UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE NUCLEAR REACTOR REGULATION

OF THE SECOND TEN-YEAR INTERVAL INSERVICE INSPECTION

REQUEST FOR RELIEF NO. 92-07

FOR

DUKE POWER COMPANY

OCONEE NUCLEAR STATION, UNIT 3

DOCKET NO. 50-287

1.0 INTRODUCTION

The Technical Specifications for the Oconee Nuclear Station state that the 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). Pursuant to 10 CFR 50.55a(a)(3), alternatives to the requirements of paragraph (g) may be used, when authorized by the NRC, 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.

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 during the second 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 applicable edition of Section XI of the ASME Code for the Oconee Nuclear Station, second 10-year inservice inspection (ISI) interval is the 1980 Edition, through Winter 1980 Addenda. 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.

Pursuant to 10 CFR 50.55a(g)(5), if the licensee determines that conformance with an examination requirement of Section XI of the ASME Code is not practical for its facility, information shall be submitted to the Commission in support of that determination and a request made for relief from the ASME Code requirement. After evaluation of the determination, pursuant to 10 CFR 50.55a(g)(6)(i), the Commission may grant relief and may impose alternative requirements that are determined to be authorized by law, will not endanger life, property, or the common defense and security, and are otherwise in the public interest, giving due consideration to the burden upon the licensee that could result if the requirements were imposed.

In a letter dated April 21, 1992, Duke Power Company (the licensee), submitted Request for Relief No. 92-07, asking relief from the scheduling requirements of IWC-2420(a).

2.0 EVALUATION

The staff, with technical assistance from its contractor, the Idaho National Engineering Laboratory (INEL), has evaluated the information provided by the licensee in support of Request for Relief No. 92-07 as follows:

Request for Relief No. 92-07, Paragraph IWC-2420(a) and IWD-2410, Successive Inspections

Code Requirement: Paragraph IWC-2420(a) states that the sequence of component examinations established in the first inspection interval shall be repeated during each successive inspection interval, to the extent practical. There is no equivalent requirement for Class 3 components. Note (5) in Table IWC-2500-1, Examination Category C-H, and Note (2) in Table IWD-2500-1 state that system hydrostatic tests shall be conducted at or near the end of the interval, or during the same inspection period of each interval of Inspection Program B.

Licensee's Code Relief Request: Relief is requested from the Code scheduling requirements that specify that examinations established during the first interval be repeated in subsequent intervals for portions of the Liquid Waste Disposal (LWD), Reactor Building (RB) Spray, and Spent Fuel Cooling (SF) systems as follows:

SYSTEM	OFD NUMBER	ISI ITEM #	ISI ID.
LWD	107B-3.1	C07.021.015	3-OFD-107B-3.1
RB Spray	102A-3.1	C07.021.007	3-OFD-102A-3.1
RB Spray	103A-3.1	C07.021.010	3-OFD-103A-3.1
RBSP 3A	103A-3.1	C07.031.007	3RBS PUMP-3A

SYSTEM	OFD NUMBER	ISI ITEM #	ISI ID.
RBSP 3B	103A-3.1	C07.031.008	3RBS PUMP-3B
SF	104A-3.1	D03.012.001	3-OFD-104A-3.1
SF	104A-3.2	D03.012.002	3-OFD-104A-3.2

Licensee's Basis for Requesting Relief: The licensee states that four hydrostatic tests were started after all the second period tests had been completed, but prior to shutting Unit 3 down on February 13, 1991, for its refueling outage which would have started the third period. To re-perform these tests would result in extra exposure and work with no improvement in equipment or system reliability. The tests were performed within 45 days of the established start date for the third period of the second interval, therefore, an acceptable level of confidence has been provided for public health and safety. The subject tests were performed on the following dates.

System	Date
LWD	2/12/91
RB Spray (A)	1/8/91
RB Spray (B)	1/9/91
SF	1/17/91

Licensee's Proposed Alternative Examination: Credit for the hydrostatic tests performed during the second period will be credited to the third period, which started on February 22, 1991.

Staff Evaluation: The scheduling requirements of the Code are intended to distribute examination and testing throughout the inspection interval and to ensure that the period of time between examinations or tests does not exceed 10 years. For the portions of systems listed above, the licensee performed the Code-required hydrostatic tests within 45 days of the established start date for the third period of the second inspection interval and is asking to credit them to the third period of the second inspection interval.

To repeat the system hydrostatic tests so that the scheduling requirements of the Code could be met would require excess labor and radiation exposure to plant personnel, and would cause a burden on the licensee without a compensating increase in quality or safety. To be in accordance with the Code scheduling requirements and to ensure that the time between tests is less than 10 years, future hydrostatic tests of the prematurely tested components should be scheduled for the second period of subsequent 10-year inservice inspection intervals.

In light of the facts that the period between Code-required hydrostatic tests is less than 10 years, and that the tests were only done 45 days prior to the beginning of the third period of the second interval, the staff has determined that the above alternative schedule will provide reasonable assurance of continued structural reliability of the subject systems.

3.0 CONCLUSION

Paragraph 10 CFR 50.55a(g)(4) requires that components (including supports) that are classified as ASME Code Class 1, 2, and 3 meet the requirements, except design and access provisions and preservice requirements, set forth in applicable editions of ASME Section XI to the extent practical within limitations of design, geometry, and materials of construction of the components.

The staff has reviewed and evaluated the licensee's submittal, and it has concluded that the scheduling requirements of the Code would result in undue hardship without a compensating increase in safety. Therefore, pursuant to 10 CFR 50.55a(a)(3)(ii), the licensee's proposed alternative contained in Request for Relief No. 92-07 is authorized provided that the new schedule for hydrostatic testing is followed in subsequent intervals in order that the time between tests do not exceed 10 years. Furthermore, the staff concluded that the licensee's alternative inspection schedule provides reasonable assurance of continued structural reliability of the subject systems.

Principal Contributor: T. M. McLellan

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