LeeRAIsPEm Resource

From: Hughes, Brian
Sent: Monday, June 09, 2014 2:27 PM
To: LeeRAIsPEm Resource
Subject: RAI LETTER 118 RELATED TO SRP 3.7.1 Seismic Design for the W.S. LEE COLA
Attachments: LEE-RAI-LTR-118.docx

Brian Hughes
Senior Project Manager
NRO/DNRL/LB4
US NRC
301-415-6582

Hearing Identifier: Lee_COL_RAI
Email Number: 148

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Subject: RAI LETTER 118 RELATED TO SRP 3.7.1 Seismic Design for the W.S. LEE COLA
Sent Date: 6/9/2014 2:27:04 PM
Received Date: 6/9/2014 2:27:05 PM
From: Hughes, Brian

Created By: Brian.Hughes@nrc.gov

Recipients:
"LeeRAIsPEm Resource" <LeeRAIsPEm.Resource@nrc.gov>
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June 10, 2014

Mr. Robert Kitchen
Licensing Manager, Nuclear Plant Development
Duke Energy
526 South Church Street
Charlotte, NC 28201-1006

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION LETTER NO. 118, RELATED TO SRP SECTION 03.07.01 SEISMIC DESIGN PARAMETERS FOR THE WILLIAM STATES LEE III UNITS 1 AND 2 COMBINED LICENSE APPLICATION (RAI – 7544)

Dear Mr. Kitchen:

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
Licensing Branch 4 - AP1000 Projects
Division of New Reactor Licensing
Office of New Reactors

Docket Nos. 52-018
52-019

Enclosure:
Request for Additional Information

CC: see next page

R. Kitchen

If you have any questions or comments concerning this matter, you may contact me at 301-415-3199.

Sincerely,

/**RA**/

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

Docket Nos. 52-018
52-019

eRAI Tracking No. 7544

Enclosure:
Request for Additional Information

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NRO-002

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NAME	KRoach*	DJackson*	SDevlin*	BHughes*
DATE	6/05/14	5/28/14	5/28/14	6/09/14

*Approval captured electronically in the electronic RAI system.

OFFICIAL RECORD COPY

R. Kitchen

Request for Additional Information 118
Issue Date: 06/09/2014
Application Title: William States Lee III, Units 1 and 2 - Dockets 52-018 and 52-019
Operating Company: Duke Energy Carolinas, LLC
Docket No. 52-018 and 52-019
Review Section: 03.07.01 - Seismic Design Parameters
Application Section: 3.7.1 - Seismic Design Parameters

QUESTION

03.07.01-6
WLS COLA FSAR Revision 8 Figures 2.5.2-241a-c show the WLS FIRS amplification transfer functions. These functions show amplification from approximately 30 to 100 Hz due to the varying fill concrete beneath the WLS proposed structures. These amplifications are consistent with the amplifications shown in previous revisions of the WLS COLA. These amplification functions indicated that the WLS FIRS between approximately 30 to 100 Hz has higher accelerations than the site-specific GMRS. WLS COLA FSAR Revision 8 Figures 2.5.2-244a-c show the comparisons of the WLS site-specific GMRS to the FIRS. From approximately 50 to 100 Hz, the FIRS are shown as being less than the site-specific GMRS. This relationship is inconsistent with the plotted amplifications functions in Figures 2.5.2-241a-c.

In compliance with 10 CFR 100.23, ISG-01, and ISG-017, please assess and evaluate the inconsistency of WLS COLA FSAR Revision 8 Figures 2.5.2-241a-c to Figures 2.5.2-244a-c at frequencies of 30 to 100 Hz and provide a thorough description of the assessment and evaluation. Please explain the basis and justify the conclusions regarding the relationship between the WLS site-specific amplification functions, FIRS, and GMRS and propose any resulting changes to the WLS COLA.