



MAY 06 2002

L-2002-085
10 CFR 50.55a

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

Re: Turkey Point Units 3 and 4
Docket Nos. 50-250 and 50-251
Alternative Examination for Reactor Pressure Vessel Nozzle Inner Radius
Re-submittal of Relief Request No. 25

Pursuant to 10 CFR 50.55a (a)(3)(i), relief is requested to implement an alternative to the ultrasonic examination requirement of ASME Section XI Table IWB-2500-1, Examination Category B-D, Item B3.100. FPL proposes to perform a visual examination, VT-1 as an alternative method for the inspection of Reactor Pressure Vessel Nozzle Inner Radius.

Florida Power & Light Company (FPL) submitted Relief Request No. 25 previously via letter L-2001-110, dated June 11, 2001. Subsequently, it was revised by letters L-2001-203, dated September 5, 2001, and L-2001-220, dated October 8, 2001. This letter supercedes all previously submitted letters for Relief Request No. 25.

The attached Relief Request No. 25 adds the resolution capability of .001 inch wire in lieu of the Code required resolution. Additionally, it references Table IWB-3512-1 of the 1989 Edition Section XI, which will be utilized for determining the acceptance criteria for the examination.

FPL requests approval of the attached Relief Request No. 25.

Please contact Walter Parker at (305) 246-6632, if there are any questions about this submittal.

Sincerely,

A handwritten signature in black ink, appearing to read 'John P. McElwain', is written over the typed name.

John P. McElwain
Vice President
Turkey Point Plant

Attachment

NRC Regulatory Issue Summary 2001-05 waived the requirements that multiple copies of documents be submitted to the NRC.

A047

Relief Request No. 25
Alternative Examination for Reactor Pressure Vessel Nozzle Inner Radius

I. COMPONENT IDENTIFICATION:

ASME Section XI, Class 1, Examination category B-D, Item B3.100 Reactor Pressure Vessel (RPV) Nozzle Inner Radius Section examined at Turkey Point Units 3 and 4.

II. EXAMINATION REQUIREMENTS:

Rules for Inservice Inspection of Nuclear Power Plant Components, ASME Section XI, 1989 Edition, Table IWB-2500-1, Examination Category B-D for Full Penetration Welds of Nozzles in pressure vessels, Code Item B3.100, Figure IWB-2500-7 (a) through (d).

The following table identifies the inner radii examinations for which relief is requested.

Unit 3	Unit 4
3-DI-A-IRS - Inlet Nozzle Inner Radius	4-DI-A-IRS - Inlet Nozzle Inner Radius
3-DO-A-IRS - Outlet Nozzle Inner Radius	4-DO-A-IRS - Outlet Nozzle Inner Radius
3-DI-B-IRS - Inlet Nozzle Inner Radius	4-DI-B-IRS - Inlet Nozzle Inner Radius
3-DO-B-IRS - Outlet Nozzle Inner Radius	4-DO-B-IRS - Outlet Nozzle Inner Radius
3-DI-C-IRS - Inlet Nozzle Inner Radius	4-DI-C-IRS - Inlet Nozzle Inner Radius
3-DO-C-IRS - Outlet Nozzle Inner Radius	4-DO-C-IRS - Outlet Nozzle Inner Radius

Since examinations of the required areas are performed after removal of the core barrel (during the 10-year ISI), FPL anticipates that essentially 100% of the surface area will be examined.

III. RELIEF REQUESTED:

Pursuant to 10 CFR 50.55a (a)(3)(i), relief is requested from the Ultrasonic (UT) examination requirement of ASME Section XI Table IWB-2500-1, Examination Category B-D, Item B3.100 to implement an alternative examination method. This relief request is applicable to Turkey Point Units 3 and 4. FPL proposes to perform a visual examination, VT-1, as an alternative method for the inspection of RPV Nozzle Inner Radii identified in the table above. The resolution capability of a .001 inch wire will be substituted for the Code required resolution for the examinations. This option is similar to the examination alternative proposed in ASME Section XI Code Case N-648. This alternative examination method will be performed during the third inspection interval.

IV. BASIS FOR RELIEF:

A "White Paper – ISI-99-26" was submitted to the NRC staff by the ASME, Boiler & Pressure Vessel Code, Subcommittee In-service Inspection, - Section XI for the elimination of RPV Nozzle Inside Radius examinations. The Westinghouse Owners Group developed this study and presented the results to the NRC staff in the May 9, 2000 meeting. According to the NRC's summary of the meeting, the staff indicated that an UT examination could be replaced by visual examination, VT-1, for the proposed RPV nozzle inspections on the basis that surveillance is maintained and a visual examination, VT-1, is performed. This examination is superior to the current requirement of the VT-3.

The requirement for the UT examination of the nozzle inner radius regions has been in effect for inspections for many years. However, there have been no inspection findings in any of the reactor vessel nozzles inner radius regions. The original requirement was included because of a cracking event in a non-nuclear vessel, which occurred near the time when the ASME Section XI inspection requirements were being established. As per the "White Paper-ISI-99-26," the failure probability is extremely low under the plant operating conditions and elimination of the RPV nozzle inner radius inspection is not expected to result in a significant increase in risk.

The original requirement, as instituted in the early 1970's, was based on very limited experience in operating nuclear plants. After more than 25 years of operation (over 1000 reactor years), no cracking incidents of any kind have been found in these vessel nozzle inner radius regions. The "White Paper-ISI-99-26" concluded that it is advisable therefore to eliminate this (UT examination) requirement.

The implementation of this relief request will provide to FPL the additional benefits of:

- Reducing the personnel radiation exposure consistent with FPL's ALARA program, and
- Reducing the on-vessel examination time by as much as 6 hours, which will result in significant cost savings.

V. ALTERNATIVE EXAMINATIONS:

1. In lieu of the UT examination requirements of ASME Section XI Table IWB-2500-1, Examination Category B-D, Item B3.100, a visual examination, VT-1, shall be performed. The resolution capability of a .001 inch wire will be substituted in lieu of the Code required resolution for the examinations. FPL will utilize the acceptance criteria of Table IWB-3512-1 of the 1989 Edition of Section XI for the examination.
2. Periodic System Pressure Tests per Category B-P, Table IWB-2500-1

VI. IMPLEMENTATION SCHEDULE:

Third Inservice Inspection Interval

VII. REFERENCES:

1. Nuclear Regulatory Commission Federal Register Part II, Vol. 64, No. 183, Wednesday September 22, 1999, 10 CFR Part 50 Industry Codes and Standards; Amended Requirements; Final Rule.
2. ASME Section XI, 1989 Edition, No Addenda, "Rules For Inservice Inspections of Nuclear Power Plant Components."
3. White Paper – ISI-99-26 "Technical Basis for Elimination of Reactor Vessel Nozzle Inner Radius Inspections."

VIII. ATTACHMENT

None