LevyCountyRAIsPEm Resource

From: Habib, Donald
Sent: Wednesday, August 15, 2012 2:25 PM
To: LevyCountyRAIsPEm Resource
Subject: REQUEST FOR ADDITIONAL INFORMATION LETTER NO. 109 RELATED TO SRP SECTION 8.3 FOR THE LEVY COUNTY NUCLEAR PLANT, UNITS 1 AND 2 COMBINED LICENSE APPLICATION
Attachments: Levy RAI Letter 109.docx

Hearing Identifier: Levy_County_COL_eRAIs
Email Number: 112

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Subject: REQUEST FOR ADDITIONAL INFORMATION LETTER NO. 109 RELATED TO SRP SECTION 8.3 FOR THE LEVY COUNTY NUCLEAR PLANT, UNITS 1 AND 2 COMBINED LICENSE APPLICATION
Sent Date: 8/15/2012 2:24:59 PM
Received Date: 8/15/2012 2:26:01 PM
From: Habib, Donald

Created By: Donald.Habib@nrc.gov

Recipients:
"LevyCountyRAIsPEm Resource" <LevyCountyRAIsPEm.Resource@nrc.gov>
Tracking Status: None

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Files	**Size**	**Date & Time**
MESSAGE	3	8/15/2012 2:26:01 PM
Levy RAI Letter 109.docx	22481	

Options
Priority: Standard
Return Notification: No
Reply Requested: No
Sensitivity: Normal
Expiration Date:
Recipients Received:

August 15, 2012

Mr. Christopher M. Fallon
Vice President, Nuclear Development
Progress Energy Florida, Inc.
P.O. Box 1006 - ECO9D
Charlotte, NC 28202

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION LETTER NO. 109 RELATED TO SRP SECTION 8.3 FOR THE LEVY COUNTY NUCLEAR PLANT, UNITS 1 AND 2 COMBINED LICENSE APPLICATION

Dear Mr. Fallon:

By letter dated July 28, 2008, as supplemented by a letter dated September 12, 2008, Progress Energy Florida, Inc. 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 301-415-8148.

Sincerely,

/**RA**/

Jerry Hale, Project Manager
Licensing Branch 4
Division of New Reactor Licensing
Office of New Reactors

Docket Nos. 52-029
52-030

eRAI Tracking No. 6632

Enclosure:
Request for Additional Information

If you have any questions or comments concerning this matter, you may contact me at 301-415-8148.

Sincerely,

/**RA**/

Jerry Hale, Project Manager
Licensing Branch 4
Division of New Reactor Licensing
Office of New Reactors

Docket Nos. 52-029
52-030

eRAI Tracking No. 6632

Enclosure:
Request for Additional Information

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NAME	JHale*	JAndersen*	DHabib*
DATE	8/15/12	8/2/12	8/15/12

*Approval captured electronically in the electronic RAI system.

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Request for Additional Information
Levy County, Units 1 and 2
Dockets 52-029 and 52-030
SRP Section: 08-03 - Stability of Offsite Power Systems

QUESTION for Electrical Branch (EEEB)

08-1

To confirm that the proposed Levy facility complies with 10 CFR 50.55a(h)(3), and Appendix A to 10 CFR Part 50, GDC 17, the NRC requests the Applicant to address the following two issues related to its electric power systems:

Given the requirements above, describe how the protection scheme for ES-1 and ES-2 buses is designed to detect and automatically respond to a single-phase open circuit condition or high impedance ground fault condition on a credited off-site power circuit or another power source.

Also, include the following information:

a. The sensitivity of protective devices to detect abnormal operating conditions and the basis for the protective device setpoint(s).
b. The differences (if any) of the consequences of a loaded (i.e., ES bus normally aligned to offsite power transformer) or unloaded (e.g., ES buses normally aligned to unit auxiliary transformer) power source.
c. If the design does not detect and automatically respond to all single-phase open circuit condition or high impedance ground fault conditions on a credited offsite power circuit or another power source, describe the consequences of such an event and the plant response.
d. Describe the offsite power transformer (e.g., start-up, reserve, station auxiliary) winding and grounding configurations.

Briefly describe the operating configuration of the ES-1 and ES-2 buses at power (normal operating condition). Include the following details:

a. Are the ES buses powered by offsite power sources? If so, explain what major loads are connected to the buses including their ratings.
b. If the ES buses are not powered by offsite power sources, explain how surveillance tests are performed to verify that a single-phase open circuit condition or high impedance ground fault condition on an off-site power circuit is detected.
c. Confirm that the operating configuration of the ES buses is consistent with the current licensing basis. Describe any departures in offsite power source alignment to the ES buses from the original plant licensing.
d. Do the plant operating procedures, including off-normal operating procedures, specifically call for verification of the voltages on all three phases of the ES buses?

e. If a common or single offsite circuit is used to supply redundant ES buses, explain why a failure, such as a single-phase open circuit or high impedance ground fault condition, would not adversely affect redundant ES buses.