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September 22, 2004

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

Subject: Duke Energy Corporation Oconee Nuclear Station, Unit 1, 2, and 3 Docket No. 50-269,-270,-387 Fourth Ten-year Inservice Inspection Interval Request for Alternate (Relief Request 2004-ON-001)

Duke Energy Corporation (Duke) hereby submits the attached Request for Alternate per 10 CFR 50.55a(a)(3)(i) for the Oconee fourth 10-year Inservice Inspection Intervals which began on January 1, 2004 for Unit 1, and will begin September 9, 2004 for Unit 2 and December 16, 2004 for Unit 3.

As described in the attached request, Duke specifically seeks relief from ASME Code requirements to perform hydrostatic tests on Class 3 pressure retaining components. The Code includes requirements for leakage testing of these same components. The ASME Code Committee and the Nuclear Regulatory Commission have endorsed the use of leakage tests in lieu of hydrostatic tests for Class 1 and Class 2 pressure retaining components. Therefore Duke considers these leakage tests to provide an acceptable level of quality and safety for Class 3 components also.

Please direct any questions to R. P. Todd at (864) 885-3418.

Very úly yours,

R. A. Jones, Site Vice President, Oconee Nuclear Station

Attachment: ISI Relief Request 04-ON-001

U.S. Nuclear Regulatory Commission September 22, 2004

xc w/att: Mr. William D. Travers, Regional Administrator U.S. Nuclear Regulatory Commission, Region II Atlanta Federal Center 61 Forsyth St., SW, Suite 23T85 Atlanta, GA 30303

> L. N. Olshan, Project Manager, Section 1 Project Directorate II Division of Licensing Project Management Office of Nuclear Reactor Regulation U. S. Nuclear Regulatory Commission Washington, DC 20555-0001

xc(w/o att):

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M. C. Shannon Senior NRC Resident Inspector Oconee Nuclear Station

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## Duke Power Company Oconee Nuclear Station – Units 1, 2, & 3 Keowee Hydro Station - Units 1 & 2 Fourth 10-Year Interval Relief Request Serial No. 04-ON-001

Pursuant to 10 CFR 50.55a (a) (3) (i), Duke Power Company requests the use of an alternative to the ASME Boiler and Pressure Vessel Code, Section XI, 1998 Edition through the 2000 Addenda.

Specifically, Duke Power Company requests approval to use a system leakage test as an alternative to the code required system hydrostatic test. A Code change removing the hydrostatic test requirement was incorporated in the 1993 Addenda for Class 1 and Class 2 pressure-retaining components, and was incorporated in the 2001 Edition for Class 3 components.

# I. <u>Systems/Components for Which an Alternative is Requested:</u>

All Class 3, Category D-B, pressure-retaining components subject to IWD-5222 hydrostatic testing for Oconee Units 1, 2, & 3 and Keowee Units 1 & 2 (the Keowee units provide the main source of emergency power for the Oconee units).

## II. <u>Code Requirement:</u>

Section XI, Table IWD-2500-1, Category D-B of the ASME Code, 1998 Edition through 2000 Addenda, requires a system leakage test each inspection period for Class 3 pressure-retaining components. Additionally, Table IWD-2500-1 requires a system hydrostatic test each inspection interval for these same Class 3 pressure-retaining components.

## III. Code Requirement for Which an Alternative is Requested:

Relief is requested from the mandatory requirement to perform a Class 3 hydrostatic pressure test (IWD-5222).

## IV. Basis for Requesting the Alternative:

Consistent with the philosophy of ASME Code Case N-498-1, this request is based on performing the VT-2 visual examinations at nominal operating pressures in lieu of elevated hydrostatic pressure tests. Additionally, the ASME Section XI Committee has determined that a hydrostatic test only increases the leakage rate from that of a leakage test run at nominal operating pressure. That is, raising the test pressure from operating pressure to hydrostatic pressure does not identify any new leakage. Therefore, performing a VT-2 visual examination at nominal operating pressure provides reasonable assurance of system integrity.

## Duke Power Company Oconee Nuclear Station – Units 1, 2, & 3 Keowee Hydro Station - Units 1 & 2 Fourth 10-Year Interval Relief Request Serial No. 04-ON-001

#### V. <u>Alternate Examinations or Testing:</u>

Duke Power Company requests that a Class 3 system leakage test (IWD-5221) be conducted in lieu of the Class 3 system hydrostatic test (IWD-5222) as shown in Section XI, Table IWD-2500-1, Category D-B, of the 2001 Edition.

#### VI. Justification for the Granting of the Alternative:

The ASME Code Committee and the Nuclear Regulatory Commission have endorsed the use of a leakage test in lieu of a hydrostatic test for Class 1 and Class 2 pressureretaining components in the 1998 Edition through the 2000 Addenda of the Boiler & Pressure Vessel Code, Section XI. Therefore, the system leakage test is sufficient to determine the leakage integrity of Class 3 pressure-retaining components at an acceptable level of quality and safety.

#### VII. <u>Implementation Schedule:</u>

Oconee Unit 1 – Beginning of the third period, July 15, 2010. Oconee Unit 2 – Beginning of the third period, September 9, 2011. Oconee Unit 3 & Keowee – Beginning of the third period, December 16, 2011.

Sponsored By: Jim Banhman Date: 9/21/04 Approved By: <u>L'flin Rhyne</u> Date: <u>9/21/04</u>

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