

NRR-PMDAPEm Resource

From: WILLIAMSON, DANNY H [DWILL21@entergy.com]
Sent: Monday, June 02, 2014 3:46 PM
To: Wang, Alan
Subject: response to teleconference request

Alan

Below is the response to questions discussed on May 29, 2014, concerning our License Amendment Request 2013-17, Revision of the Ventilation Filter Testing Program and Associated Surveillance Requirements.

Please let me know if any other information is needed.

1.0 Background:

River Bend Station submitted a proposed Technical Specification amendment to the NRC that would revise Technical Specifications (TS) Sections 3.6.4.3, "Standby Gas Treatment System," 3.6.4.7, "Fuel Building Ventilation System," 3.7.2, "Control Building Fresh Air System, and 5.5.7, "Ventilation Filter Testing Program." This revision will eliminate the operability and surveillance requirements for the heaters in the safety-related charcoal filter trains in those systems, and reduce the duration of the monthly surveillance test of the filter trains.

As part of the Technical Specification amendment request, TS 5.5.7.c will be revised to change the charcoal test conditions from 70% to 95% relative humidity and to modify the allowable penetration by the methyl iodide test agent. This amendment request includes raising the charcoal efficiency requirements for the Fuel Building Ventilation System (FBVS) from 0.5% to 5.0%. During the NRC review process of this TS amendment request, the NRC has requested a clarification of the basis for raising the charcoal efficiency requirements of the FBVS from 0.5% to 5.0%.

2.0 Supporting Information:

The Fuel Building Ventilation System is no longer credited to mitigate the consequences of any design basis accident. The Fuel Building was previously removed from the secondary containment envelope via TS Amendment 113. Under a DBA-LOCA, all potential leakage paths to the Fuel Building were assumed to be released directly to the environment with no credit taken for holdup, dilution, or decay by the building or for filtration by the Fuel Building Ventilation System filters. Amendment 113 also removed the requirements for the fuel building during fuel handling other than during movement of "recently irradiated fuel (i.e., fuel that has occupied part of a critical core within the previous 24 hours)."

River Bend Station has both a licensing requirement and physical limitation that results in no fuel in the Fuel Building being classified as "recently irradiated" because the minimum amount of time that fuel can be moved from a critical core to the fuel building is greater than 24 hours. Technical Requirements Manual TR 3.9.10, Decay Time, requires that the reactor be subcritical for greater than 24 hours prior to movement of irradiated fuel in the reactor vessel. Also, reactor disassembly takes greater than 24 hours, resulting in the physical limitation to move "recently irradiated fuel" in the Fuel Building.

3.0 Conclusion:

The current penetration requirement in TS 5.5.7 is 0.5% for FBVS. The guidance table in ASTM D3803-1989 shows the average penetration of $0.56\% \pm 0.11\%$ at 95% relative humidity. The TS amendment request to raise the minimum charcoal efficiency on the FBVS from 0.5% to 5.0% was based on the following:

- The Fuel Building Ventilation System is not part of the RBS secondary containment (Ref: TS Amendment 113) and is no longer credited to mitigate the consequences of any design basis accident.

- Raising the minimum charcoal efficiency to 5.0% will have no impact on current operating and accident off site dose calculations.
- Leaving the FBVS charcoal efficiency requirement at the current 0.5% efficiency may unnecessarily challenge the operability of the charcoal since there is very little margin between the current TS efficiency requirement and the average penetration at 95% relative humidity.
- The 5.0% efficiency requirement was selected to be consistent with the efficiency requirement for the Standby Gas Treatment system to reduce error traps when interpreting TS requirements.

Hearing Identifier: NRR_PMDA
Email Number: 1336

Mail Envelope Properties (AB886B0D6516ED40B856643C503B23FC2293408E)

Subject: response to teleconference request
Sent Date: 6/2/2014 3:46:27 PM
Received Date: 6/2/2014 3:46:38 PM
From: WILLIAMSON, DANNY H

Created By: DWILL21@entergy.com

Recipients:
"Wang, Alan" <Alan.Wang@nrc.gov>
Tracking Status: None

Post Office: litxmetsp002.etrsoth.corp.entergy.com

Files	Size	Date & Time
MESSAGE	3929	6/2/2014 3:46:38 PM

Options
Priority: Standard
Return Notification: No
Reply Requested: No
Sensitivity: Normal
Expiration Date:
Recipients Received: