



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

December 9, 2009

Mr. David A. Heacock
President and Chief Nuclear Officer
Dominion Nuclear Connecticut, Inc.
Innsbrook Technical Center
5000 Dominion Boulevard
Glen Allen, VA 23060-6711

SUBJECT: MILLSTONE POWER STATION, UNIT NO. 3 – REQUEST FOR ADDITIONAL
INFORMATION REGARDING THIRD 10-YEAR INTERVAL INSERVICE
INSPECTION PROGRAM RELIEF REQUEST IR-3-10 (TAC NO. ME1262)

Dear Mr. Heacock:

By letter dated April 28, 2009 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML091310666), Dominion Nuclear Connecticut, Inc. (DNC), submitted Relief Request IR-3-10 for Millstone Power Station, Unit No. 3 (MPS3). DNC requested relief from certain examination requirements of the American Society of Mechanical Engineers Boiler and Pressure Vessel Code (ASME Code), Section XI, and proposed alternative examination criterion for the third 10-year in-service inspection interval which began on April 23, 2009, and is scheduled to end on April 22, 2019. IR-3-10 pertains to the frequency of the volumetric examinations in lieu of bare metal visual examinations of the reactor vessel hot leg and cold leg nozzle-to-safe end welds at MPS3. To complete its review, the Nuclear Regulatory Commission staff requests responses to the enclosed questions.

The draft questions were sent to Mr. William Bartron, of your staff, to ensure that the questions were understandable, the regulatory basis for the questions was clear, and to determine if the information was previously docketed. On December 3, 2009, Mr. Mohamed Elmaghrabi, of your staff, agreed that you would provide a response by January 4, 2010.

If you have any questions regarding this matter, please contact me at 301-415-1603.

Sincerely,

A handwritten signature in black ink, appearing to read "Carleen J. Sanders".

Carleen J. Sanders, Project Manager
Plant Licensing Branch I-2
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. 50-423

Enclosure:
As stated

cc w/encl: Distribution via Listserv

REQUEST FOR ADDITIONAL INFORMATION

REQUEST IR-3-10 ALTERNATIVE EXAMINATION CRITERIA FOR THE VISUAL
EXAMINATIONS OF REACTOR COOLANT SYSTEM HOT LEG AND COLD LEG
NOZZLE-TO-SAFE END WELDS

DOMINION NUCLEAR CONNECTICUT, INC.

MILLSTONE POWER STATION, UNIT NO. 3

DOCKET NO. 50-423

By letter dated April 28, 2009 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML091310666), Dominion Nuclear Connecticut, Inc. (DNC or the licensee), submitted Relief Request IR-3-10 for Millstone Power Station, Unit No. 3 (MPS3). DNC requested relief from certain examination requirements of the American Society of Mechanical Engineers Boiler and Pressure Vessel Code (ASME Code), Section XI, and proposed alternative examination criterion for the third 10-year in-service inspection interval which began on April 23, 2009, and is scheduled to end on April 22, 2019. IR-3-10 pertains to the frequency of the volumetric examinations in lieu of bare metal visual examinations of the reactor vessel (RV) hot leg and cold leg nozzle-to-safe end welds at MPS3. To complete its review, the Nuclear Regulatory Commission (NRC) staff requests responses to the questions presented below.

1. The NRC staff plans to perform a confirmatory flaw analysis to determine the estimated time for leak and rupture for the RV hot leg nozzle-to-safe end welds at MPS3. Please provide the distance from the center of the safe-end-to-nozzle weld to the center of the safe-end-to-pipe weld.
2. DNC proposes to volumetrically inspect the RV cold leg nozzle-to-safe end welds at a frequency of every third refueling outage in lieu of Code Case N-722, "Additional Examinations for PWR Pressure Retaining Welds in Class 1 Components Fabricated With Alloy 600/82/182 Materials," requirements. Code Case N-722 requires visual examinations of RV cold leg nozzle-to-safe end welds once per interval. Please clarify the reasons for requesting relief for the cold leg nozzle-to-safe end welds, since the proposed examination frequency appears to satisfy the requirements of Code Case N-722.
3. Page 3, Section 4 of IR-3-10 states that, "[a]ttachment 2 contains Technical Evaluation M3-EV-08-0016 . . ." Attachment 2 of IR-3-10 contains Technical Evaluation M3-EV-08-0018. Please explain the discrepancy.
4. IR-3-10 does not mention the percent volume coverage achieved during the volumetric examinations of the subject welds by ultrasonic testing (UT) in the spring 2007 outage. Please state what percent volume coverage was obtained by UT in the spring 2007 outage.

Enclosure

5. Please discuss the details of the UT examinations performed in the spring 2007 outage and any indications detected including fabrication flaws and/or flaws that were not rejectable under IWB-3514 acceptance standards.
6. DNC has proposed to volumetrically inspect the RV hot leg nozzle-to-safe end welds at the frequency of every other refueling outage in lieu of the Code Case N-722, "Additional Examinations for PWR [pressurized water reactor] Pressure Retaining Welds in Class 1 Components Fabricated With Alloy 600/82/182 Materials Section XI, Division 1," which requires inspection every outage. Please articulate the basis for not performing the examinations every outage in terms of either acceptable level of quality and safety per Title 10 of the *Code of Federal Regulations* (10 CFR) 50.55a(a)(3)(i) or hardship without a compensating increase in the level of quality and safety per 10 CFR 50.55a(a)(3)(ii).
7. Page 1, Section 3, of Relief Request IR-3-10, indicates that the applicable code examination category is Examination Category B-P and applicable inspection item is B15.10. The applicable code requirement is Code Case N-722, which does not cite Examination Category B-P and Item Number B15.10. Please clarify IR-3-10 to reflect that the applicable inspection items for which an alternative is being requested are Item Numbers B15.90 and B15.95 of the ASME Code, Section XI, Code Case N-722.
8. On page 1, Section 3, of Relief Request IR-3-10, the first paragraph states that the applicable code requirement is Examination Category B-P. The applicable code requirement is Code Case N-722, which does not cite Examination Category B-P. Please clarify IR-3-10 to reflect that Examination Category B-P is not the applicable code requirement.
9. Please clarify whether the VT-2 examination for leakage, in accordance with IWA-5241(b) requirement, will also be performed on the subject welds each refueling cycle. In the event leakage did occur through the weld, boric acid buildup may be detected by this examination.

December 9, 2009

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INFORMATION REGARDING THIRD 10-YEAR INTERVAL INSERVICE
INSPECTION PROGRAM RELIEF REQUEST IR-3-10 (TAC NO. ME1254)

Dear Mr. Heacock:

By letter dated April 28, 2009 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML091310666), Dominion Nuclear Connecticut, Inc. (DNC), submitted Relief Request IR-3-10 for Millstone Power Station, Unit No. 3 (MPS3). DNC requested relief from certain examination requirements of the American Society of Mechanical Engineers Boiler and Pressure Vessel Code (ASME Code), Section XI, and proposed alternative examination criterion for the third 10-year in-service inspection interval which began on April 23, 2009, and is scheduled to end on April 22, 2019. IR-3-10 pertains to the frequency of the volumetric examinations in lieu of bare metal visual examinations of the reactor vessel hot leg and cold leg nozzle-to-safe end welds at MPS3. To complete its review, the Nuclear Regulatory Commission staff requests responses to the enclosed questions.

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Sincerely,

/ra/

Carleen J. Sanders, Project Manager
Plant Licensing Branch I-2
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. 50-423

Enclosure:
As stated

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*By Memos dated

OFFICE	LPL1-2/PM	LPL1-2/LA	DCI/CPNB/BC	LPL1-2/BC
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DATE	12/03/09	11/24/2009	10/09/2009; 11/26/2009	12/09/09

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