

**ENERGY
NORTHWEST**

August 12, 1999
GO2-99-155

P.O. Box 968 ■ Richland, Washington 99352-0968

Docket No. 50-397

U.S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, DC 20555

Gentlemen:

Subject: **WNP-2 OPERATING LICENSE NPF-21
INSERVICE INSPECTION PROGRAM PLAN RELIEF REQUEST
2ISI-18 AND 2ISI-19**

This letter submits two Inservice Inspection (ISI) Program Plan relief requests for NRC review and approval. Relief Request 2ISI-18 (Attachment 1) proposes to use the existing WNP-2 written practice for the qualification and certification of personnel that perform nondestructive examinations as an alternative to the development and administration of a second written practice, regarding the above, for examinations of the containment vessel. The NRC evaluated a similar request from the Duane Arnold Energy Center (TAC No. MA0419) and on April 16, 1998, approved the relief request. The safety evaluation concluded the proposed alternative provided for qualified examiners.

Relief Request 2ISI-19 (Attachment 2) proposes to eliminate reexamination of containment vessel flaws or areas of degradation after the flaw or degradation is repaired.

Relief is requested in accordance with 10 CFR 50.55a(a)(3)(i), as the proposed alternatives provide an acceptable level of quality and safety.

Staff review and approval is requested prior to September 1, 2000, to support the Spring 2001 refueling outage. Should you have any questions or desire additional information regarding this issue, please call me or Mr. PJ Inserra at (509) 377-4147.

Respectfully,

W. W. Coleman for

RL Webring
Vice President, Operations Support/PIO
Mail Drop PE08

190016

Attachments

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PDR ADOCK 05000397
G PDR

A047/1

cc: EW Merschoff - NRC RIV
JS Cushing - NRC NRR
NRC Sr. Resident Inspector - 927N

DL Williams - BPA/1399
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Requirement for Which Relief is Requested

ASME Section XI, 1992 Edition, 1992 Addenda, Subarticle IWA-2300.

Section XI Requirements

ASME Section XI, 1992 Edition, 1992 Addenda, Subarticle IWA-2300, requires examination personnel to be qualified and certified to the requirements of ANSI/ASNT CP-189.

Code Requirement from Which Relief is Requested

Relief is requested from the provisions of Subarticle IWA-2300, "Qualifications of Nondestructive Examination Personnel." This Subarticle requires personnel that perform nondestructive examinations be qualified and certified using a written practice in accordance with ANSI/ASNT CP-189, "Standard for Qualification and Certification of Nondestructive Testing Personnel," as amended by the requirements of ASME Section XI.

Basis for Requesting Relief

Relief is requested in accordance with 10 CFR 50.55a(a)(3)(i) in that the proposed alternative provides an acceptable level of quality and safety.

The requirements regarding examination of Code Class 1, 2, and 3 components (10 CFR 50.55a) reference the 1989 Edition of ASME Section XI. The qualification of nondestructive examination personnel is addressed in Subarticle IWA-2300 of the 1989 Edition and requires a written practice based on SNT-TC-1A, as amended by the requirements of Subarticle IWA-2300. We have implemented a qualification program based on the above requirements.

In a Federal Register Notice dated August 8, 1996 (61 Federal Register 41303), the NRC amended 10 CFR 50.55a to incorporate by reference the 1992 Edition with 1992 Addenda of Subsections IWE and IWL of Section XI of the ASME Boiler and Pressure Vessel Code. This change represents an addition to the Inservice Inspection (ISI) Program Plan. The ASME Section XI, 1992 Edition, 1992 Addenda requires the use of a written practice based on the requirements of ANSI/ASNT CP-189, as amended by the requirements of Subarticle IWA-2300, to implement Subsection IWE. This is a duplication of the existing written practice and existing qualification and certification program for personnel that perform nondestructive examinations of Code Class 1, 2, and 3 components (as noted in the paragraph immediately above).

Alternative Requirements

Examinations required by Subsection IWE shall be conducted by personnel qualified and certified to a written practice based on the current ISI Section XI Code of record for

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subsections IWB, IWC, IWD, and IWF for the remainder of the second ISI inspection interval. The current Code for the second inspection interval is the 1989 Edition, no Addenda. These alternate requirements will be revised to the latest approved written practice when the ISI Program Plan for IWB, IWC, IWD, and IWF is revised for the third ISI inspection interval. The revision is anticipated to be completed in 2005.

In addition to the current written practice for personnel performing examinations of Code Class 1, 2, and 3 components, as described in the previous paragraph, the following will be included in the written practice for IWE personnel qualification:

- 1) A near distance test chart that meets the requirements of IWA-2321 and IWA-2322 (ASME Section XI, 1992 Edition, 1992 Addenda) will be used for annual demonstration of natural or corrected near distance visual acuity.
- 2) Personnel performing IWE examinations will receive instructions pertinent to IWE components.

Justification for the Granting of Relief

We will revise the written practice for qualifying and certifying examination personnel to ASME Section XI, IWA-2300, 1992 Edition, 1992 Addenda, or later, when the ISI program is revised for the third ISI inspection interval during 2005.

The alternative incorporates provisions of IWA-2321 and IWA-2322, of the 1992 Code, for vision and illumination requirements as alternate visual near distance requirements for the remainder of the second ISI inspection interval.

The alternative provides qualification and certification to the same requirements used for personnel performing examinations of Code Class 1, 2, and 3 components in addition to specific requirements for visual acuity for IWE component examinations. The alternative meets, as a minimum, the requirements for examinations now being performed on Code Class 1, 2, and 3 components, therefore, providing an adequate level of quality and safety.

Visual examination is the primary nondestructive examination method required by Subsection IWE. Neither CP-189 or SNT-TC-1A specifically includes visual examination, thus, the Code requires qualification and certification to comparable levels as defined in CP-189 or SNT-TC-1A, as applicable, and the employer's written practice.

The latest Edition of ASME Section XI (1998) no longer requires nondestructive examination examiners to be qualified or certified using CP-189 for performance of visual containment examinations (IWE-2330). The 1998 Edition of Section XI requires that the Owner establish a qualification and certification program.

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The current requirements represent a hardship to WNP-2, and its vendors, regarding the development and maintenance of an additional, separate written practice. Development and administration of a second program would not enhance safety or quality and would serve as a burden, particularly in developing a second written practice, tracking of certifications, and duplication of paperwork. This duplication would also apply to NDE vendor programs. Updating to the 1992 Edition, 1992 Addenda, for subsections IWB, IWC, IWD, and IWF would require a request for relief similar to this one. The alternate, as a minimum, has the same requirements for performing visual examination of Code Class 1, 2, and 3 components.

Implementation Schedule

Relief is requested for the first ten-year containment inspection interval for WNP-2.

Bibliography

1. Letter dated December 19, 1997, Kenneth E. Peveler to NRC, "Duane Arnold Energy Center, Docket No: 0-331, Op. License No: DPR-49, Relief Request MC-R001"
2. Letter dated March 18, 1998, Kenneth E. Peveler to NRC, "Duane Arnold Energy Center, Docket No: 0-331, Op. License No: DPR-49, Relief Request MC-R001"
3. Letter dated April 16, 1998, Richard P. Savio to Mr. Lee Liu, "Evaluation of Relief Request MC-R001 Related to Qualification Requirements for Non-Destructive Examination Personnel Performing Containment Inspections - Duane Arnold Energy Center (TAC No. MA0419)"
4. Letter dated April 23, 1998, Richard J. Laufer to Mr. Lee Liu, "Correction to Evaluation of Relief Request MC-R001 Related to Qualification Requirements for Non-Destructive Examination Personnel Performing Containment Inspections - Duane Arnold Energy Center (TAC No. MA0419)"
5. ASME Boiler and Pressure Vessel Code, Section XI, 1989 Edition, no Addenda
6. ASME Boiler and Pressure Vessel Code, Section XI, 1992 Edition, 1992 Addenda
7. ASME Boiler and Pressure Vessel Code, Section XI, 1998 Edition, no Addenda

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Components for Which Relief is Requested

All components within the examination boundary of Subarticle IWE as listed in the ISI Program Plan.

Section XI Requirements

ASME Section XI, 1992 Edition, 1992 Addenda, IWE-2420(b) and IWE-2420(c) state:

“(b) When component examination results require evaluation of flaws, areas of degradation, or repairs in accordance with IWE-3000, and the component is found to be acceptable for continued service, the areas containing such flaws, degradation, or repairs shall be reexamined during the next inspection period listed in the schedule of the inspection program of IWE-2411 or IWE-2412, in accordance with Table IWE-2500-1, Examination Category E-C.

(c) When the reexaminations required by IWE-2420(b) reveal that the flaws, areas of degradation, or repairs remain essentially unchanged for three consecutive inspection periods, the areas containing such flaws, degradation, or repairs no longer require augmented examination in accordance with Table IWE-2500-1, Examination Category E-C.”

Code Requirement from Which Relief is Requested

Relief is requested from implementing ASME Section XI, 1992 Edition, 1992 Addenda, IWE-2420.

Basis for Requesting Relief

Relief from the above requirements is requested under 10 CFR 50.55a(a)(3)(i) in that the proposed alternative provides an acceptable level of quality and safety.

Alternative Requirement

The requirements of IWE-2420, ASME Section XI, 1998 Edition will be used.

Justification for the Granting of Relief

The current requirement is ambiguous, contradicts IWE-3122, and does not follow similar requirements for ASME Section XI, Code Class 1, 2, and 3 components.

When a component is subjected to an inservice examination, ASME Section XI provides four means for acceptance in IWE-3122. They are:

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- 1) IWE-3122.1 - results do not exceed acceptance standards of IWE-3400;
- 2) IWE-3122.2 - results exceed the acceptance standards, but the component is repaired;
- 3) IWE-3122.3 - results exceed the acceptance standards, but the component is replaced;
- 4) IWE-3122.4 - results exceed the acceptance standards, but the component is evaluated as acceptable for continued service.

In accordance with IWE-3122, only when an unacceptable examination result is evaluated and determined acceptable for continued service is a reexamination required during the next inspection period. Contrary to this, the requirements of IWE-2420 would require reexamination during the next inspection period for components that were repaired. Performing successive examinations on a component that has been repaired is not warranted since the component has been restored to an acceptable condition.

Table 1 compares the 1992 Edition, 1992 Addenda, with the 1998 Edition.

The proposed alternate requirement removes the ambiguity and conflict between IWE-3122 and IWE-2420.

The ASME has approved the proposed alternate.

Implementation Schedule

This relief request will be implemented during the first containment inspection interval.



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TABLE 1

ASME Section XI, 1992 Edition, 1992 Addenda	ASME Section XI, 1998 Edition	Comments
IWE-2420(a) The sequence of component examinations established during the first inspection interval shall be repeated during each successive inspection interval, to the extent practical.	IWE-2420(a) The sequence of component examinations established during the first inspection interval shall be repeated during each successive inspection interval, to the extent practical.	No change.
IWE-2420(b) When component examination results require evaluation of flaws, areas of degradation, or repairs in accordance with IWE-3000, and the component is found to be acceptable for continued service, the areas containing such flaws, degradation, or repairs shall be reexamined during the next inspection period listed in the schedule of the inspection program of IWE-2411 or IWE-2412, in accordance with Table IWE-2500-1, Examination Category E-C.	IWE-2420(b) When component examination results require evaluation of flaws, <u>or</u> areas of degradation, or repairs in accordance with IWE-3000, and the component is found to be acceptable for continued service, the areas containing such flaws, <u>or</u> degradation, or repairs shall be reexamined during the next inspection period listed in the schedule of the inspection program of IWE-2411 or IWE-2412, in accordance with Table IWE-2500-1, Examination Category E-C.	Removed repairs from reexamination requirement.
IWE-2420(c) When the reexamination required by IWE-2320(b) reveal that the flaws, areas of degradation, or repairs remain essentially unchanged for three consecutive inspection periods, the areas containing such flaws, degradation, or repairs no longer require augmented examination in accordance with Table IWE-2500-1, Examination Category E-C.	IWE-2420(c) When the reexamination required by IWE-2320(b) reveal that the flaws, <u>or</u> areas of degradation, or repairs remain essentially unchanged for <u>the next three</u> consecutive inspection periods, <u>these</u> areas containing such flaws, degradation, or repairs no longer require augmented examination in accordance with Table IWE-2500-1, Examination Category E-C.	Removed repairs from reexamination requirement. Reduced reexamination periods from three to one.