February 25, 2008

Vice President, Operations
Entergy Nuclear Operations, Inc.
James A. FitzPatrick Nuclear Power Plant
P.O. Box 110
Lycoming, NY 13093

SUBJECT: JAMES A. FITZPATRICK NUCLEAR POWER PLANT – RELIEF REQUEST NO. 2 (RR-2) FROM THE REQUIREMENTS OF AMERICAN SOCIETY OF MECHANICAL ENGINEERS BOILER AND PRESSURE VESSEL CODE SECTION XI, APPENDIX VIII, SUPPLEMENT 10 (TAC NO. MD4754)

Dear Mr. Sir or Madam:

By letter dated February 27, 2007, as supplemented by letter dated February 22, 2008, Entergy Nuclear Operations, Inc. (ENO), submitted Relief Request No. 2 (RR-2) for the Fourth Inservice Inspection (ISI) Interval Inspection Program Plan at the James A. FitzPatrick Nuclear Power Plant (JAFNPP). ENO has requested relief from requirements of the American Society of Mechanical Engineers Boiler and Pressure Vessel Code (ASME Code), Section XI, "Rules for Inservice Inspection of Nuclear Power Plant Components," 2001 Edition with 2003 Addenda, related to the qualification for dissimilar metal piping welds.

The Nuclear Regulatory Commission (NRC) staff has reviewed your request as documented in the enclosed safety evaluation. Based on its review, the NRC staff concludes that the proposed alternatives provide an acceptable level of quality and safety. Therefore, pursuant to Title 10 of the *Code of Federal Regulations* 50.55a(a)(3)(i), the proposed alternative in RR-2 is authorized for the fourth 10-year ISI Interval which ends on December 31, 2017. Although the current license for JAFNPP expires on October 17, 2014, the licensee has applied for license renewal.

If you have any questions regarding this matter, please contact Adrian Muñiz at 301-415-4093.

Sincerely,

/RA/

Mark G. Kowal, Chief
Plant Licensing Branch I-1
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. 50-333

Enclosure:
As stated

cc w/encl: See next page

February 25, 2008

Vice President, Operations
Entergy Nuclear Operations, Inc
James A. FitzPatrick Nuclear Power Plant
P.O. Box 110
Lycoming, NY 13093

SUBJECT: JAMES A. FITZPATRICK NUCLEAR POWER PLANT – RELIEF REQUEST NO. 2 (RR-2) FROM THE REQUIREMENTS OF AMERICAN SOCIETY OF MECHANICAL ENGINEERS BOILER AND PRESSURE VESSEL CODE SECTION XI, APPENDIX VIII, SUPPLEMENT 10 (TAC NO. MD4754)

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As stated
cc w/encl: See next page
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SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO RELIEF REQUEST NO. 2 (RR-2)

FOR THE FOURTH 10-YEAR INTERVAL OF THE INSERVICE INSPECTION PROGRAM

ENTERGY NUCLEAR OPERATIONS, INC.

JAMES A. FITZPATRICK NUCLEAR POWER PLANT

DOCKET NO. 50-333

## 1.0 INTRODUCTION

By letter dated February 27, 2007, as supplemented by letter dated February 22, 2008, Entergy Nuclear Operations, Inc. (ENO), submitted the James A. FitzPatrick Nuclear Power Plant (JAFNPP) fourth 10-year Inservice Inspection (ISI) Interval Program Plan and associated relief requests.

ENO requested relief from requirements of the American Society of Mechanical Engineers Boiler and Pressure Vessel Code (ASME Code), Section XI, "Rules for Inservice Inspection of Nuclear Power Plant Components," 2001 Edition with 2003 Addenda, related to the qualification for dissimilar metal piping welds (DMWs). The proposed relief would implement the use of modifications/changes to ASME Code, Section XI, Appendix VIII, Supplement 10, through the Performance Demonstration Initiative (PDI) program as an alternative for ultrasonic test (UT) examination of DMWs during the JAFNPP fourth ISI 10-year interval.

## 2.0 REGULATORY REQUIREMENTS

Pursuant to Title 10 of the *Code of Federal Regulations* (10 CFR) Section 50.55a(g)(4), ASME Code Class 1, 2, and 3 components (including supports) must meet the requirements, except the design and access provisions and the pre-service examination requirements, set forth in the ASME Code, Section XI, "Rules for ISI of Nuclear Power Plant Components," to the extent practical within the limitations of design, geometry, and materials of construction of the components.

The regulations require that in-service examination of components and system pressure tests conducted during the first 10-year interval and subsequent intervals comply with the requirements in the latest edition and addenda of Section XI of the ASME Code incorporated by reference in 10 CFR 50.55a(b) 12 months prior to the start of the 120-month interval, subject to the limitations and modifications listed therein. The ASME Code of record for the current, fourth 10-year ISI interval at JAFNPP is the 2001 Edition with 2003 Addenda.

In accordance with 10 CFR 50.55a(g)(6)(ii)(C), the implementation of Supplements 1 through 8, 10 and 11 of Appendix VIII to Section XI, 1995 Edition with the 1996 Addenda of the ASME Code is required on a phased schedule ending on November 22, 2002. Supplement 10 was included in the last phase of implementation and was required to be implemented by November 22, 2002. Additionally, 10 CFR 50.55a(g)(6)(ii)(C)(2) requires licensees implementing the 1989 Edition and earlier editions of Section XI of the ASME Code to implement the 1995 Edition with the 1996 Addenda of Appendix VIII and supplements to Appendix VIII of Section XI of the ASME Code.

Pursuant to 10 CFR 50.55a(a)(3), alternatives to requirements may be authorized by the Nuclear Regulatory Commission (NRC) if the licensee demonstrates that: (i) the proposed alternatives provide an acceptable level of quality and safety, or (ii) compliance with the specified requirements would result in hardship or unusual difficulty without a compensating increase in the level of quality and safety.

## 3.0 TECHNICAL EVALUATION

### 3.1 System/Components Affected

The following table provides a description of JAFNPP Class 1 system/components affected for RR-2.

| JAMES A. FITZPATRICK - CLASS 1 System/Components | | |
|---|---|---|
| REFERENCE | EXAMINATION CATEGORY | EXAMINATION DESCRIPTION |
| ASME Code, Section XI, IWB-2500-1 | B-F | Alternative Requirements to ASME Code, Section XI, Appendix VIII, Supplement 10 for Examination of DMWs in Vessel Nozzles |

Component Numbers: Pressure retaining DMW in vessel nozzles subject to UT examination using procedures, personnel and equipment qualified to ASME Code, Section XI, Appendix VIII, Supplement 10 criteria.

### 3.2 Applicable Code Requirement, Edition and Addenda

The following paragraphs or statements are from ASME Code, Section XI, Appendix VIII, Supplement 10, 2001 Edition with 2003 Addenda and identify the specific requirements that are included in RR-2.

| ASME CODE REQUIREMENTS | |
|---|---|
| Item/Paragraph | ASME CODE, SECTION XI, APPENDIX VIII, SUPPLEMENT 10 |
| 1/Paragraph 1.1(b) | Pipe diameters within a range of 0.9 to 1.5 times a nominal diameter shall be considered equivalent. |
| 2/Paragraph 1.1(d) | All flaws in the specimen set shall be cracks. |
| 3/Paragraph 1.1(d)(1) | At least 50% of the cracks shall be in austenitic material. At least 50% of the cracks in austenitic material shall be contained wholly in weld or buttering material. At least 10% of the cracks shall be in Ferritic material. |

| | |
|---|---|
| | The remainder of the cracks may be in either austenitic or Ferritic material. |
| 4/Paragraph 1.2(b) | The number of unflawed grading units shall be at least twice the number of flawed grading units. |
| 5/Paragraph 1.2(c)(1) and 1.3(c) | At least 1/3 of the flaws, rounded to the next higher whole number, shall have depths between 10% and 30% of the nominal pipe wall thickness. Paragraph 1.4(b) distribution table requires 20% of the flaws to have depths between 10% and 30%. |
| 6/Paragraph 2.0 | First sentence: The specimen inside surface and identification shall be concealed from the candidate. |
| 7/Paragraph 2.2(b) | The regions containing a flaw to be sized shall be identified to the candidate. |
| 8/Paragraph 2.2(c) | For a separate length-sizing test, the regions of each specimen containing a flaw to be sized shall be identified to the candidate. |
| 9/Paragraph 2.3(a) | For the depth sizing test, 80% of the flaws shall be sized at a specific location on the surface of the specimen identified to the candidate. |
| 10/Paragraph 2.3(b) | For the remaining flaws, the regions of each specimen containing a flaw to be sized shall be identified to the candidate. The candidate shall determine the maximum depth of the flaw in each region. |
| 11/Table VIII-S2-1 | Provides the false call criteria when the number of unflawed grading units is at least twice the number of flawed grading units. |

3.3 Reason for Request

Relief is requested to use the following alternative requirements for implementation of ASME Code, Section XI, Appendix VIII, Supplement 10 requirements. Alternative requirements will be implemented through the PDI Program.

3.4 Proposed Alternatives and Basis

ENO proposed alternatives to the ASME Code requirements, which are listed below. See RR-2 for a detailed description of ENO's technical basis.

Item 1 - The proposed alternative to paragraph 1.1(b) states: "The specimen set shall include the minimum and maximum pipe diameters and thicknesses for which the examination procedure is applicable. Pipe diameters within a range of 1/2-inch of the nominal diameter shall be considered equivalent. Pipe diameters larger than 24-inches shall be considered to be flat. When a range of thicknesses is to be examined, a thickness tolerance of $\pm$25 percent is acceptable."

Item 2 - The proposed alternative to paragraph 1.1 (d) states: "At least 60 percent of the flaws shall be cracks, the remainder shall be alternative flaws. Specimens with [intergranular stress corrosion cracking (IGSCC)] shall be used when available. Alternative flaws, if used, shall provide crack-like reflective characteristics and shall be limited to the case where implantations of cracks produce spurious reflectors that are uncharacteristic of actual flaws.
Alternative flaw mechanisms shall have a tip width of less than or equal to 0.002-inches. Note, to avoid confusion the proposed alternative modifies instances of the term 'cracks' or 'cracking' to the term 'flaws' because of the use of alternative flaw mechanisms."

Item 3 - The proposed alternative to paragraph 1.1(d)(1) states: "At least 80% of the flaws shall be contained wholly in weld or buttering material. At least one and a maximum of 10% of the flaws shall be in ferritic base material. At least one and a maximum of 10% of the flaws shall be in austenitic base material."

Item 4 - The proposed alternative to paragraph 1.2(b) states: "Detection sets shall be selected from Table VIII-S10-1. The number of unflawed grading units shall be at least one and a half times the number of flawed grading units."

Item 5 - The proposed alternative to the flaw distribution requirements of paragraph 1.2(c)(1) (detection) and 1.3(c) (length) will use the distribution table of paragraph 1.4(b) (depth) below for all qualifications.

| Flaw Depth (% Wall Thickness) | Minimum Number of Flaws |
|---|---|
| 10-30% | 20% |
| 31-60% | |
| 61-100% | |

Item 6 - The proposed alternative to the first sentence of paragraph 2.0 is: "For qualifications from the outside surface, the specimen inside surface and identification shall be concealed from the candidate. When qualifications are performed from the inside surface, the flaw location and specimen identification shall be obscured to maintain a "blind test"."

Items 7 and 8 - The proposed alternative to paragraphs 2.2(b) and 2.2(c) states: "The regions containing a flaw to be sized may be identified to the candidate."

Items 9 and 10 - The proposed alternative to paragraph 2.3(a) and 2.3(b) states: ". . .the regions of each specimen containing a flaw to be sized may be identified to the candidate."

Item 11 - The proposed alternative modifies the acceptance criteria of Table VIII-S2-1. See Table VIII-S2-1 – “Performance Demonstration Detection Test Acceptance Criteria” of RR-2 for a detailed description.

3.5 Alternate Examinations or Tests

In lieu of the requirements of ASME Code, Section XI, Appendix VIII, Supplement 10 of the 2001 Edition with 2003 Addenda the proposed alternative shall be used.

3.6 Duration

Relief is requested for the fourth 10-year interval of the JAFNPP ISI Program, March 1, 2007 through December 31, 2017. Although the current license for JAFNPP expires on October 17, 2014, the licensee has applied for license renewal.

3.5 NRC Staff Evaluation

ENO proposed to use the program developed by the PDI, which modifies selected aspects of the existing ASME Code, Section XI, Appendix VIII, Supplement 10 (ASME Code, Supplement 10) requirements. The NRC staff's evaluation concerning the differences between the ASME Code, Supplement 10 and the PDI program are discussed below.

PARAGRAPH 1.1(b):

The ASME Code, Supplement 10, requirement of "Pipe diameters within a range of 0.9 to 1.5 times the nominal diameter are equivalent" was established for a single nominal diameter. When applying this ASME Code-required tolerance to a range of diameters, the tolerance rapidly expands on the high side. The NRC staff notes, as an example, under the current ASME Code, Supplement 10 requirement, a 5-inch outside diameter pipe would be equivalent to a range of 4.5-to-7.5 inches in diameter and under the proposed PDI program, the equivalent range would be reduced from 4.5-to-5.5 inches in diameter. The NRC staff cites further, that under the ASME Code a 16-inch nominal diameter pipe would be equivalent to a range of 14.4-to-24 inches in diameter and under the proposed PDI program the equivalent range would be significantly reduced to a range from 15.5-to-16.5 inches in diameter.

ENO stated that though the proposed modification is less stringent than the ASME Code for small pipe diameters (<5-inches) typically, smaller pipe diameters have a thinner wall thickness than larger diameter piping, which results in shorter sound path distances reducing the detrimental effects (beam spread) of pipe curvature.

The NRC staff agrees that the proposed alternative will provide increased conservative tolerance results for a range of piping diameters in comparison to the current ASME Code requirement. The NRC staff finds that the differences in tolerance results for smaller diameter piping are not significant. Therefore, the NRC staff finds the proposed alternative acceptable.

PARAGRAPH 1.1(d):

The ASME Code, Supplement 10, requires all flaws to be cracks. ENO stated that implanting a crack requires excavation of the base material on at least one side of the flaw. Manufacturing test specimens containing cracks free of spurious reflections and telltale indicators is exceptionally difficult in austenitic material because the sound beam, which normally passes only through base material, must now travel through weld material on at least one side, producing an unrealistic flaw response. In addition, it is important to preserve the dendritic structure present in field welds that would otherwise be destroyed by the implantation process. To overcome these difficulties the PDI program developed a process, which allows the use of up to 40 percent fabricated flaws as an alternative flaw mechanism under controlled conditions. These fabricated flaws are isostatically compressed which produces ultrasonic reflective characteristics similar to the responses associated with real cracks.

The PDI is selectively installing these fabricated flaws in specimen locations that are unsuitable for real cracks. The NRC staff notes that the PDI presented this process for discussion at public meetings held June 12 through 14, 2001, and January 31 through February 2, 2002, at the Electric Power Research Institute NDE Center, Charlotte, NC. The NRC staff attended the meetings and determined that the process parameters used for manufacturing fabricated flaws

demonstrated the ability to produce acoustic responses similar to those associated with actual cracks. In addition, the NRC staff agrees with ENO's assessment that flaws made in austenitic base material free of spurious reflectors and telltale indicators are difficult to create. Therefore, the NRC staff concludes that the proposed alternative will produce flaws which will be an adequate test of the detection equipment and procedures.

PARAGRAPH 1.1(d)(1):

The ASME Code, Supplement 10, requires that at least 50 percent of the flaws be contained in austenitic material and at least 50 percent of the flaws in the austenitic material shall be contained fully in weld or buttering material. ENO stated that this means as few as 25 percent of the total flaws must be located in the weld or buttering material and that recent field experience indicates that flaws, identified during ISI of DMWs, contained within the weld or buttering material are the likely scenarios. The metallurgical or grain structure of austenitic weld and buttering material represents a much more stringent ultrasonic scenario than that of a ferritic material or austenitic base material.

The NRC staff notes that the proposed 80 percent minimum alternative to the ASME Code requirement for at least 50 percent of the flaws to be contained in the weld metal or buttering material provides a testing scenario reflective of industry experience. In addition, the alternative reduces or minimizes difficulties associated with telltale reflectors common to placing flaws in austenitic base material. Therefore, the NRC staff finds the proposed alternative provides a more rigorous inspection than that required by the ASME Code and, therefore, is acceptable.

PARAGRAPH 1.2(b):

Table VIII-S2-1 of the ASME Code, Supplement 10, requires that detection sets contain the minimum number of flaws in a test set to be 5 with 100 percent detection. The ASME Code also requires the number of unflawed grading units to be two times the number of flawed grading units. The proposed alternative moves requirements to Table VIII-S10-1. ENO states that Table VIII-S10-1 provides a statistically based ratio between the number of unflawed grading units and the number of flawed grading units and that the PDI program reduces the ratio to 1.5 times. This reduces the number of test samples to a more reasonable number from the human factors perspective. However, the statistical basis used for screening personnel and procedures is still maintained at the same level with competent personnel proving successful and less skilled personnel proving unsuccessful.

The NRC staff notes that the proposed detection criteria of Table VIII-S10-1 begins with the minimum number of flawed grading units in a test set being 10 and reduces the number of false calls to one and a half times the number of flawed grading units. The NRC staff finds that the proposed alternative satisfies the pass/fail objective established in ASME Code, Section XI, Appendix VIII, for performance demonstration acceptance criteria.

PARAGRAPHS 1.2(c)(1) and 1.3(c):

For detection and length sizing, the ASME Code, Supplement 10, requires that at least 1/3 of the flaws be located between 10 and 30 percent through-wall thickness and 1/3 located greater than 30 percent through-wall thickness. The remaining 1/3 of the flaws would be located randomly throughout the pipe wall thickness. The proposed flaw depth criteria stipulate that at least 20 percent of the flaws be located in each of the increments of 10-to-30 percent, 31-to-60 percent

and 61-to-100 percent through-wall thickness. In addition, a minimum of 75 percent of the flaws shall be distributed within the range of 10-to-60 percent of wall thickness.

ENO stated that this distribution allows candidates to perform detection, length and depth-sizing demonstrations while simultaneously utilizing the same test set and that the 75 percent requirement provides an overall distribution tolerance. The distribution uncertainty decreases the possibilities for testmanship that would be inherent to a uniform distribution. It is possible to achieve the same distribution utilizing the ASME Code requirements, but it is preferable to make the criteria consistent.

The NRC staff finds that the proposed alternative simplifies assembling test sets for detection and sizing qualifications and is more indicative of actual conditions in the field. The proposed alternative does not significantly deviate from, or reduce the level of, detection and length sizing from that required in the ASME Code. Therefore, the NRC staff finds the alternative is acceptable.

PARAGRAPH 2.0:

The ASME Code, Supplement 10, requires that the test specimen inside surface and identification are to be concealed from the candidate. Concealment renders qualifications conducted from the inside surface of the specimen impossible. The ASME Code requirement is applicable to test specimens used for qualification performed from the outside surface only. The alternative requires that tests on the outside surface are to be conducted with the inside surface concealed. In addition, when tests are conducted from the inside surface of the specimen the flaws shall be obscured from the candidate.

The NRC staff concludes that the intent behind the concealment of the inside surface of the specimen is to assure that tests conducted from the outside are blind examinations that do not provide flaw location information. Furthermore, the proposed alternative obscures the flaw location and specimen identification from the candidate for examinations performed from the inside surface in order to maintain a “blind” examination. The NRC staff finds that the alternative requirements differentiate between the outside and inside surfaces of the test specimen, are more useful for testing purposes and remain as conservative as the ASME Code requirements, therefore, are acceptable.

PARAGRAPHS 2.2(b) and 2.2(c):

The ASME Code, Supplement 10, requires that the location of flaws added to the test set for length sizing shall be identified to the candidate. The PDI program modifies identifying the location of additional flaws as an option in lieu of a requirement. ENO states that this option provides an additional element of difficulty to the testing process because the candidate would be expected to demonstrate the skill of detecting and sizing flaws over an area larger than a specific location.

The NRC staff finds that the proposed alternative is more conservative and will provide an additional element of difficulty to the testing process, since the candidate would be expected to demonstrate the skill of detecting and sizing flaws over a larger area in comparison to a specific region. The NRC staff finds the alternative, if utilized, would require the demonstration of a higher level of skill than that currently required by the ASME Code and is, therefore, acceptable.

PARAGRAPH 2.3(a):

The ASME Code, Supplement 10, requires that 80 percent of the flaws be sized in a specific location that is identified to the candidate. The PDI program permits depth sizing and detection tests to be conducted separately or concurrently. In addition, for depth sizing tests conducted separately, the test administrator is provided with the option of not identifying flaw locations. Furthermore, the maximum depth of the flaw in each location must be identified.

ENO states that the proposed alternative changes the identification of flaws from a "shall" to a "may" which modifies this requirement from a specific area to a more generalized region to ensure security of samples. In order to maintain a blind test, the location of flaws cannot be shared with the candidate. The proposed alternative is more conservative than the Code requirements.

The NRC staff finds that the proposed alternative will provide an additional element of difficulty to the testing process, since the candidate would be expected to demonstrate the skill of detecting and sizing flaws in an unknown location. The NRC staff finds the proposed alternative would require the demonstration of a higher level of skill than that currently required by the ASME Code and is, therefore, acceptable.

PARAGRAPH 2.3(b):

The ASME Code, Supplement 10, requires that the location of flaws added to the test set for depth sizing shall be identified to the candidate. The PDI program requires identifying the location of additional flaws as an option. ENO states that the proposed alternative changes the "shall" to a "may" which modifies this from a specific area to a more generalized region to ensure security of samples. The alternative is more conservative than the Code requirements.

The NRC staff finds that the proposed alternative will provide an additional element of difficulty to the testing process since the candidate would be expected to demonstrate the skill of finding and sizing flaws in an area larger than a specific location. The NRC staff finds the alternative would require the demonstration of a higher level of skill than that currently required by the ASME Code and is, therefore, acceptable.

TABLE VIII-S2-1:

The proposed alternative modifies the acceptance criteria of Table VIII-S2-1 and presents the modified acceptance criteria in Table VIII-S10-1 as follows:

TABLE VIII-S10-1
PERFORMANCE DEMONSTRATION DETECTION TEST
ACCEPTANCE CRITERIA

| Detection Test Acceptance Criteria | | False Call Test Acceptance Criteria | |
|---|---|---|---|
| Number of Flawed Grading Units | Minimum Detection Criteria | Number of Unflawed Grading Units | Maximum Number of False Units |
| ~~5~~ | ~~5~~ | ~~10~~ | ~~0~~ |
| ~~6~~ | ~~6~~ | ~~12~~ | ~~1~~ |
| ~~7~~ | ~~6~~ | ~~14~~ | ~~1~~ |
| ~~8~~ | ~~7~~ | ~~16~~ | ~~2~~ |

| | | | | | |
|---|---|---|---|---|---|
| ~~9~~ | ~~7~~ | ~~18~~ | | ~~2~~ | |
| *10* | *8* | ~~20~~ | *15* | ~~3~~ | *2* |
| *11* | *9* | ~~22~~ | *17* | ~~3~~ | *3* |
| *12* | *9* | ~~24~~ | *18* | ~~3~~ | *3* |
| *13* | *10* | ~~26~~ | *20* | ~~4~~ | *3* |
| *14* | *10* | ~~28~~ | *21* | ~~5~~ | *3* |
| *15* | *11* | ~~30~~ | *23* | ~~5~~ | *3* |
| *16* | *12* | ~~32~~ | *24* | ~~6~~ | *4* |
| *17* | *12* | ~~34~~ | *26* | ~~6~~ | *4* |
| *18* | *13* | ~~36~~ | *27* | ~~7~~ | *4* |
| *19* | *13* | ~~38~~ | *29* | ~~7~~ | *4* |
| *20* | *14* | ~~40~~ | *30* | ~~8~~ | *5* |

The ASME Code, Supplement 10, requirements are based on statistical parameters for screening personnel. ENO states that the proposed alternative is identified as new Table VIII-S10-1. It was modified to reflect the reduced number of unflawed grading units and allowable false calls. The proposed alternative increases the minimum number of flawed grading units and reduces the number of unflawed grading units while maintaining the same statistical parameters as the ASME Code.

The NRC staff finds that the proposed alternative provides the same pass/fail screening criteria used to develop the test size tables in Appendix VIII which are also used to create Table VIII-S10-1 in the PDI program. Therefore, the NRC staff determined that the alternative does not significantly impact the false call criteria established in the table and is acceptable.

The NRC staff finds that the differences, discussed above, between the ASME Code and the proposed PDI program, are acceptable modifications to the requirements of ASME Code, Section XI, Appendix VIII, Supplement 10.

## 4.0 CONCLUSION

The NRC staff has reviewed ENO's submittal and determined that the proposed alternative PDI program will provide an acceptable level of quality and safety. ENO proposed modifications/changes to the ASME Code, Section XI, Appendix VIII, Supplement 10, implemented through the PDI program as an alternative to the Supplement 10 qualification requirements for UT examination of DMWs. Therefore, pursuant to 10 CFR 50.55a(a)(3)(i), the proposed alternative in RR-2 is authorized for the fourth 10-year ISI Interval which ends on December 31, 2017. Although the current license for JAFNPP expires on October 17, 2014, the licensee has applied for license renewal.

All other ASME Code, Section XI requirements for which relief was not specifically requested and approved in this relief request remain applicable, including third party review by the Authorized Nuclear Inservice Inspector.

Principal Contributor: D. Tarantino

Date: February 25, 2008