



DAVE BAXTER  
Vice President  
Oconee Nuclear Station

November 20, 2008

Duke Energy Corporation  
ON01VP/7800 Rochester Highway  
Seneca, SC 29672

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

864-885-4460  
864-885-4208 fax  
dabaxter@dukeenergy.com

Subject: Duke Energy Carolinas, LLC  
Oconee Nuclear Station, Unit 2  
Docket No. 50-270  
Summary Ultrasonic Examination Results of Completed  
Alloy 82/182 Weld Overlays  
Relief Request 07-ON-004

By letter dated September 13, 2007, Duke submitted Relief Request (RR) 07-ON-004 (ADAMS Accession # ML07260149), applicable to all three Oconee units, to seek relief related to full structural weld overlays on the Decay Heat Removal (DHR) Drop line to Hot Leg Nozzle welds. The RR included a commitment to provide the results of the Ultrasonic Test (UT) examinations of the weld overlays within 14 days of completion of the UT examinations. The NRC staff provided verbal approval of RR 07-ON-004 on November 27, 2007 and written approval on January 17, 2008 (ADAMS Accession # ML073460027).

The Unit 2 UT examination of the DHR drop line weld overlays were completed November 15, 2008. No flaws outside the IWB-3514 criteria were identified, and no repairs were made to the weld overlays, the original base materials or original 82/182 weld materials. The attached Enclosure provides a report summarizing the results of these examinations, per the commitment contained in RR 07-ON-004.

If there are any questions, please contact Corey Gray at (864) 886-6325.

Very truly yours,

*for* Dave Baxter, Vice President  
Oconee Nuclear Site

Enclosure

A047  
A110  
NRR

U. S. Nuclear Regulatory Commission  
November 20, 2008  
Page 2

cc: Mr. John Stang, Project Manager  
Office of Nuclear Reactor Regulation  
U.S. Nuclear Regulatory Commission  
Mail Stop: 8 G9A  
Washington, D.C 20555

Mr. Luis Reyes, Regional Administrator  
U.S. Nuclear Regulatory Commission - Region II  
61 Forsyth St., SW, Suite 23T85  
Atlanta, Georgia 30303

Mr. Andy Hutto  
Senior Resident Inspector  
Oconee Nuclear Station

Mrs. Susan Jenkins, Section Manager  
Bureau of Land and Waste Management  
SC Dept. of Health & Environmental Control  
2600 Bull St.  
Columbia, SC 29201

U. S. Nuclear Regulatory Commission  
November 20, 2008

Enclosure  
Weld Overlays Ultrasonic Examination  
2EOC23  
Summary Report

Decay Heat Removal Drop Line Weld Overlay  
Reference Relief Request 07-ON-004

Hot Leg Decay Heat Nozzle Welds:  
2-53A-10-13V

U. S. Nuclear Regulatory Commission  
November 20, 2008

### **Ultrasonic Examination Procedure**

SI-UT-126, Revision 3, *Procedure for the Phased Array Ultrasonic Examination of Weld Overlaid Similar and Dissimilar Metal Welds*, was used for examinations of the Decay Heat Nozzle weld overlay (WOL). This procedure, and the examiner who applied the procedure, are qualified through the PDI Program at the EPRI NDE Center.

#### **Decay Heat Nozzle (2-53A-10-10A/ 2-PHA-17) Weld Overlay Examination**

**Component Identification:** DH Weld Overlay 2-53A-10-13V

**Examination Date:** 11/15/2008

**Examination Time:** 20:25 - 21:22

**Weld Overlay Regions Examined:** Overlay, Weld and Base Material (Outer 25%)  
Dissimilar Metal

**Examination Summary:** No suspected flaw indications were observed during the examinations. The examination gain was adjusted to maintain the procedure-specified baseline noise level from 5% to 20% of full screen height. The lower range of examination angles detected responses from the inside surface of the component which were useful for monitoring search unit contact / coupling effectiveness during the examination. During the course of the examinations, 100% coverage of the weld overlay material and 100% coverage of the Code-required volume for the DM weld was achieved.