

LevyCountyRAIsPEm Resource

From: Habib, Donald
Sent: Thursday, October 01, 2015 10:46 AM
To: LevyCountyRAIsPEm Resource
Subject: RAI Letter No. 133 Related to SRP Section 7.1, Instrumentation and Controls, Introduction, for the Levy Nuclear Plant Units 1 and 2 COL Application
Attachments: 2015-10-01 RAI Letter 133 for MCR Heatup ICE 8286.docx

Hearing Identifier: Levy_County_COL_eRAIs
Email Number: 129

Mail Envelope Properties (d8be5e3e7f2b45478a14f41df7e97e28)

Subject: RAI Letter No. 133 Related to SRP Section 7.1, Instrumentation and Controls, Introduction, for the Levy Nuclear Plant Units 1 and 2 COL Application
Sent Date: 10/1/2015 10:45:38 AM
Received Date: 10/1/2015 10:45:39 AM
From: Habib, Donald

Created By: Donald.Habib@nrc.gov

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

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MESSAGE	3	10/1/2015 10:45:39 AM
2015-10-01 RAI Letter 133 for MCR Heatup ICE 8286.docx		80278

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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

October 1, 2015

Mr. Christopher M. Fallon
Vice President, Nuclear Development
Duke Energy Florida, Inc.
P.O. Box 1006 – EC12L
Charlotte, NC 28201-1006

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION LETTER NO. 133 RELATED
TO STANDARD REVIEW PLAN SECTION 7.1, INSTRUMENTATION AND
CONTROLS, INTRODUCTION, FOR THE LEVY 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., now Duke Energy Florida, 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.

C. Fallon

If you have any questions or comments concerning this matter, you may contact me at 301-415-1035.

Sincerely,

Donald Habib, Project Manager
Licensing Branch 4
Division of New Reactor Licensing
Office of New Reactors

Docket Nos. 52-029
52-030

eRAI Tracking No. 8286

Enclosures:
Requests for Additional Information

C. Fallon

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Sincerely,

Donald Habib, Project Manager
Licensing Branch 4
Division of New Reactor Licensing
Office of New Reactors

Docket Nos. 52-029
52-030

eRAI Tracking Nos. 8286

Enclosures:
Requests for Additional Information

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NRO-002

OFFICE	DSEA/SCVB	OGC/AGCNRP	LB4/PM
NAME	TJackson	KRoach	DHabib*
DATE	9/21/15	9/23/15	10/1/15

*Approval captured electronically in the electronic RAI system.

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Request for Additional Information Letter 133, RAI 8262

Issue Date: 10/01/2015

Application Title: Levy County, Units 1 and 2 - Dockets 52-029 and 52-030

Operating Company: Duke Energy Florida

Review Section: 07.01 - Instrumentation and Controls – Introduction

QUESTIONS

07.01-1

Demonstrate how the safety-related I&C equipment that are to be used in the main control room (MCR) for the Levy COL application is qualified for the changed environmental conditions and time duration. Also clarify whether the qualification conducted for the Common-Q equipment will be credited for the Levy COL application.

10 CFR 50.55a(h) incorporates by reference IEEE Std. 603-1991, which contains Clause 5.4, "Equipment Qualification." Clause 5.4 requires safety system equipment be qualified by type test, previous operating experience, or analysis, or any combination of these three methods, to substantiate that it will be capable of meeting, on a continuing basis, the performance requirements as specified in the design basis.

Section 7.1 of the AP1000 DCD, Revision 19, is incorporated by reference in the Levy COL application. The AP1000 DCD Chapter 7 includes description of the protection system hardware utilizing the Common-Q platform. Table 7-1 in Common Qualified Platform Topical Report, WCAP-16097-P-A, Revision 2, shows that the environmental design requirements for the Common-Q equipment include a maximum temperature at 120 Deg. F and 95% relative humidity (RH) and a minimum temperature of 40 Deg. F and 20% RH for a time duration of 12 hours. According to the documents submitted by the applicant, the potential environmental conditions in the MCR after a design basis event (DBE) are now revised from 95 Deg. F and 70% RH to 115 Deg. F and 35% RH for an extended time duration of four days (between 4th and 7th day after a DBE).

1. Will the Levy COL application continue to rely upon the environmental qualification testing that was previously performed on Common-Q equipment as described in Topical Report WCAP-16097-P-A or will the applicant perform additional testing to demonstrate environmental qualification of safety-related I&C equipment in the main control room (e.g., flat panel displays)?
2. If the Levy COL application will continue to rely upon the environmental qualification previously performed and described in WCAP-16097-P-A, describe how Common-Q safety equipment in the MCR, such as flat display panels and their processors, remain qualified for the changed environmental conditions for the higher temperature with an extended time duration.
3. If additional testing will be performed on safety-related I&C equipment in the MCR, provide the following:
 - a. If testing has been performed, provide the summary results of the tests including maximum temperature and humidity limits and their time durations, identification

of standards used to conduct the testing, and other information commensurate with the level of detail currently outlined in Topical Report WCAP-16097-P-A for environmental qualification of Common-Q equipment.

- b. If testing is to be performed in the future, identify the standards by which the testing will be governed and the ITAAC that would address such future testing.
4. Update the Levy COL application accordingly to include the information above in order to ensure a clear licensing basis.