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US Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington DC 20555-0001

Re: **Docket 50-326 R-116 License Response to GL2016-01**

GL-2016-01 requests information from NPR as follows:
(1) Are neutron-absorbing materials used in a reactor pool, fuel storage pool, or other wet locations designed for the storage of reactor or spent fuel?
(2) If neutron-absorbing materials are used, is their use credited in the licensing or design basis (i.e., criticality safety analysis) for the storage of reactor fuel or spent fuel in a reactor pool, fuel storage pool, or other wet locations, as applicable?
(3) If neutron-absorbing materials are credited in the facility licensing or design basis for the storage of reactor or spent fuel in a reactor pool, fuel storage pool, or other wet locations, as applicable, then provide a description of, and technical basis for, any surveillance or monitoring programs used to confirm continued acceptable performance of the neutron-absorbing materials over time.

REQUIRED RESPONSES

(1), (2) The current Technical Specifications (TS) for the referenced facility are as quoted below. A revised version has been proposed recently and is similar – also quoted below. Neither takes any credit for the use of neutron absorbing materials to maintain reactivity at the required level for any form of spent fuel. Fuel element storage in the reactor pool, or any other wet location, relies on a combination of geometry and low quantity of adjacent elements to achieve the desired result.
(3) Consequently there is no requirement for a monitoring or surveillance plan for neutron absorbing materials.

5.4 Fuel Storage

Specification(s).

a. All fuel elements shall be stored in a geometrical array where the k_{eff} is less than 0.80 for all conditions of moderation and reflection.

b. Irradiated fuel elements and fueled devices shall be stored in an array which will permit sufficient natural convection cooling by water or air such that the fuel element or fueled device temperature will not exceed 80°C.

c. Fuel showing evidence of damage (see Technical Specification 3.1.6)

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shall be stored separately from fuel not suspected to be damaged, and shall be checked for fission product leakage.

Basis. These specifications establish a sufficient reactivity margin to guard against accidental criticality of elements in storage, and that heat dissipation does not create excess corrosion or other problems. Damaged fuel is more likely to have or develop fission product leakage and so must be monitored and kept separately.

The new proposal is to read as follows and constitutes the only revision in an updated TS version dated 5-13-2016.

5.4 Fuel Storage

Specification(s).

a. All fuel elements and fueled devices shall be stored in a geometrical array where the k_{eff} is less than 0.80 for all conditions of moderation and reflection.

b. Irradiated fuel elements and fueled devices shall be stored in an array which will permit sufficient natural convection cooling by water or air such that the fuel element or fueled device temperature will not exceed design limits.

c. Fuel elements or fueled devices showing evidence of damage (see Technical Specification 3.1.6) shall be stored separately from fueled items not suspected to be damaged, and shall be checked for fission product leakage.

Basis. These specifications establish a sufficient reactivity margin to guard against accidental criticality of fuel elements or fueled devices in storage, and that heat dissipation does not create excess corrosion or other problems. Damaged items containing fuel are more likely to have or develop fission product leakage and so must be monitored and kept separately.

I declare under penalty of perjury that the foregoing is true and correct to my knowledge.
Executed on May 29th, 2016

George E. Miller

Dr. George E. Miller