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September 14, 2005

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

Subject: Duke Energy Corporation  
Catawba Nuclear Station, Units 1 and 2  
Docket Numbers 50-413 and 50-414  
McGuire Nuclear Station, Units 1 and 2  
Docket Numbers 50-369 and 50-370  
Oconee Nuclear Station, Units 1, 2, and 3  
Docket Numbers 50-269, 50-270, and 50-287  
10 CFR 21 Notification - Identification of Defect

Pursuant to 10 CFR 21.21(d)(3)(ii), Duke Energy Corporation is providing the required written notification of the identification of a defect. This information was initially reported to the NRC Operations Center on August 2, 2005 (Event Number 41888, ADAMS Accession Number ML052170170).

The attachment to this letter provides the information requested by 10 CFR 21.21. In addition, the attachment discusses the relevance of this issue to Duke Energy Corporation's Catawba, McGuire, and Oconee Nuclear Stations. There are no commitments contained in this letter or its attachment.

Should you have any questions or require additional information, please contact L.J. Rudy at (803) 831-3084.

Very truly yours,

Henry B. Barron

LJR/s

Attachment

IE19

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xc (with attachment):

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ATTACHMENT

10 CFR 21.21 NOTIFICATION

This notification follows the format of and addresses the considerations contained in 10 CFR 21.21(d)(4)(i)-(viii).

*(i) Name and address of the individual or individuals informing the Commission.*

Henry B. Barron, Group Vice President and Chief Nuclear Officer

Duke Energy Corporation, 526 South Church St., Charlotte, NC 28202-1802

*(ii) Identification of the facility, the activity, or the basic component supplied for such facility or such activity within the United States which fails to comply or contains a defect.*

The basic component which is the subject of this notification is a relay, purchased commercial grade and dedicated by Duke Energy Corporation for use in nuclear safety related applications. Specific relay information is as follows:

Struthers-Dunn 219 Series relays manufactured in China with AC coils that have a date code of the 24<sup>th</sup> week of 2004 or earlier (date codes of 0424B or earlier). The letter "B" occurs at the end of the affected date codes which identifies the manufacturing location where the defective relays were manufactured.

*(iii) Identification of the firm constructing the facility or supplying the basic component which fails to comply or contains a defect.*

The affected relays were purchased commercially from Newark Electronics, a distributor for Struthers-Dunn relays. The relays were drop shipped directly from Magnecraft & Struthers-Dunn, 700 Orange Street, Darlington, SC 29532. (Note: Recently, the Struthers-Dunn and the Magnecraft product line have been split up and Struthers-Dunn has relocated to 2295 Hoffmeyer Road, Florence, SC 29501.) The commercially purchased relays were dedicated by Duke Energy Corporation.

*(iv) Nature of the defect or failure to comply and the safety hazard which is created or could be created by such defect or failure to comply.*

The affected relays have been identified by the supplier as having a manufacturing defect in the relay coil. Some of the coils did not have their coil cores annealed. The annealing step in the manufacturing process was omitted. The omitted annealing step results in the coil drawing more current than it is rated for. The coil may subsequently fail after an extended time in the energized state.

The safety hazard which is created or could be created by the defect depends upon the application in which the affected relays are utilized. The relays could ultimately be utilized in a variety of nuclear safety related applications.

*(v) The date on which the information of such defect or failure to comply was obtained.*

Duke Energy Corporation first became aware of the defect associated with these relays on August 2, 2005.

*(vi) In the case of a basic component which contains a defect or fails to comply, the number and location of all such components in use at, supplied for, or being supplied for one or more facilities or activities subject to the regulations in this part.*

Catawba Nuclear Station previously utilized five of the affected relays in applications associated with the safety related Nuclear Service Water System. The relays were utilized in the control circuitry for various isolation valves in the system. All of the affected relays that were installed in the plant have since been replaced with relays utilizing coils that have been properly annealed. In addition, three of the affected relays were located in inventory and these relays have since been removed from inventory.

McGuire Nuclear Station does not have any of the affected relays in nuclear safety related applications. Procurement personnel identified one potentially affected relay located in Receiving. This relay has been removed from inventory.

Oconee Nuclear Station has not installed any of the affected relays. Three of the affected relays were located in inventory and have since been removed from inventory.

*(vii) The corrective action which has been, is being, or will be taken; the name of the individual or organization responsible for the action; and the length of time that has been or will be taken to complete the action.*

Catawba Nuclear Station Engineering personnel identified all plant applications that utilized the affected relay. Maintenance personnel subsequently replaced the five relays utilized in Nuclear Service Water System applications. This work commenced on August 2, 2005 and was completed on August 5, 2005. Procurement personnel identified the three affected relays located in inventory and these were removed on August 2, 2005.

McGuire Nuclear Station does not have any of the affected relays in nuclear safety related applications. Procurement personnel identified one potentially affected relay located in Receiving. This relay was removed from inventory on August 25, 2005.

Oconee Nuclear Station Procurement personnel identified the three affected relays located in inventory and these were removed on August 24, 2005.

*(viii) Any advice related to the defect or failure to comply about the facility, activity, or basic component that has been, is being, or will be given to purchasers or licensees.*

Duke Energy Corporation made an initial notification concerning this subject to the NRC Operations Center on August 2, 2005 (Event Number 41888, ADAMS Accession Number ML052170170). In addition, Duke Energy Corporation is presently developing an information release concerning this subject for posting on the Institute for Nuclear Power Operations' Nuclear Network. The projected completion date for this activity is September 20, 2005.