



Tennessee Valley Authority, Post Office Box 2000, Decatur, Alabama 35609-2000

October 3, 2014

10 CFR 72.44(d)(3)

ATTN: Document Control Desk
Director, Division of Spent Fuel Storage and Transportation
Office of Nuclear Material Safety and Safeguards
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555-0001

Browns Ferry Nuclear Plant, Units 1, 2, and 3
Renewed Facility Operating License Nos. DPR-33, DPR-52, and DPR-68
NRC Docket Nos. 50-259, 50-260, 50-296, and 72-052

Subject: **Independent Spent Fuel Storage Installation
Annual Radioactive Effluent Release Report**

Reference: Certificate Number 1014, Certificate of Compliance for Spent Fuel
Storage Casks, Appendix A, Section 5.4, "Radioactive Effluent
Control Program," Amendment No. 5

The Browns Ferry Nuclear Plant (BFN) Independent Spent Fuel Storage Installation (ISFSI) complies with the referenced Certificate of Compliance (CoC) for spent fuel storage casks in accordance with Title 10 of the U.S. Code of Federal Regulations (10 CFR) Part 72, Section 212, "Conditions of general license issued under § 72.210." Appendix A, Section 5.4, of the CoC requires the submittal of an annual radioactive effluent release report in accordance with 10 CFR Part 72, Section 44, Paragraph (d)(3). Although spent fuel has been stored in the BFN ISFSI since August 21, 2005, the Tennessee Valley Authority (TVA) had not previously submitted the required annual radioactive effluent release reports for the BFN ISFSI. (This adverse condition is identified in TVA's Corrective Action Program as Problem Evaluation Report No. 897879.) Thus, the enclosed annual radioactive effluent release report for the BFN ISFSI covers the period from initial ISFSI use to the end of calendar year 2013.

TVA utilizes the Holtec International HI-STORM 100 Cask System for storage of spent fuel in the BFN ISFSI. The HI-STORM 100 Cask System does not create any radioactive material or have any radioactive waste treatment system. Therefore, specific operating procedures for the control of radioactive effluents are not required. The HI-STORM 100 Cask System is also designed and

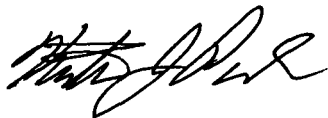
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fabricated with a totally seal-welded pressure vessel such that leakage from the confinement boundary is not considered to be a credible occurrence. Thus, as specified in the enclosed report, there were no radionuclides released to the environment in liquid or gaseous effluents from the BFN ISFSI since its initial use, August 21, 2005, through December 31, 2013.

There are no new regulatory commitments in this letter. If you have any questions, please contact Mr. Jamie L. Paul at (256) 729-2636.

Respectfully,



K. J. Polson
Site Vice President

Enclosure: Browns Ferry Nuclear Plant Independent Spent Fuel Storage
Installation Annual Radioactive Effluent Release Report

cc:

NRC Regional Administrator - Region II
NRC Senior Resident Inspector - Browns Ferry Nuclear Plant

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NRC Project Manager - Browns Ferry Nuclear Plant
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Enclosure

**Browns Ferry Nuclear Plant
Independent Spent Fuel Storage Installation
Annual Radioactive Effluent Release Report**

August 21, 2005¹, through December 31, 2013

Independent Spent Fuel Storage Installation:

45 Total Casks

The Browns Ferry Nuclear Plant (BFN) Independent Spent Fuel Storage Installation (ISFSI) is located within the BFN Protected Area and is designed to hold 92 (and four spare) Holtec International HI-STORM 100 storage casks. At the end of the 2013 calendar year, the BFN ISFSI contained 45 storage casks.

Airborne Effluent Releases from the ISFSI:

0.00E+00 Curies

There were no airborne effluent releases from the BFN ISFSI during the period August 21, 2005 to December 31, 2013.

Liquid Effluent Releases from the ISFSI:

0.00E+00 Curies

There were no liquid effluent releases from the BFN ISFSI during the period August 21, 2005 to December 31, 2013.

Dose to Individuals Due to ISFSI Effluent Releases:

0.00+00 mrem

¹ This annual radioactive effluent release report (ARERR) is the initial ARERR for the BFN ISFSI which has been in use since August 21, 2005.