



**FPL**

Florida Power & Light Company, 6501 S. Ocean Drive, Jensen Beach, FL 34957

July 14, 2004

L-2004-149  
10 CFR 50.4  
10 CFR 50.55a

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

Re: St. Lucie Unit 2  
Docket No. 50-389  
In-Service-Inspection Plan  
Third Ten-Year Interval  
Relief Request 8

Pursuant to 10 CFR 50.55a(a)(3)(i), Florida Power & Light Company (FPL) requests approval of Relief Request 8, *Alternative Examination Of Class 3 Piping Base Metal Weld Repairs*. This request is to eliminate the requirement for radiography of Class 3 piping base metal repair welds when repair welds are greater than 10 square inches in area. The subject piping is on the intake cooling water (ICW) system. The details of the 10 CFR 50.55a request are attached.

This Relief Request proposes an alternate that results in repair welds receiving a degree of examination equivalent to that imposed on pipe welds during the construction period. This alternate provides an acceptable level of quality and safety.

Please contact George Madden at 772-467-7155 if there are any questions about this submittal.

Very truly yours,

William Jefferson, Jr.  
Vice President  
St. Lucie Plant

Attachment

WJ/GRM

**10 CFR 50.55a St. Lucie Unit 2  
Third Inspection Interval  
Relief Request Number 8, Revision 0**

**Information to Support NRC Re-Approval of a 10 CFR 50.55a Request  
for Use During a New 10-Year Interval  
Inservice Inspection Program**

**1. Previous 10 CFR 50.55a Request Approved by NRC**

**FPL Relief Request Number: Unit 2 No. 37**

**Applicable ASME Code Components: Intake Cooling Water (ICW) ASME Class 3 lined carbon steel piping and components**

**Request Submittals: FPL letter L-2003-116 dated May 1, 2003 and supplemented by letter L-2003-118 dated May 4, 2003**

**NRC Approval Letter: NRC letter dated May 29, 2003; Subject: Saint Lucie Nuclear Plant, Unit 2 - Safety Evaluation For Relief Request No. 37 Regarding Radiographic Inspection Of Intake Cooling Water System Piping (TAC Nos. MB8732)**

**2. Changes to the Applicable ASME Code Section**

ASME B&PV Code Section XI, 1989 Edition, no Addendum, was applicable for the second inspection interval. Article IWA-4000, paragraph IWA-4120(a) states:

"(a) Repairs shall be performed in accordance with the Owner's Design Specification and the original Construction Code of the component or system. Later Editions and Addenda of the Construction Code or of Section III, either in their entirety or portions thereof, and Code Cases may be used....."

For the third ISI interval, the Code of Record is ASME Section XI 1998 edition through the 2000 addenda. Paragraph IWA-4421 of ASME Section XI 1998 edition through the 2000 addenda has replaced Paragraph IWA-4120(a) of ASME B&PV Code Section XI, 1989 Edition, no Addendum and Paragraph IWA-4421 states:

"(a) Welding, brazing, defect removal and installation activities shall be performed in accordance with the Owner's Requirements and the Construction Code of the component or system, except as provided in (b) and (c) below.

(b) Later Editions and Addenda of the Construction Code or a later different Construction Code, either in its entirety or portions thereof, and Code Cases may be used ..."

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The above stated sections of ASME Section XI 1989 edition and the 1998 edition of ASME Section XI through the 2000 Addenda contain the same requirements. Therefore there are no Code changes that have an effect on this request.

**3. Component Aging Factors**

The examination and repair of the ICW piping is within the scope of the Intake Cooling Water System Inspection Program which is one of the aging management programs described in the PSL FSAR. The ICW piping program is one of many programs that were described in the PSL License Renewal Application. The purpose of the ICW inspection program is to manage the aging effects of loss of material due to various corrosion mechanisms affecting the ICW piping. Applicable aging factors are addressed in the ICW piping program, therefore aging factors do not have an effect on the basis for the request for which re-approval is being sought.

**4. Changes in Technology for [Inspecting or Testing] the Affected ASME Code Component(s)**

The Relief Request does not address limitations with inspection or testing and this item is not applicable. Therefore, changes in technology do not affect the basis for the previous request.

**5. Confirmation of Renewed Applicability**

Pursuant to 10 CFR 50.55a (a)(3)(i), relief is requested from ASME III which requires radiography of lined carbon steel ICW piping base metal repair welds when repair welds are greater than 10 square inches in area and circumferential butt welds in the piping were not examined by radiography.

In accordance with the proposed alternative, repair welds in St. Lucie Unit 2 ICW Class 3 lined carbon steel piping will receive a final surface examination but not radiographic examination, regardless of the surface area of the weld repair. Additionally, when the repair does not penetrate through the piping, the repair excavation area will receive a surface examination prior to welding. Also, where the repair penetrates through the piping, the root pass of the repair weld will receive a surface examination. The alternative inspection requirements provide an acceptable level of quality and safety.

Based on the information provided in the previous 10 CFR 50.55a request, information contained within the NRC approval documents, and information above, the circumstances and basis continue to be applicable to the proposed request.

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**6. Duration of Re-Approved 10 CFR 50.55a Request**

The Relief Request is to remain valid for the remainder of the Third Inservice Inspection Interval.