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June 19, 2003

U.S. Nuclear Regulatory Commission  
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Washington D.C. 20555

Subject: Duke Energy Corporation  
Catawba Nuclear Station Units 1 and 2  
Docket Nos. 50-413 and 50-414

Response to NRC November 8, 2002 and November 22, 2002  
letters on Bulletin 2002-02: Reactor Pressure Vessel Head  
And Vessel Head Penetration Nozzle Inspection Programs

Pursuant to 10 CFR 50.54(f), this letter and enclosure provide Duke Energy Corporation's response to the NRC's request to provide future inspection plans related to NRC Bulletin 2002-02 for the Catawba Nuclear Station. <sup>1,2</sup>

Duke Energy has not made any new regulatory commitments in this response.

If you have questions or need additional information, please contact Gregory S. Kent at (704)373-6032.

Very truly yours,

*M. S. Tuckman*

M. S. Tuckman

ENCLOSURE

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<sup>1</sup> Letter, C.P. Patel to G.R. Peterson, Catawba Nuclear Station Unit 1- Response to NRC Bulletin 2002-02, dated November 22, 2002.

<sup>2</sup> Letter, C.P. Patel to G.R. Peterson, Catawba Nuclear Station Unit 2- Response to NRC Bulletin 2002-02, dated November 8, 2002.

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M. S. Tuckman, affirms that he is the person who subscribed his name to the foregoing statement, and that all the matters and facts set forth herein are true and correct to the best of his knowledge.

M. S. Tuckman

M. S. Tuckman, Executive Vice President

Subscribed and sworn to me:

June 19, 2003

Date

Mary P. Debus

Notary Public

My Commission Expires:

JAN 22, 2006

Date

SEAL



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bcc: L.F. Vaughn - PB05E  
M.T. Cash - EC050  
G.D. Gilbert - CN01RC  
M.R. Robinson - EC090  
G.S. Kent - EC050  
J.M. Shuping - EC090  
D.E. Whitaker - EC090  
K.E. Nicholson - CN01RC  
J.M. Brindle - CN03CE  
S.L. Mays - CN03SE  
W.O. Callaway - CN03SE  
Catawba RGC Data File - CN01RC  
Catawba Master File - 801.01  
Saluda River Electric Corporation  
NC Municipal Power Agency No. 1  
TR Puryear, NC Electric Membership Corporation - CN03G  
Piedmont Municipal Power Agency  
ELL - EC050

**ENCLOSURE I**  
**Catawba Nuclear Station**

**Requested Information**

To provide future inspection plans for the Reactor Pressure Vessel Head (RPVH) and RPVH penetrations no later than 90 days prior to the next refueling outage (RFO) following the Catawba 2 March 2003 RFO.

**Response:**

Catawba Nuclear Station plans to conduct RPVH and RPVH penetration inspections on units 1 and 2 in accordance with NRC Order EA 03-009, including non-visual NDE methods. The inspection plan is a function of the calculated susceptibility category of the RPVH penetrations to potential degradation and recent inspection history.

Duke Energy's September 6, 2002 response to NRC Bulletin 2002-02 stated that Catawba Nuclear Station RPVHs have calculated total effective degradation years (EDY) values between 2 and 3. These EDY values place each RVPH in the low susceptibility category for Primary Water Stress Corrosion Cracking (PWSCC). The values of EDY will be revised for the end of each operating cycle to determine the appropriate inspection for the RPVH during the next refueling outage.

Catawba Nuclear Station completed bare metal visual inspections of the RPVH for Unit 1 in May, 2002 and for Unit 2 in March, 2003. Results of these inspections have been submitted to the NRC. No evidence of wastage or RPVH penetration leakage was detected.

Based on the results of these completed inspections and in accordance with the requirements of NRC Order EA 03-009 for RPVHs in the low PWSCC susceptibility category, plans for future RPVH inspections for each Catawba Nuclear Station unit are as follows:

- Conduct a bare metal visual examination of 100% of each RPVH surface (including 360 degrees around each RPVH nozzle) at least every third RFO (or every five years).
- Conduct an ultrasonic test of each RPVH penetration nozzle from 2 inches above the J-groove weld to the bottom of the nozzle and an assessment to determine if leakage has occurred into the interference fit zone. The supplemental volumetric examinations will be completed by February 11, 2008, and then occur at a frequency at least every fourth RFO (or every 7 years).

The methods, qualification requirements, and acceptance criteria of the supplemental volumetric examinations will be consistent with industry practices developed from EPRI research on volumetric inspection of the RPVH penetrations.