

LeeRAIsPEm Resource

From: Tanya Simms
Sent: Wednesday, August 06, 2008 10:58 AM
To: LeeRAIsPEm Resource
Subject: Request for Additional Information Letter No. 001 Related to SRP Section 08.02 for the William States Lee III Units 1 and 2 Combined License Application
Attachments: LEE-RAI-LTR-001.doc

Hearing Identifier: Lee_COL_RAI
Email Number: 1

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Subject: Request for Additional Information Letter No. 001 Related to SRP Section 08.02
for the William States Lee III Units 1 and 2 Combined License Application
Sent Date: 8/6/2008 10:57:36 AM
Received Date: 8/6/2008 10:57:37 AM
From: Tanya Simms

Created By: Tanya.Simms@nrc.gov

Recipients:
"LeeRAIsPEm Resource" <LeeRAIsPEm.Resource@nrc.gov>
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Priority: Standard
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Reply Requested: Yes
Sensitivity: Normal
Expiration Date:
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August 6, 2008

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

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION LETTER NO. 001 RELATED TO
SRP SECTION 08.02 FOR THE WILLIAM STATES LEE III UNITS 1 AND 2
COMBINED LICENSE APPLICATION

Dear Mr. Hastings:

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 advance 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 301-415-1387 or you may contact Brian Hughes, the lead project manager for the William States Lee III combined license at 301-415-6582.

Sincerely,

/RA/

Tanya Simms, 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

If you have any questions or comments concerning this matter, you may contact me at 301-415-1387 or you may contact Brian Hughes, the lead project manager for the William States Lee III combined license at 301-415-6582.

Sincerely,

/RA/

Tanya Simms, Project Manager
AP1000 Projects Branch 1
Division of New Reactor Licensing
Office of New Reactors

Docket Nos. 52-018
52-019

eRAI Tracking No. 666

Enclosure:
Request for Additional Information

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NRO-002

OFFICE	EEB/BC	NWE1/PM	OGC	NWE1/L-PM
NAME	AHowe*	TSimms*	SBrock*	BHughes*
DATE	6/09/08	7/08/08	7/10/08	8/05/08

*Approval captured electronically in the electronic RAI system.

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Request for Additional Information No. 666 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: 08.02 - Offsite Power System
Application Section: 8.2

QUESTIONS from Electrical Engineering Branch (EEB)

08.02-1

RAI - SRP 8.2- EEB-03

Section 8.2.2 of the FSAR states that in order to maintain reactor coolant pump operation for 3 seconds following a turbine trip, the grid voltage on the high side of the step-up transformers (GSUs), and reserve auxiliary transformer (RATs) can not drop less than 80 percent of the nominal voltage at the Reactor Coolant Pump. In this regard, provide the following information:

- a. Is this voltage based on worst expected switchyard voltage?
- b. Is the 20% voltage drop requirement consistent with North American Electric Reliability Council (NERC) criteria (or local reliability council)?
- c. Describe the effect of voltage drop of 20% on the operation of the onsite auxiliary power system equipment including the Class 1E battery chargers and uninterruptible power supplies.

08.02-2

RAI-SRP 8.2-EEB-10

Section 8.2.1.1 of the FSAR discusses the results of the Failure Mode and Effects Analysis (FMEA) of the Lee Nuclear Station switchyards. In order for the staff to evaluate the FMEA, describe in detail how each event (a breaker not operating during a fault on an offsite line; fault on a switchyard bus; fault on an autobank; a spurious relay trip; a loss of control power; and other cases discussed in the FSAR) in the FMEA was evaluated to conclude that the offsite power to each unit is not lost.