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NL-05-1793

October 6, 2005

Docket Nos.: 50-348
50-364
72-42

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

Joseph M. Farley Nuclear Plant
HI-STORM 100 Thermal Validation Test

Ladies and Gentlemen:

Certificate of Compliance (CoC) 1014, Amendment 2, for the Holtec HI-STORM 100 cask system includes special requirements for the first systems placed in storage. Specifically, CoC 1014, Condition 9, requires a letter report summarizing the results of thermal validation tests for the first HI-STORM 100 cask systems placed into service with a heat load equal to or greater than 10 kW. Validation tests are required for each subsequent cask system that has a heat load that exceeds a previously validated heat load by more than 2 kW. Additional testing is not required for a system after it has been tested at a heat load equal to or greater than 16kW. CoC 1014, Condition 9, also includes a provision that allows cask users to satisfy these requirements by referencing validation test reports submitted to the NRC by other cask users.

On July 14, 2005, SNC placed the first HI-STORM 100 cask system, comprised of multi-purpose canister (MPC) -32 serial number (S/N) 027 and HI-STORM 100S overpack S/N 150, into storage in the Farley Nuclear Plant (FNP) Independent Spent Fuel Storage Installation (ISFSI). The decay heat load for MPC-32 canister S/N 027 and HI-STORM 100S overpack S/N 150 was 13.425 kW.

By letter dated October 15, 2004, the Tennessee Valley Authority (TVA) submitted to the NRC the results of the thermal validation test for MPC-32 canister S/N 006 and HI-STORM 100S overpack S/N 063 with a heat load of 22.5967 kW placed into storage in the Sequoyah ISFSI. The thermal validation test submitted by the TVA bounds the heat load for MPC-32 S/N 027 and HI-STORM 100S S/N 150 placed into service in the Farley ISFSI. Accordingly, the requirements of CoC 1014, Condition 9, are met and a thermal validation test is not required for MPC-32 S/N 027 and HI-STORM 100S S/N 150. In addition, the cask heat load of 22.5967 kW and corresponding thermal validation analysis

submitted by the TVA exceeds the upper limit heat load for which testing is required (i.e., 16 kW). Accordingly, additional letter reports are not required for subsequent MPC-32 canisters and HI-STORM 100S overpacks loaded at Farley.

This letter contains no NRC commitments. If you have any questions, please advise.

Sincerely,



L. M. Stinson

LMS/TWS/sdl

Enclosures:

cc: Southern Nuclear Operating Company
Mr. J. T. Gasser, Executive Vice President
Mr. J. R. Johnson, General Manager – Plant Farley
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U. S. Nuclear Regulatory Commission
Dr. W. D. Travers, Regional Administrator
Mr. R. E. Martin, NRR Project Manager – Farley
Mr. C. A. Patterson, Senior Resident Inspector – Farley
Mr. J. R. Hall, SFPO Project Manager