

MARCUS R. NICHOL
Senior Project Manager, Quality Issues and
Licensing Actions

1201 F Street, NW, Suite 1100
Washington, DC 20004
P: 202.739.8131
mrn@nei.org
nei.org



NUCLEAR ENERGY INSTITUTE

7/11/2013
78 FR 41810

①

August 12, 2013

Ms. Cindy K. Bladey
Chief, Rules, Announcements, and Directives Branch (RADB)
Office of Administration
Mail Stop: 3WFN 6-A56
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

RECEIVED

2013 AUG 12 PM 4:25

RULES AND DIRECTIVES
BRANCH
USNRC

Subject: NEI Comments on Draft Revision 4 of SRP subsection 9.1.4, "Light Load Handling System and Operations," 78 Fed. Reg. 41810; Docket ID NRC-2013-0148

Project Number: 689

Dear Ms. Bladey:

On behalf of the nuclear energy industry, the Nuclear Energy Institute (NEI)¹ appreciates the opportunity to provide comments on draft Revision 4 of subsection 9.1.4 to NUREG-0800, "Standard Review Plan for the Review of Safety Analysis Reports for Nuclear Power Plants: LWR Edition" (SRP).

The SRP promotes regulatory clarity and reliability by establishing guidance to staff on how to review applications for NRC regulatory approval. We appreciate the NRC staff upholding these principles in their revision to Subsection 9.1.4, which is being updated to reflect an NRC regulatory position on refueling cavity design established based upon operating experience associated with IE Bulletin 84-03. We particularly welcome the NRC's decision not to impose the changes on existing plant licensees or prior regulatory approvals, without first addressing the Backfit Rule or Issue Finality provisions. As noted in the draft revision, only applications submitted six months or more after the changes become final would be subject to them.

We note three areas where the subject guidance could be further clarified, as follows:

1. We recommend the staff improve clarity of the new term "permanent and temporary storage locations," which may cause some confusion around its meaning. Storage of fuel is by nature not

¹ The Nuclear Energy Institute (NEI) is the organization responsible for establishing unified industry policy on matters affecting the nuclear energy industry, including the regulatory aspects of generic operational and technical issues. NEI's members include all entities licensed to operate commercial nuclear power plants in the United States, nuclear plant designers, major architect/engineering firms, fuel cycle facilities, nuclear materials licensees, and other organizations and entities involved in the nuclear energy industry.

NUCLEAR. CLEAN AIR ENERGY

SUNSI Review Complete
Template = ADM - 013
E-RIDS= ADM-03
Add= J. DeGange (JL) #

J. Colaccino (SK) #

permanent, and ultimately the used fuel will be removed from the facility. Even when permanently discharged used fuel is placed in a location with no intention to move it prior to its removal from the facility, there are many other reasons that the fuel may be moved in the future, for example to more efficiently store fuel according to technical specifications. A temporary storage location could mean an intermediate location to place the fuel assembly as it makes its way from the reactor to the spent fuel pool, or it could mean storing the temporarily discharged fuel in the spent fuel pool during a refueling outage with the intent to reinsert the fuel into the reactor for the next cycle. We believe that the use of "permanent and temporary" is not necessary to achieve the objectives of the guidance, and we recommend the NRC staff eliminate their use. If the terms "permanent and temporary" are retained, then the meaning of each should be defined and/or modified to improve clarity. For example, it could be replaced with "locations storing permanently or temporarily discharged fuel," or it could be defined as "temporary storage locations are those which are not a permanent SSC, such as a rack temporarily installed in the cask loading pit."

2. We recommend the staff improve clarity of the new criterion for the refueling cavity seal in Section III.3.D.i that "*A robust refueling cavity water seal...is not vulnerable to a single failure.*" This criterion appears to create the expectation that the refueling cavity seal is passive single failure proof. This also does not appear to be consistent with all recent NRC approvals, and is problematic in that most, if not all, refueling cavity seals cannot be designed to be passive single failure proof. It is unclear whether the NRC intends this criterion to be strictly active single failure proof, or whether the NRC's intent is that "A single failure (either passive or active) of the refueling cavity seal would not result in a gross failure that significantly affects the cavity water level, such that leakage could not be detected and mitigative actions to increase reactor cavity water level could not be taken in time to prevent water from reaching levels identified in Section III.3.D.ii."
3. We recommend that item #1 under "Technical Rationale" be clarified to include a discussion that GDC 2 also applies to SRP Section 9.1.4 in relation to the refueling cavity seal design. It is noted that the refueling cavity seal is typically treated as a structure, system or component distinct from the light load handling system.

We appreciate the NRC staff's consideration of these comments. If you have any questions concerning our comments, please contact me.

Sincerely,



Marcus R. Nichol

c: Mr. Jonathan L. DeGange, NRO/DARR/APOB, NRC
Ms. Joseph Colaccino, NRO/DARR/APOB, NRC
NRC Document Control Desk