



JUN 11 2001

L-2001-110  
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 Inside Radius  
Relief Request No. 25

Florida Power & Light Company (FPL) requests approval of the attached Relief Request No. 25.

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

Approval of the above Relief Request is requested by September 2001 to support planning for the next Turkey Point Unit 4 refueling outage scheduled for Spring 2002. Please contact Steve Franzone at (305) 246-6228, if there are any questions about this submittal.

Very truly yours,

R. J. Hovey  
Vice President  
Turkey Point Plant

Attachments (1)

cc: Regional Administrator, Region II, USNRC  
Senior Resident Inspector, USNRC, Turkey Point Plant  
Florida Department of Health and Rehabilitative Services

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**Relief Request No. 25**  
**Alternative Examination for Reactor Pressure Vessel Inside Radius**

**I. COMPONENT IDENTIFICATION:**

ASME Section XI, Class 1, Examination category B-D, Item B3.100 Nozzle Inside Radius  
Section in Reactor Pressure Vessels examined at Turkey Point Units 3 and 4.

**II. EXAMINATION REQUIREMENTS:**

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

**III. RELIEF REQUESTED:**

Pursuant to 10 CFR 50.55a (a)(3)(i), relief is requested to implement an alternative to the  
Ultrasonic (UT) examination requirement of ASME Section XI Table IWB-2500-1,  
Examination Category B-D, Item B3.100. FPL proposes to perform a VT-1, Visual  
Examination, as an alternative method for the inspection of Reactor Pressure Vessel (RPV)  
Inside Radius. These examinations will be performed during the third inspection interval.  
This relief request is applicable to Turkey Point Units 3 and 4.

**IV. BASIS FOR RELIEF:**

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

The requirement for the UT examination of the nozzle inner radius regions has been in effect  
for inspections for many years. There have been no inspection findings in any of the reactor  
vessel nozzles. 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 that elimination of the  
RPV nozzle inner radius inspection would not be expected to result in a significant increase in  
risk.



The original requirement, as instituted in the early 1970's, was a good idea, since there was only limited experience in operating nuclear plants. Today, after some 25 years of operation (over 1000 reactor years), no cracking incidents of any kind in these nozzles inner radius regions have been found whatsoever. It is advisable, therefore, to eliminate this requirement since it is no longer necessary.

The implementation of this relief is also expected to reduce on-vessel examination time by as much as 6 hours, which translates to significant cost savings and reduced personnel radiation exposure.

**V. ALTERNATIVE EXAMINATIONS:**

1. In lieu of an Ultrasonic (UT) examination requirements of ASME Section XI Table IWB-2500-1, Examination Category B-D, Item no. B3.100, a VT-1 visual examination shall be performed per Table IWB-2500-1, Examination Category B-N-1, Item B13.10 utilizing the VT-3 acceptance criteria of IWB-3520.2.
2. Periodic System Pressure Tests per Category B-P, Table IWB-2500-1

**VI. IMPLEMENTATION SCHEDULE:**

Third Inservice Inspection Interval