

**From:** Ramsey, Kevin  
**Sent:** Thursday, February 03, 2011 4:33 PM  
**To:** Wheeler, Jennifer K.; Hrabal, Craig; Maurer, Robert S. "Bob"  
**Subject:** Final Summary of Public Meeting w/NFS at 1:30 pm on 1/13/11  
**Attachments:** L32830 Handout at Public Meeting 2011-01-13 pm.pdf

At 1:30 pm on Thursday, January 13, 2011, a public meeting was conducted with Nuclear Fuel Services (NFS). The meeting addressed open issues associated with Chapter 5 of the license renewal application. The following individuals participated:

Jennifer Wheeler, NFS  
Robert Maurer, NFS  
Kevin Ramsey, NRC  
Craig Hrabal, NRC  
Chris Tripp, NRC  
Dennis Morey, NRC  
Tom Marenchin, NRC

NFS responses to the following requests for additional information (RAI) were discussed:

- RAI 5.3
  - NRC stated that it disagrees with the NFS statement that its reflection modeling requirements are more conservative than 1-inch, close-fitting water for normal conditions. There was an extensive discussion of how NFS models reflectors. NFS provided some drawings (attached) showing how reflectors are modeled in some situations. NFS agreed to clarify the description of its methodology by adding text and drawings to Chapter 5 of the application. In addition to the description, NFS will provide justification that the method is conservative. This may include studies, papers, use of the methodology at other facilities, and comparison of real world situations to the model, and this information will be added to the RAI response.
  - In order to resolve the tangential reflection issue, NFS agreed to provide justification for why the tangential reflection bounds the reflection due to an operators hands and any incidental reflection.
  - For enclosure modeling, NFS agreed to specify an "offset" distance in Chapter 5. In addition, a reflector must be explicitly modeled if it is located within the specified offset distance and it could be a more effective reflector than 4-inches of water on the sides of the enclosure or 1-inch of water on the top of the enclosure. NFS will add a justification to the RAI response explaining the offset distance as well as the 1-inch reflection modeled on the top of the enclosure.
  - The NRC noted that NFS failed to specify the management measures that will be used to ensure the assumptions used for "partial reflection" are not exceeded. NFS pointed out that this information can be found on page 5-14 of the application, and NRC agreed that the issue is closed.
  - The NRC noted that on page 5-15 the minimum number of blocks around an array should be specified to define the bounding condition, and a justification of why this minimum number is bounding should be added to the RAI response.
- RAI 5.10 – NRC noted that NFS fails to explain why its base model is conservative. The justification discussed above should close this issue also.

- RAI 5.12 – NRC noted that NFS failed to add a commitment to consider the full range of interstitial moderation. NFS agreed to add a justification to the RAI response explaining why 0.1 is an adequate number (acceptable means of representing sprinkler activation). In addition, NFS will add a statement to Chapter 5 defining the range of moderation that NFS will consider.
- RAI 5.14 – NRC stated that it believes the NFS commitment is rather vague. NFS disagreed. It referred to the second sentence in Section 5.5.2. NFS believes that committing to comply with the performance requirements is sufficient. NRC stated that it would reconsider the issue.
- RAI 5.17 – NRC asked where the commitment would be added to the application. NFS stated that it would be added to Section 5.4.1.
- RAI 5.18 – There was some confusion regard the issue with this RAI response. After an extensive discussion, NRC noted that Section 5.1.2 commits to establishing nuclear criticality safety controls that meet the regulatory requirements of Part 70. However, this section only commits to establishing safety limits and operating limits for items relied on safety (IROFS), and maintaining adequate management measures for IROFS. It is the understanding of NRC staff that some controls required to meet Part 70 requirements aren't designated as an IROFS. NFS agreed to review the wording and clarify that it will maintain all controls required to meet Part 70 requirements. After the meeting, NFS committed to update 5.1.2 (3) to state "NFS shall establish and maintain NCS safety limits, controls, and procedures." NRC staff agree that this change will close the issue.

Kevin M. Ramsey  
Senior Project Manager  
Fuel Manufacturing Branch  
U.S. NRC  
301-492-3123