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December 4, 2003

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
11555 Rockville Pike
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Subject: McGuire Nuclear Station Unit 2
Docket Nos. 50 -370
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 McGuire 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 for McGuire Nuclear Station Unit 2.

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

Very truly yours,

G.R. Peterson

ENCLOSURES

A109

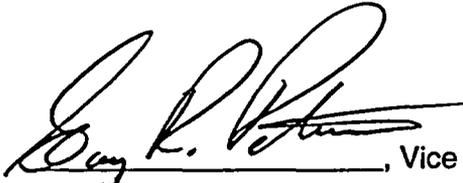
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xc: L. A. Reyes
U.S. Nuclear Regulatory Commission Regional Administrator
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R. E. Martin
NRC Senior Project Manager (CNS and MNS)
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J. B. Brady
Senior Resident Inspector (MNS)

G.R.Peterson, 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, McGuire Nuclear Site



Subscribed and sworn to me: December 4, 2003
Date


_____, Notary Public

My Commission Expires: August 17, 2006
Date

ENCLOSURE I
McGuire 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 September 7, 2003, McGuire conducted a bare metal visual inspection of the Unit 2 reactor vessel lower head, including 360 degrees around 100% of the bottom mounted instrument (BMI) penetrations. McGuire conducted the inspection using video cameras and direct visual observation.

The inspection showed the presence of dried borated water trails running down the side and across the bottom of the reactor vessel. The borated water trails intersected the BMI penetrations creating thin lamellar boron deposits. None of the deposits were characteristic of through-wall leakage. Isotopic analysis of samples taken at the annulus of randomly selected penetrations indicated the age of the deposits to be greater than 18 months.

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

The McGuire Unit 2 refueling outage for end of cycle 15 was concluded on October 6, 2003, when the unit was placed on-line.