

February 26, 2004

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
11555 Rockville Pike
Rockville, Maryland 20852

Subject: Catawba Nuclear Station Unit 1
Docket No. 50 -413
Response to NRC Bulletin 2003-02: Leakage from
Reactor Pressure Vessel Lower Head Penetrations
and Reactor Coolant Pressure Boundary Integrity

Pursuant to 10 CFR 50.54(f), this letter and the associated attached Enclosure provides Duke Energy Corporation's (Duke's) response to specific items of NRC Bulletin 2003-02 for Catawba Nuclear Station. This bulletin requested plant-specific information as a result of NRC staff concerns regarding reactor pressure vessel lower head penetration leakage and reactor coolant pressure boundary integrity.

Information is provided for Bulletin Item 2. This response provides information concerning the inspection results of the reactor pressure vessel lower head penetrations.

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

Very truly yours,



D.M. Jamil

ENCLOSURE

4109

D.M. Jamil 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.



Vice President

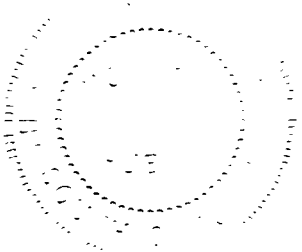
Subscribed and sworn to me: 2/26/04
Date



Notary Public

My Commission Expires: 7/10/2012
Date

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ENCLOSURE I
Catawba Nuclear Station
Response to NRC Bulletin 2003-02

Requested Information

(2)

Within 60 days of plant restart following the next inspection of the RPV lower head penetrations, the subject PWR addressees should submit to the NRC a summary of the inspections performed, the extent of the inspections, the methods used, a description of the as-found condition of the lower head, any findings of relevant indications of through-wall leakage, and a summary of the disposition of any findings of boric acid deposits and any corrective actions taken as a result of indications found.

Response:

On November 9, 2003, Duke conducted a bare metal visual inspection of the Catawba Unit 1 reactor vessel lower head, including 360 degrees around 100 percent of the bottom mounted instrument (BMI) penetrations. Duke conducted this inspection using digital cameras and direct visual observation.

The inspection showed the presence of rust trails and superficial scaling on the bottom of the reactor vessel. The rust trails intersected the BMI penetrations from a source on the vessel sides, and were attributed to past cavity seal leakage. The inspectors observed no white boron or other deposits indicative of BMI penetration or through-wall leakage. The inspection detected no wastage of the carbon steel surface. Isotopic analysis of smears from the rust areas indicated either no activity or an age greater than two years.

The bare metal surface of the reactor vessel was cleaned and re-inspected to establish a baseline for future inspections.

The Catawba Unit 1 refueling outage concluded December 31, 2003 when the unit was placed on line.