



February 18, 2013
E-34552

U. S. Nuclear Regulatory Commission
Attn: Document Control Desk
One White Flint North
11555 Rockville Pike
Rockville, MD 20852

Subject: Supplement to Submittal of Biennial Report of 72.48 Evaluations Performed for the Standardized NUHOMS[®] System, Certificate of Compliance (CoC) 1004, for the Period 07/24/10 to 07/23/12, Docket 72-1004

Reference: Letter from Donis Shaw (TN) to Document Control Desk, "Submittal of Biennial Report of 10 CFR 72.48 Evaluations Performed for the Standardized NUHOMS[®] System, CoC 1004, for the Period 07/24/10 to 07/23/12, Docket 72-1004," July 23, 2012

Pursuant to the requirements of 10 CFR 72.48(d)(2), the submittal referenced above provided 72.48 evaluations performed for the CoC 1004 Standardized NUHOMS[®] System, for the period 07/24/10 to 07/23/12. Enclosure 1 provides an additional 72.48 evaluation summary, for LR 721004-940, Revision 0, approved on 7/23/11. The summary includes indication as to whether the evaluation had associated Updated Final Safety Analysis Report (UFSAR) changes that were incorporated into the UFSAR for the Standardized NUHOMS[®] Horizontal Modular Storage System for Irradiated Fuel, NUH003.0103, Revision 12, submitted on February 1, 2012. This situation has been entered into TN's corrective action program and actions are in progress to prevent recurrence.

Should you or your staff require additional information, please do not hesitate to contact me at 410-910-6878 or Clark Vanderniet at 410-910-6933.

Sincerely,

Donis Shaw
Licensing Manager

cc: B. Jennifer Davis (NRC SFST), provided in a separate mailing

Enclosures:

1. Evaluation Summary for LR 721004-940 Revision 0

NM5526

Evaluation Summary for LR 721004-940 Revision 0

LR 721004-940 Revision 0 – (no associated UFSAR change)

Change Description

The change involved a nonconformance in the basket of one 24PTH dry shielded canister (DSC) where the radial gaps between the egg-crate-basket plates and certain transition rails between those plates and the DSC shell had a maximum average radial gap of 0.93 in. This average gap is 0.28 inches larger than the maximum permissible radial gap of 0.65 in.

Evaluation

A Transnuclear calculation conservatively assumed an overall total uniform gap of 1.00 inches to evaluate this change. The calculation results show that the temperature of the fuel cladding increases by 1 °F and remains well below the maximum temperature for normal conditions (752 °F); therefore, this change has a negligible effect on the thermal design function.

The calculation results show a 2 °F temperature increase for some basket components. The increase in temperature has a secondary effect of increasing pressure within the DSC cavity that relates to the structural design function. The calculation results show a cavity pressure of 13.73 psig, which is well below the design pressure of 20.0 psig. The DSC cavity pressure in the updated final safety analysis report (UFSAR) is given as 13.7 psig. Therefore, the effect on the structural function of the DSC is not considered adverse.

The basket plates and transition rails do not contribute to the confinement design function. Since the DSC structural design function is not adversely affected, the confinement design function is also not adversely affected.

This change did not adversely affect the shielding or criticality design functions.

The eight 72.48 evaluation criteria were met.