LeeRAIsPEm Resource

From: Hughes, Brian
Sent: Tuesday, February 28, 2012 11:50 AM
To: LeeRAIsPEm Resource
Subject: RAI LTR NO 103 RELATED TO SRP 2.2.2 Potential Accidents for the W.S. LEE Units 2 & 3 COLA
Attachments: LEE-RAI-LTR-103.docx

Brian Hughes
Senior Project Manager
NRO/DNRL/NWE1
US NRC
301-415-6582

Hearing Identifier: Lee_COL_RAI
Email Number: 131

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Subject: RAI LTR NO 103 RELATED TO SRP 2.2.2 Potential Accidents for the W.S. LEE Units 2 & 3 COLA
Sent Date: 2/28/2012 11:50:09 AM
Received Date: 2/28/2012 11:50:11 AM
From: Hughes, Brian

Created By: Brian.Hughes@nrc.gov

Recipients:
"LeeRAIsPEm Resource" <LeeRAIsPEm.Resource@nrc.gov>
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February 28, 2012

Mr. James Thornton, P.E.
Licensing Manager, Nuclear Plant Development
Duke Energy
526 South Church Street
Charlotte, NC 28201-1006

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION LETTER NO. 103 RELATED TO SRP SECTION: 02.02.03 - EVALUATION OF POTENTIAL ACCIDENTS FOR THE WILLIAM STATES LEE III UNITS 1 AND 2 COMBINED LICENSE APPLICATION

Dear Mr. Thornton:

By letter dated December 12, 2007, as supplemented by letters dated January 28, 2008, February 6, 2008 and February 8, 2008, Duke Energy submitted its application to the U. S. Nuclear Regulatory Commission (NRC) for a combined license (COL) for two AP1000 advanced passive pressurized water reactors pursuant to 10 CFR Part 52. The NRC staff is performing a detailed review of this application to enable the staff to reach a conclusion on the safety of the proposed application.

The NRC staff has identified that additional information is needed to continue portions of the review. The staff's request for additional information (RAI) is contained in the enclosure to this letter.

To support the review schedule, you are requested to respond within 30 days of the date of this letter. If changes are needed to the final safety analysis report, the staff requests that the RAI response include the proposed wording changes.

If you have any questions or comments concerning this matter, you may contact me at 301-415-6582.

Sincerely,

/**RA**/

Brian Hughes, Senior Project Manager
AP1000 Projects Branch 1
Division of New Reactor Licensing
Office of New Reactors

Docket Nos. 52-018
52-019

Enclosure:
Request for Additional Information

CC: see next page

J.Thornton

If you have any questions or comments concerning this matter, you may contact me at 301-415-6582.

Sincerely,

/**RA**/

Brian Hughes, Senior Project Manager
AP1000 Projects Branch 1
Division of New Reactor Licensing
Office of New Reactors

Docket Nos. 52-018
52-019

eRAI Tracking No. 6339

Enclosure:
Request for Additional Information

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NAME	STammara*	MMcoppin*	BHughes*
DATE	02/23/12	02/23/12	02/28/12

*Approval captured electronically in the electronic RAI system.

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Request for Additional Information No. 6339
2/28/2012

William States Lee III, Units 1 and 2
Duke Energy Carolinas, LLC
Docket No. 52-018 and 52-019
SRP Section: 02.02.03 - Evaluation of Potential Accidents
Application Section: 2.2.3

QUESTIONS for Radiation Protection and Accident Consequences Branch (RPAC)

02.02.03-8
RG 1.206 provides guidance regarding the information that is needed to ensure that the potential hazards in the vicinity of the site are identified and evaluated in order to meet the siting criteria in 10 CFR 100.20 and 10 CFR 100.21.

In William Lee Station (WLS) Units 1 and 2 COL FSAR Section 2.2.3.1.1.4, the applicant identified in FSAR Table 6.4-202, additional site specific chemicals that are outside the scope of DCD evaluations. The applicant also stated that “Based on the screening guidance provided in Regulatory Guide 1.78, none of the site-specific chemicals used were found to be a credible habitability threat to main control room occupants in case of a release.” However, no discussion or justification is provided in making this conclusion. Additionally, in FSAR Section 2.2.3.1.3 the applicant stated that “Accidents involving the release of toxic chemicals from on-site facilities and nearby mobile and stationary sources are addressed in Section 6.4. For each postulated event, the concentration at the site is determined for use in evaluating the control room habitability.” However, in Section 6.4 such evaluations are not presented, except for chlorine from truck transport. In addition, onsite site-specific chemical evaluations are not presented other than the reference of Table 6.4-202; therefore, the staff is not able to review the information and the screening analysis performed by the applicant in concluding that on-site chemicals do not pose a threat to control room habitability.

Based on the review of site-specific chemicals listed in Table 6.4-202, the consideration of Chemical Methoxypropylamine (MPA) by the Vogtle RCOLA, and on guidance within RG 1.78, the two site-specific chemicals MPA, and Dimethylamine used by WLS were analyzed by the staff as confirmatory calculations. The respective concentrations from the staff’s confirmatory analysis of these two chemicals, at the intake to the control room are found to exceed the IDLH (Immediate Danger to Life and Health) concentration. Therefore, they may have a potential to exceed the respective IDLH concentration in the control room.

Address the information, provide the rationale, analysis and discussion in connecting both the FSAR Sections consistently as appropriate to justify and present the conclusion. Also provide the proposed changes you intend to make to the FSAR.