y)(6)

We believe that the addition of definitions for inservice examination and test (IST) interval and inspection interval, are appropriate to delineate between the intervals described in the ASME BPVC Section XI and OM Code and the code of record interval described in § 50.55a(y)(2).

We recommend that the title of § 50.55a(y)(6) be revised to read “(6) Inservice inspection (ISI) interval” to be consistent with the format and title of § 50.55a(y)(3).

4. Comments on proposed changes to 10 CFR 50.55a(y)(4) and (y)(5)

We believe that the proposed definitions for inservice inspection (ISI) program, and inservice examination and testing (IST) program are unnecessary. The industry has not struggled with defining these programs, which have been required by § 50.55a for many years. Further clarification does not seem warranted.

We recommend that the USNRC remove the proposed content of 10 CFR 50.55a(y)(4) and (y)(5) from the final rule.

5. Additional comments pertaining to the use of alternatives approved in accordance with 10 CFR 50.55a(z)

The proposed rule does not provide guidance on whether licensees may use alternatives approved in accordance with 10 CFR 50.55a(z) during the code of record interval, or whether use of alternatives may be authorized only for a single inspection interval.

We recommend that the USNRC revise the final rule to clarify that alternatives approved in accordance with 10 CFR 50.55a(z) may be used for the duration of the code of record interval.