



JAMES R. MORRIS
Vice President

Catawba Nuclear Station
4800 Concord Rd. / CNO1VP
York, SC 29745-9635

803 831 4251
803 831 3221 fax

February 8, 2007

U.S. Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, DC 20555-0001

Subject: Duke Power Company LLC d/b/a Duke Energy Carolinas,
LLC (Duke)
Catawba Nuclear Station, Units 1 and 2
Docket Numbers 50-413 and 50-414
Inspection and Mitigation of Alloy 82/182 Pressurizer
Butt Welds

In October of 2006, while performing inspections of its pressurizer Alloy 82/182 butt welds in accordance with MRP-139, "Primary System Piping Butt Weld Inspection and Evaluation Guideline", a pressurized water reactor licensee discovered several circumferential indications in its pressurizer surge, safety, and relief nozzles. Because of the potential importance of this issue, Duke is submitting this letter to notify the NRC regarding Catawba's actions taken or planned for inspecting or mitigating Alloy 600/82/182 butt welds on pressurizer spray, surge, safety, and relief lines.

This letter contains two attachments. Attachment 1 is a description of the current Reactor Coolant System (RCS) leakage monitoring program for Catawba Units 1 and 2. Attachment 2 is a compilation of the inspection and mitigation effort for pressurizer Alloy 600/82/182 butt welds for Catawba Units 1 and 2. Details concerning the locations inspected and mitigated are provided in Attachment 2. Future inspections of pressurizer butt welds at Catawba Units 1 and 2 will be performed in accordance with the ASME Code and applicable relief requests and MRP-139.

The NRC will be informed if Catawba revises any of the information contained in this letter.

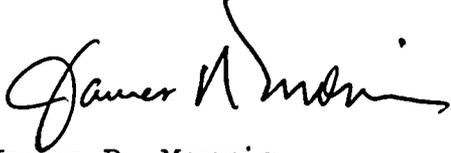
U.S. Nuclear Regulatory Commission

Page 2

February 8, 2007

Our staff is available to meet with the NRC to discuss any of the information contained in this letter. If there are any questions, please contact L.J. Rudy at (803) 831-3084.

Very truly yours,

A handwritten signature in cursive script, appearing to read "James R. Morris". The signature is written in black ink and is positioned above the printed name.

James R. Morris

LJR/s

Attachments

U.S. Nuclear Regulatory Commission

Page 3

February 8, 2007

xc (with attachments):

W.D. Travers, Regional Administrator
U.S. Nuclear Regulatory Commission, Region II
Atlanta Federal Center
61 Forsyth St., SW, Suite 23T85
Atlanta, GA 30303

A.T. Sabisch, Senior Resident Inspector
U.S. Nuclear Regulatory Commission
Catawba Nuclear Station

J.F. Stang, Jr., Senior Project Manager (addressee only)
U.S. Nuclear Regulatory Commission
Mail Stop O-8 H4A
Washington, D.C. 20555-0001

Attachment 1

RCS Leakage Monitoring Information for Catawba Units 1 and 2

i . 1

A water inventory balance program monitors reactor coolant leakage with established limits for continued operation specified in the technical specifications. This program will measure any leakage from components and small diameter nozzles as unidentified system leakage, which has an established operational limit of less than 1.0 gallons per minute. More restrictive plant procedures require an assessment of potential leak sources whenever unidentified leakage exceeds 0.15 gallons per minute (unidentified leakage calculations are typically performed every 24 hours). If leakage increases based on the mass balance, limited walkdowns at power would be performed to identify the source of the leakage. If leakage exceeds the more restrictive limit and the leak source remains unidentified, plant management would assess what additional leak investigation activities are required, or if plant shutdown is necessary.

Evidence of leakage is evaluated and resolved through the Corrective Action Program and the Fluid Leak Management Program.

Attachment 2

Inspection and Mitigation Effort for Pressurizer Butt Welds for
Catawba Units 1 and 2

Catawba Unit 1 Inspection and Mitigation Summary for Alloy 600/82/182 Pressurizer Butt Welds

Nozzle		MRP-139 Volumetric Inspection Requirement Met or to be Met		Mitigation Completed	Comments
Function / Designation	Susceptible Material Description	Outage Designation	Start Date	Outage Designation	
Spray 1PZR-W2SE	Nozzle to safe-end weld	NA ¹	NA ¹	1EOC 16 11/2006	Bare Metal Visual ² per NRC Bulletin 2004-01: 1EOC 15, 5/2005.
Surge 1PZR-W1SE	Nozzle to safe-end weld	NA ¹	NA ¹	1EOC 16 11/2006	Bare Metal Visual ² per NRC Bulletin 2004-01: 1EOC 15, 5/2005.
Safety 1PZR-W4ASE	Nozzle to safe-end weld	NA ¹	NA ¹	1EOC 16 11/2006	Bare Metal Visual ² per NRC Bulletin 2004-01: 1EOC 15, 5/2005.
Safety 1PZR-W4BSE	Nozzle to safe-end weld	NA ¹	NA ¹	1EOC 16 11/2006	Bare Metal Visual ² per NRC Bulletin 2004-01: 1EOC 15, 5/2005.
Safety 1PZR-W4CSE	Nozzle to safe-end weld	NA ¹	NA ¹	1EOC 16 11/2006	Bare Metal Visual ² per NRC Bulletin 2004-01: 1EOC 15, 5/2005.
Relief 1PZR-W3SE	Nozzle to safe-end weld	NA ¹	NA ¹	1EOC 16 11/2006	Bare Metal Visual ² per NRC Bulletin 2004-01: 1EOC 15, 5/2005.

Note 1. Prior to 1EOC16, welds were not inspectable using a PDI qualified technique.

Note 2. This information is provided for historical purposes. A full structural weld overlay was applied at this location during 1EOC 16 to mitigate the effects of PWSCC. (Reference Relief Request 06-GO-001, Revision 1, dated September 27, 2006.)

Catawba Unit 2 Inspection and Mitigation Summary for Alloy 600/82/182 Pressurizer Butt Welds

Nozzle		MRP-139 Volumetric Inspection Requirement Met or to be Met		Mitigation Completed or to be Completed	Comments
Function / Designation	Susceptible Material Description	Outage Designation	Start Date	Outage Designation	
Spray 2PZR-W2SE	Nozzle to safe-end weld	NA ¹	NA ¹	2EOC 15 9/2007	Bare Metal Visual ² per NRC Bulletin 2004-01: 2EOC 13, 9/2004; 2EOC 14, 3/2006.
Surge 2PZR-W1SE	Nozzle to safe-end weld	NA ¹	NA ¹	2EOC 15 9/2007	Bare Metal Visual ² per NRC Bulletin 2004-01: 2EOC 13, 9/2004; 2EOC 14, 3/2006.
Safety 2PZR-W3SE	Nozzle to safe-end weld	NA ¹	NA ¹	2EOC 15 9/2007	Bare Metal Visual ² per NRC Bulletin 2004-01: 2EOC 13, 9/2004; 2EOC 14, 3/2006.
Safety 2PZR-W4ASE	Nozzle to safe-end weld	NA ¹	NA ¹	2EOC 15 9/2007	Bare Metal Visual ² per NRC Bulletin 2004-01: 2EOC 13, 9/2004; 2EOC 14, 3/2006.
Safety 2PZR-W4BSE	Nozzle to safe-end weld	NA ¹	NA ¹	2EOC 15 9/2007	Bare Metal Visual ² per NRC Bulletin 2004-01: 2EOC 13, 9/2004; 2EOC 14, 3/2006.
Relief 2PZR-W4CSE	Nozzle to safe-end weld	NA ¹	NA ¹	2EOC 15 9/2007	Bare Metal Visual ² per NRC Bulletin 2004-01: 2EOC 13, 9/2004; 2EOC 14, 3/2006.

Note 1. Welds are not inspectable using PDI qualified methods.

Note 2. Bare Metal Visual inspections detected no evidence of cracking or borated water leakage.