September 15, 2004

Mr. Chad Simpson 1068 Wendy Road Rock Hill, South Carolina 29732

Dear Mr. Simpson:

I am responding to your letter to Dr. Nils J. Diaz, Chairman, U.S. Nuclear Regulatory Commission (NRC), dated August 10, 2004, which was in response to the NRC staff's notice that was published in the *Federal Register* on July 12, 2004, "Notice of Opportunity To Comment and Proposed No Significant Hazards Consideration Determination." That Notice is related to the proposed use of mixed oxide (MOX) fuel lead test assemblies (LTAs) at Duke Energy Corporation's (licensee) Catawba Nuclear Station, Units 1 and 2 (Catawba).

Your letter describes your own general responses to the issue of the proposed use of MOX LTAs at Catawba and asks that the 30-day comment period provided in the notice be extended. Your letter did not provide a basis for your request to extend the comment period. The NRC staff does not intend to extend the comment period for that specific notice; however, the NRC staff will consider any further comments if they are received within a reasonable time.

Your letter also stated that you want to know more about the issue. The licensee's letter to the NRC staff dated February 27, 2003, Section 5.4, contains a description of the United States government's participation in the excess weapons-grade plutonium disposition program. Included in this discussion is the following statement from the Department of Energy:

"The fundamental purpose of the program is to ensure that plutonium produced for nuclear weapons and declared excess to national security needs (now and in the future) is never again used for nuclear weapons . . ."

The licensee's letter may be obtained electronically from the NRC's Agencywide Documents Access and Management System (ADAMS) Public Electronic Reading Room on the Internet at the NRC Web site, http://www.nrc.gov/reading-rm/adams.html. See ADAMS number ML030760734. Additional information may also be obtained from a website that the NRC staff maintains for the overall MOX program at http://www.nrc.gov/materials/fuel-cycle-fac/mox/licensing.html. This website includes the following questions as well as other information:

- What is MOX?
- Is MOX fuel currently produced in the U.S. or elsewhere?
- What is the NRC's regulatory responsibility for MOX?
- How does the uranium fuel cycle produce depleted uranium?
- How is MOX fabricated?
- Would MOX fuel be used in reactors in the same way that uranium fuel is now used?

- What is the difference between weapons-grade plutonium and reactor-grade plutonium?
- Would MOX fuel be reprocessed? How would used MOX fuel be stored?

You can be assured that the NRC staff will not issue any authorization for the use of MOX fuel at Catawba until we have adequate assurance that all requirements for the safe operation of the Catawba plant will be met.

I trust that this information is responsive to your request for information on the use of MOX fuel at Catawba. If you should need further information in regards to the proposed use of MOX LTAs at Catawba, please contact me or Mr. Robert Martin, the NRC staff's Project Manager for Catawba at 301-415-1493.

Sincerely,

/RA/

J. E. Dyer, Director Office of Nuclear Reactor Regulation

- What is the difference between weapons-grade plutonium and reactor-grade plutonium?
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Sincerely,

/RA/

J. E. Dyer, Director Office of Nuclear Reactor Regulation

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