

Response to Public Comments on Draft Standard Review Plan Section 9.1.4

Comment	Proposed Resolution	NRC Staff Resolution
NEI Comments:		
<p>1. 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 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.</p>	<p>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.”</p>	<p>To avoid confusion and defining “permanent” or “temporary,” the terms have been removed. It is generally understood that any time a fuel assembly is placed in a fuel rack, that fuel assembly is treated as stored fuel.</p>
<p>2. The criterion in Section III.3.D.i 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</p>	<p>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.”</p>	<p>Sentence has been clarified.</p>

<p>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.”</p>		
<p>3. Item #1 under “Technical Rationale” does not include the refueling cavity seal. It is noted the refueling cavity seal is typically treated as a structure, system or component distinct from the light load handling system.</p>	<p>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.</p>	<p>Revised as suggested.</p>
<p>ACRS Comments:</p>		
<p>1. Inclusion of the new I.3.D and III.3.D paragraphs expand the original scope of the Light Load Handling System to now include more broadly applicable and specific design requirements relating to the Spent Fuel Pool design and the Refueling Cavity design. That expansion of scope might be better handled by either creating a stand-alone SRP section focused on the requirements for protection of the Fuel Transfer Canal and the Refueling Cavity against a LLHS accident, or by adding that new information to the current section of the SRP that applies to the design of the Spent Fuel Pool and the Refueling Cavity.</p>	<p>The title of the revised SRP Section should be revised so that it is clear that the revised SRP section includes changes relative to the LLHS equipment itself.</p>	<p>Revised as suggested.</p>
<p>2. Text changes in the revised SRP Section that point to Operating Experience in order to bring attention to the requirement for physical fuel handling precautions to prevent loss of the cavity seal should be well described and clearly worded as distinct from physical design feature requirements.</p>	<p>Include OE-based guidance for fuel handling precautions.</p>	<p>Revised as suggested.</p>