



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20555

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
OF THE SECOND 10-YEAR INTERVAL INSERVICE INSPECTION PROGRAM PLAN  
FOR  
FLORIDA POWER CORPORATION  
CRYSTAL RIVER NUCLEAR PLANT, UNIT 3  
DOCKET NO. 50-302

1.0 INTRODUCTION

By letter dated February 9, 1988, as supplemented May 25, 1990 and June 7, 1991, Florida Power Corporation (the licensee) submitted its Second 10-Year Interval Inservice Inspection (ISI) Program Plan for Crystal River Unit 3 (CR-3). Technical Specification 4.0.5 for CR-3 states that inservice inspection and testing of the American Society of Mechanical Engineers (ASME) Code Class 1, 2, and 3 components shall be performed in accordance with Section XI of the ASME Boiler and Pressure Vessel Code and applicable Addenda as required by 10 CFR 50.55a(g), except where specific written relief has been granted by the Commission pursuant to 10 CFR 50.55a(g)(6)(i). 10 CFR 50.55a(a)(3) states that alternatives to the requirements of paragraph (g) may be used if (i) the proposed alternatives would provide an acceptable level of quality and safety, or (ii) compliance with the specified requirements would result in hardship or unusual difficulties without a compensating increase in the level of quality and safety. The relief requests included in the licensee's ISI Program Plan were previously approved or found to be unnecessary by the NRC in letters dated April 19, 1988, September 28, 1988, May 30, 1990 and September 13, 1991. Table 1 presents a summary of the relief requests and the status of each as determined by the staff.

Pursuant to 10 CFR 50.55a(g)(4), ASME Code Class 1, 2, and 3 components (including supports) shall meet the requirements, except the design and access provisions and the preservice examination requirements set forth in the ASME Code, Section XI, "Rules for Inservice Inspection 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 inservice examination of components and system pressure tests conducted each 10-year interval 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), on the date 12 months prior to the start of the 120-month inspection interval, subject to the limitations and modifications listed therein. The components (including supports) may meet the requirements

set forth in subsequent editions and addenda of the ASME Code incorporated by reference in 10 CFR 50.55a(b), subject to the limitations and modifications listed therein.

The licensee has prepared the CR-3 Second 10-Year Interval ISI Program Plan to meet the requirements of the 1983 Edition, Summer 1983 Addenda of Section XI of the ASME Boiler and Pressure Vessel Code, with the following exception. The extent of examination for Class 1, Examination Category B-J, and Class 2, Examination Category C-F and C-G, piping welds in the residual heat removal (RHR), emergency core cooling (ECC) and containment heat removal (CHR) have been determined by the requirements of the 1974 Edition, through Summer 1975 Addenda, as permitted for Class 1 and required for Class 2 by 10 CFR 50.55a(b). The staff, with technical assistance from its contractor, the Idaho National Engineering Laboratory (INEL), has evaluated the CR-3 Second 10-Year Interval ISI Program Plan, additional information related to the Program Plan, and the requests for relief from certain ASME Code requirements determined to be impractical for CR-3 during the second inspection interval.

## 2.0 EVALUATION

The ISI Program Plan has been evaluated for (a) application of the correct Section XI Code edition and addenda, (b) compliance with examination and test requirements of Section XI, (c) acceptability of the examination sample, (d) compliance with prior ISI commitments made by the licensee, (e) correctness of the application of system or component examination exclusion criteria, and (f) adequate information in support of requests for relief from impractical Section XI Code requirements. The staff has determined that the licensee's ISI Program Plan reflects compliance with the requirements listed above.

The information provided by the licensee in support of the requests for relief has been evaluated and documented in the attached INEL Technical Evaluation Report (TER) EGG-MS-9896. All requested reliefs have previously been approved or found to be unnecessary by the NRC as noted in Table 1. However, the relief request status differs from the TER referenced above in two cases. For Relief Requests 88-030 and 88-040, the TER lists the status as "evaluated and granted in a letter dated September 28, 1988." However, upon further review of the September 28, 1988 letter, it was found that Relief Requests 88-030 and 88-040 involved Code Cases (N-416 and N-424, respectively) that were approved for general use in NRC Regulatory Guide 1.147, Revision 6. The conclusion of the September 28, 1988 letter was that relief was not required for 88-030 and 88-040. This conclusion is reflected in Table 1 of this report. Since relief is not required in these two cases, Requests for Reliefs 88-030 and 88-040 should be withdrawn from the CR-3 Second 10-Year Interval ISI Program.

### 3.0 CONCLUSION

The staff concludes that the CR-3 Second 10-Year Interval ISI Program Plan, with the additional information provided and the specific written relief, constitutes the basis for compliance with 10 CFR 50.55a(g) and Technical Specification 4.0.5, and is therefore acceptable.

Principal Contributor: T. McLellan

Date: April 13, 1992

TABLE I

SUMMARY OF RELIEF REQUESTS

<u>Relief Request Number</u>	<u>System or Component</u>	<u>Exam. Cat.</u>	<u>Item No.</u>	<u>Volume or Area to be Examined</u>	<u>Required Method</u>	<u>Licensee Proposed Alternative</u>	<u>Relief Request Status</u>
88-010	Recertification of Level II Personnel					Code Case N-356	Granted in letter dated 4/19/88
88-030	Class 2 Piping	C-H				Code Case N-416	Relief not required (Letter dated 9/28/88)
88-040	Certification of Visual Examination Personnel					Code Case N-424	Relief not required (Letter dated 9/28/88)
90-010	Core Flood Nozzle-to-Safe End Weld	B-F	B1.6				Granted in SER dated 5/30/90

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90-020	Core Flood, Make-up and Decay Heat Systems	B-P	B15.51	Class 1 piping	System hydro per IWB-5222		Crated in SER dated 9/13/91
		C-H	C7.20	Class 2 pressure vessels	System hydro per IWC-5222		
90-050	Reactor Coolant Pump	B-L-1	B12.10	Pump casing welds	Volumetric examination		Granted in SER dated 9/13/91
		B-L-2	B12.20	Pump casing internal surfaces	VT-3 visual examination		
90-060	Reactor Pressure Vessel	F-A	F1.30	Support skirt			Granted in SER dated 9/13/91