

From: Lawrence Burkhart
To: Brian Sepelak
Date: 5/23/01 9:02AM
Subject: DRAFT RAI

Brian,

Attached is a draft RAI that is the basis for our call today.

Mail Envelope Properties (3B0BB4DD.537 : 6 : 21370)

Subject: DRAFT RAI
Creation Date: 5/23/01 9:02AM
From: Lawrence Burkhart

Created By: LJB@nrc.gov

Recipients

firstenergycorp.com
sepelakb (Brian Sepelak)

Post Office

firstenergycorp.com

Route

internet

Files

RAI.splb.wpd
MESSAGE

Size

6780
576

Date & Time

05/23/01 08:44AM
05/23/01 09:02AM

Options

Expiration Date: None
Priority: Standard
Reply Requested: No
Return Notification: None

Concealed Subject: No
Security: Standard

RAI for Beaver Valley 1&2 - Change in decay time specified in TS 3/4.9.3.

1. In your submittal of March 19, 2001, you request a change to TS 3.9.3, "Decay Time" to decrease the amount of time fuel must remain in the reactor vessel after shutdown before offloading. The change would reduce the decay time from 150 hours to 100 hours. On page B-38 of your submittal, you state that the change in decay time will result in an increase in the spent fuel pool (SFP) heat load. You also state that BVPS will evaluate the effects of an increased heat load on the SFP cooling system due to conducting a core offload at 100 hours.

The impact of the increased heat load on the SFP is information we need to be able to fully evaluate your request to change the decay time in TS 3.9.3. Please submit the results of all evaluations performed on the impact of the increased heat load on the SFP and supporting systems. Your evaluation of the spent fuel cooling system should address both the planned and unplanned offload conditions. The use of the terminology "planned" and "unplanned" has been used by the staff for the review of SFP heat load changes since questions arose in the mid-1990's regarding refueling practices at Millstone Unit 1. A planned offload is a scheduled offload for refueling, maintenance, or decommissioning purposes. An unplanned offload is a previously unscheduled offload in response to an event or equipment failure. This difference in terminology was made to ensure SFP temperature evaluations accurately reflected actual licensee practices.

Your analyses should reflect the following:

1. As you have performed full core offloads during all your refueling outages, your planned offload is a full core offload. Therefore, Analysis Cases 1a. and 1b. should assume the offloading of a full core with all other storage locations filled.
2. The single active failure assumed in Analysis Case 1a. should be the worst single active failure, including common cause failures.
3. Your unplanned offload analysis should assume a decay heat load based on a full core offload plus refueling load that has decayed for 36 days plus heat load from a SFP with all other storage locations filled. In this case no single failure needs to be considered.
4. If your analysis shows that the spent fuel cooling systems cannot maintain spent fuel temperature below 150°F under normal (planned) offload conditions, please submit an analysis that demonstrates that the SFP can withstand the higher temperature. This is based on the concrete code ACI-349-85 that states temperatures shall not exceed 150°F for normal operation or any other long term periods of time.
5. Your analysis should confirm that the SFP make-up source can provide make-up water equal to or greater than the boil-off rate and that make-up water can be provided within a sufficient time.