

June 30, 2011

Mr. Rodney McCullum
Director, Used Fuel Programs
Nuclear Energy Institute
1776 I Street NW, Suite 400
Washington, DC 20006

SUBJECT: NEI POSITION REGARDING THE STACK-UP CONFIGURATION FOR DRY
STORAGE CASKS

Dear Mr. McCullum:

By letter dated April 15, 2011 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML111160561), the Nuclear Energy Institute (NEI), provided comments on a Nuclear Regulatory Commission (NRC) Technical Assistance Request (TAR) response dated February 25, 2011 (ADAMS Accession No. ML110200478), indicating NEI's belief that the position stated in the TAR response was inconsistent with NRC's previously established regulatory position in the areas of 1) applicability of 10 CFR Part 50 and 10 CFR Part 72 to spent fuel loading, unloading and handling operations performed inside buildings governed by 10 CFR Part 50; and 2) the authority granted to licensees to make changes to the spent fuel storage system or facility Final Safety Analysis Report (FSAR) without prior NRC review and approval pursuant to 10 CFR 50.59 and 10 CFR 72.48.

I first want to thank you for your letter and for coordinating industry participation at our public meeting held on April 28, 2011, to discuss these issues. The summary of the meeting is at ADAMS Accession No. ML111470236. Such stakeholder interaction exchange is important to ensure that the NRC remains an efficient, effective, and transparent regulator. We found the discussions very informative and, upon consideration of the information provided, concluded that the current scope of the cask licensing basis, as defined in the 10 CFR Part 72 Certificate of Compliance (CoC) and FSAR for the Holtec HI-STORM 100 spent fuel storage system does not impose specific requirements for the freestanding stack-up configuration being performed using devices integral to structures governed by the regulations of 10 CFR Part 50. We concluded that Section 3 of the Holtec FSAR does not analyze tip-over of the freestanding stack-up configuration in the reactor or fuel handling building, but also concluded that general licensees operating under the provisions of Subpart K of 10 CFR Part 72 must preclude overturning of the freestanding stack-up configuration with an extremely high level of certainty using physical and procedural barriers, such as seismic stability analyses. The use of these physical and procedural barriers must be evaluated against the requirements of 10 CFR 50.59. It is the staff's expectation that these 50.59 analyses will include appropriate measures to ensure the safe transfer of spent fuel while within the scope of Part 50 governed facilities and activities.

With respect to your question about the applicability of 10 CFR Part 50 and 10 CFR Part 72 to spent fuel loading, unloading and handling operations performed inside buildings governed by 10 CFR Part 50, the NRC maintains that both regulations are applicable. The proposed changes involve two distinct and separate Safety Analysis Reports (SARs), one for the reactor, and the other for the cask. A change to the cask system and portions of the reactor facility will need to be evaluated under both 10 CFR 50.59 and 10 CFR 72.48, as well as other applicable regulations. There is not one controlling regulation. The regulation at 10 CFR 72.48(c) addresses changes to "the Safety Analysis Report for a spent fuel storage cask design, as amended and supplemented [("cask SAR")." The "Changes, tests, and experiments" regulation within 10 C.F.R. 72.48(c) addresses the Part 72 cask, not the part 50 reactor. Similarly, 10 CFR 50.59 addresses changes to the reactor's final SAR. Further, there are multiple licenses involved in the proposed change. First, there is a reactor operating license issued under 10 CFR 50.57; second a general license issued to the reactor operator for the storage of spent fuel in an independent spent fuel storage installation (ISFSI) at power reactor sites under 10 CFR 72.210; and third a CoC issued for a spent fuel storage cask design under 10 CFR 72.238.

In Regulatory Guide 3.72, "Guidance for Implementation of 10 CFR 72.48, Changes, Tests, and Experiments," the NRC staff endorsed Appendix B to NEI 96-07, "Guidelines for 10 CFR 72.48 Implementation." Section 4.1, "Applicability," of Appendix B to NEI 96-07 provides the following guidance with respect to changes to ISFSI operations within the Part 50 reactor facility:

A second situation that could require a licensee to apply both 72.48 and another regulation is when proposed changes could affect both the 10 CFR Part 50 reactor facility described in the reactor UFSAR and the 10 CFR Part 72 ISFSI facility or cask design described in the ISFSI/cask UFSAR. An example could be a change to a cask loading activity in the reactor spent fuel building. In this case, both a 50.59 and 72.48 screening/evaluation may need to be performed.

In response to your question about the authority granted to licensees to make changes to the spent fuel storage system or facility FSAR without prior NRC review and approval pursuant to 10 CFR 50.59 and 10 CFR 72.48, the requirements of 10 CFR 72.48 set forth the criteria under which a general licensee, as well as a CoC holder, may make changes in the ISFSI facility, the cask design, or procedures related to ISFSI operations without prior NRC approval. Similarly, the requirements of 10 CFR 50.59 set forth the criteria under which a licensee may make changes in the reactor facility or procedures related to reactor operations without prior NRC approval.

We trust that this is responsive to the principal issues raised by your letter. Please feel free to contact us if you should have further questions.

Sincerely,

/RA/

Vonna Ordaz, Director
Division of Spent Fuel Storage and Transportation
Office of Nuclear Material Safety
and Safeguards

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