

PMLeeCol PEmails

From: Brian Anderson
Sent: Monday, August 11, 2008 4:37 PM
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Cc: Brian Hughes; Brian Anderson
Subject: DRAFT - RAI 871 - related to SRP section 10.04.06 for Bellefonte Units 3 and 4
Attachments: LEE Draft RAI 871 - 10.4.6.doc
Importance: High

Attached is a draft RAI related to SRP section 10.04.06 for William States Lee III Units 1 and 2. If you would like to schedule a conference call to discuss this RAI, please let me know before 5:00 p.m. on August 14.

Thank you,
Brian

Brian Anderson
301-415-9967
Project Manager, AP1000 Projects Branch 1
Office of New Reactors
U.S. Nuclear Regulatory Commission

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LEE Draft RAI 871 - 10.4.6.doc	29690	

Options

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Return Notification: No
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Request for Additional Information No. 871 Revision 0

William States Lee III Nuclear Station Units 1 and 2
Duke Energy Carolinas, LLC
Docket No. 52-018 and 52-019
SRP Section: 10.04.06 - Condensate Cleanup System
Application Section: 10.4.7

QUESTION

10.04.06-***

In order to ensure compliance with GDC 14, SRP Section 10.4.6 refers to SRP Section 5.4.2.1, "Steam Generator Materials," for acceptance criteria for secondary water chemistry. SRP Section 5.4.2.1 refers to Branch Technical Position, BTP 5-1, "Monitoring of Secondary Side Water Chemistry in PWR Steam Generator," which states, in part, "The applicant should address how its program meets industry guidelines (e.g., EPRI's secondary water chemistry guidelines and Nuclear Energy Institute (NEI) 97-06)." BTP 5-1 also indicates that the secondary water chemistry program should control pH. Although consistency with industry guidelines was addressed in the AP1000 DCD, the COL applicant made the selection of the pH control and oxygen scavenger agents as discussed in COL Information Item 10.4.12.2. To address COL Information Item 10.4.12.2, the COL applicant identified the oxygen scavenger agents as hydrazine and carbohydrazide, and pH control agents as dimethylamine and methoxypropylamine in Lee FSAR Section 10.4.7.2.1.

The EPRI Secondary Water Chemistry Guidelines provide guidance on how pH is to be optimized in conjunction with the selected amine. The EPRI Secondary Water Chemistry Guidelines also recommend a site-specific materials compatibility review for plants implementing advanced amine treatment. The information provided by the applicant did not address these items. The staff therefore requests the following additional information:

How were the selected amines (dimethylamine and methoxypropylamine) qualified for secondary systems pH control?

10.04.06-***

How will the secondary systems pH be optimized in conjunction with the selected amines?

10.04.06-***

Will the EPRI Secondary Water Chemistry Guidelines be used as guidance with respect to the qualification of the selected pH control agents and the optimization of the pH?