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March 1, 2011

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U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

Subject: Duke Energy Carolinas, LLC
Oconee Nuclear Station
License No. SNM-2503, Docket No. 72-4
Independent Spent Fuel Storage Installation
Annual Effluent Release Report

Gentlemen:

In accordance with 10 CFR 72.44 (d)(3), Duke Energy Carolinas, LLC (Duke Energy), hereby submits the annual report specifying the quantity of each of the principal radionuclides released to the environment in liquid and gaseous effluents during the previous 12 months of operation (January 1, 2010 through December 31, 2010) of the Independent Spent Fuel Storage Installation (ISFSI).

Duke confirms that there were no releases of radioactive material from the Oconee ISFSI during the reporting period. This conclusion is based on the following:

- a. The double-sealed welded dry storage canisters (DSCs) in-service are fabricated from non-corrosive materials and are designed to maintain confinement for all normal, off-normal and accident conditions during storage, as well as during severe environmental events (e.g. tornado, earthquake). In addition, the monitoring of DSC surface contamination was within the limits given in Technical Specifications 2.4.1 which provides assurance that any offsite dose was inconsequential.
- b. There were no ISFSI off-normal or accident conditions or severe environmental phenomena during the reporting period.
- c. Radiological dose data acquired at the ISFSI perimeter supports the conclusion.

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Should there be any questions concerning this report please contact Judy E. Smith,
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Sincerely,


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