

May 10, 2007

U.S. Nuclear Regulatory Commission Washington, D.C. 20555-0001

ATTENTION:

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SUBJECT:

Nine Mile Point Nuclear Station Unit No. 1; Docket No. 50-220

Request for Use of Later Edition to ASME Code, Section XI for the Nine Mile Point Unit 1 Inservice Inspection Program

REFERENCE:

Telecon Between Nine Mile Point Nuclear Station and NRR/NRC (D. Pickett, M. David, M. Mitchell, J. White, T. Burns, and B. Bickett), on April 05, 2007, to "Discuss Inservice Inspection Results for Nine

Mile Point Unit 1 Reactor Pressure Vessel Nozzle N2D."

Pursuant to 10 CFR 50.55a(g)(4)(iv), and as clarified in NRC Regulatory Issue Summary (RIS) 2004-12, "Clarification on Use of Later Editions and Addenda to the ASME OM Code and Section XI," Nine Mile Point Nuclear Station, LLC (NMPNS) hereby requests NRC approval to use a later edition of the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code, Section XI at Nine Mile Point Unit 1.

This request is associated with an identified flaw indication discovered during the Alternate Risk-Informed Inservice Inspection (ISI) Program's automated ultrasonic examination of the reactor pressure vessel (RPV) nozzle N2D (reactor recirculation) to safe end weld 32-WD-164, during the recently completed refuel outage.

Attachment (1) provides NMPNS's request for approval to use a later Edition of the ASME Code, SectionXI; Attachment (2) provides the results of the analytical evaluation of the subject flaw for your review and approval; Attachment (3) contains the results of an independent review of the reported flaw indication (weld 32-WD-164) performed by the Electric Power Research Institute's (EPRI)

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Nondestructive Examination (NDE) Program personnel; and Attachment (4) contains the automated ultrasonic examination summary report for weld 32-WD-164.

Should you have any questions regarding this matter, please contact M. H. Miller, Licensing Director, at (315) 349-5219.

Very truly yours,

Gary Jay Laughlin

Manager Engineering Services

GJL/GB/

Attachments:

- (1) Request for Approval to Use Later Edition of the ASME Code.
- (2) Flaw Evaluation of the Nine Mile Point Unit 1 Recirculation Inlet Nozzle-to-Safe End Weld (32-WD-164) Indication and Allowable Flaw Size Calculation, Revision 1, dated April 4, 2007.
- (3) Evaluation of Dissimilar Metal Weld Examinations Performed at Nine Mile Point Unit 1 During Refueling Outage 19 (N1R19).
- (4) Automated Utrasonic Weld Examination Summary Report For Recirculation Inlet Nozzle-to-Safe End Weld No. 32-WD-164.

cc: S. J. Collins, NRC Regional Administrator, Region I

L. M. Cline, NRC Senior Resident Inspector

M. J. David, NRR Project Manager

M. A. Mitchell, NRR

J. R. White, NRC Region 1

T. F. Burns, NRC Region 1

B. Bickett, NRC Region 1

ATTACHMENT (1)

REQUEST FOR APPROVAL TO USE LATER EDITION OF THE ASME CODE

ATTACHMENT (1) REQUEST FOR APPROVAL TO USE LATER EDITION OF THE ASME CODE

I. ASME CODE COMPONENT(S) AFFECTED

System:

Reactor Recirculation System

Weld Number:

32-WD-164

Description:

Nozzle-to-Safe End Weld

Nozzle Location:

RPV Inlet Nozzle N2D

Nozzle Material:

SA 336 316 NG

Safe End Material: 316 l

Pipe Size & Thickness of weld: 28.0" Dia., 1.70" t

II. APPLICABLE CODE EDITION AND ADDENDA

The Code of Record for the Nine Mile Point Unit 1 (NMP1) Third Inservice Inspection Interval is the ASME Code, Section XI, 1989 Edition, no Addenda.

III. PROPOSED SUBSEQUENT CODE EDITION AND ADDENDA

NMP1 proposes to use 1995 ASME Boiler and Pressure Vessel Code, Section XI, Subsection IWB, "Class 1 Components," Article 3000, "Acceptance Standards," Subarticle 3600, "Analytical Evaluation of Flaws," Subsubarticle 3640, "Evaluation Procedures and Acceptance Criteria for Austenitic Piping" by reference in 10 CFR 50.55a(b)(2) with the following limitations. The request for use and application of Subsubarticle 3640 is specifically limited to the Reactor Recirculation System Nozzle-to-Safe End Weld No. 32-WD-164 and the evaluation of the associated planar flaw indication as detailed in "Flaw Evaluation of the Nine Mile Point Unit 1 Recirculation Inlet Nozzle-to-Safe End Weld (32-WD-164) Indication and Allowable Flaw Size Calculation" (Attachment 2).

IV. RELATED REQUIREMENTS

The proposed use of the 1995 Edition of the Code does not affect other parts of the Code. All paragraphs, subparagraphs and related acceptance standards and requirements listed under Subsubarticle 3640 will be met with implementation of ASME Code, Section XI 1995 Edition. Pursuant to 10 CFR 50.55a(g)(4)(iv), the use of a later Code edition is requested on the basis that the proposed alternative would provide an acceptable level of quality and safety.

V. BASIS FOR REQUEST

NMP1 recently completed its first refuel outage of the Third Inspection Period of the Third Ten-Year Inservice Inspection Interval. During the outage, NMPNS performed inservice examinations on the reactor recirculation system welds in accordance with the Alternate Risk-Informed Inservice Inspection Program and the ASME Section XI (1989 Edition no Addenda).

ATTACHMENT (1) REQUEST FOR APPROVAL TO USE LATER EDITION OF THE ASME CODE

The automated ultrasonic (UT) examinations were performed by WesDyne, in accordance with ASME Section XI, Appendix VIII (1995 Edition thru 1996 Addenda) as modified by the Performance Demonstration Initiative – Dissimilar Metals (PDI). The examination results identified a surface planar flaw indication on nozzle—to-safe end weld 32-WD-164 located on the N2D recirculation nozzle. The results of the UT examination were compared against the acceptance standards of ASME Section XI, Table IWB-3514-2, "Allowable Planar Flaws" and were determined to exceed the acceptance criteria. Attachment (4) provides the documented results of the WesDyne automated UT weld examination.

NMPNS, through its review of previous examination records and comparison of the flaw indication to the original fabrication radiographs and associated repair records, has determined that the indication is a fabrication type flaw (incomplete fusion). The flaw resulted from previous weld repairs performed during the recirculation piping and safe end replacement activity in 1982-1983. NMPNS also requested the Electric Power Research Institute's (EPRI) Nondestructive Examination (NDE) Program personnel to provide a technical and independent review of the reported flaw indication. Attachment 3 provides the results of the EPRI NDE Center evaluation.

NMPNS, with assistance from Structural Integrity Associates, Inc., performed a flaw evaluation (Attachment 2) in accordance with ASME Code, Section XI, IWB-3600, 1995 Edition. The evaluation results concluded that the flaw would meet the requirements of IWB-3640.

VI. DURATION OF THE PROPOSED REQUEST

NMP1 requests use of the 1995 ASME Code, Section XI, Subsubsection 3640, 1995 Edition for the analysis of the subject flaw in weld No. 32-WD-164 through the remainder of the Third Inservice Inspection Interval.