LevyCountyRAIsPEm Resource

From: Anderson, Brian
Sent: Tuesday, February 16, 2010 11:42 AM
To: LevyCountyRAIsPEm Resource
Subject: REQUEST FOR ADDITIONAL INFORMATION LETTER NO. 081 RELATED TO SRP SECTION 2.5.2 FOR THE LEVY COUNTY UNITS 1 AND 2 COMBINED LICENSE APPLICATION
Attachments: LNP-RAI-LTR-081.doc

Importance: High

Hearing Identifier: Levy_County_COL_eRAIs
Email Number: 81

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Subject: REQUEST FOR ADDITIONAL INFORMATION LETTER NO. 081 RELATED TO SRP SECTION 2.5.2 FOR THE LEVY COUNTY UNITS 1 AND 2 COMBINED LICENSE APPLICATION
Sent Date: 2/16/2010 11:42:02 AM
Received Date: 2/16/2010 11:42:07 AM
From: Anderson, Brian

Created By: Brian.Anderson@nrc.gov

Recipients:
"LevyCountyRAIsPEm Resource" <LevyCountyRAIsPEm.Resource@nrc.gov>
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MESSAGE	3	2/16/2010 11:42:07 AM
LNP-RAI-LTR-081.doc	62970	

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

February 16, 2010

Mr. Garry Miller
General Manager, Nuclear Plant Development
Progress Energy Florida, Inc.
PO Box 1551
411 Fayetteville Street Mall
Raleigh, NC 27602

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION LETTER NO. 081 RELATED TO SRP SECTION 2.5.2 FOR THE LEVY COUNTY NUCLEAR PLANT, UNITS 1 and 2 COMBINED LICENSE APPLICATION

Dear Mr. Miller:

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 301-415-9967.

Sincerely,

/**RA**/

Brian C. Anderson, Lead Project Manager
AP1000 Projects Branch 1
Division of New Reactor Licensing
Office of New Reactors

Docket Nos. 52-029
52-030

eRAI Tracking No. 4283

Enclosure:
Request for Additional Information

If you have any questions or comments concerning this matter, you may contact me at 301-415-9967.

Sincerely,

/**RA**/

Brian C. Anderson, Lead Project Manager
AP1000 Projects Branch 1
Division of New Reactor Licensing
Office of New Reactors

Docket Nos. 52-029
52-030

eRAI Tracking No. 4283

Enclosure:
Request for Additional Information

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NRO-002

OFFICE	RGS1/BC	NWE1/PM	NWE1/L-PM
NAME	RKaras *	BAnderson *	BAnderson*
DATE	01/22/10	01/23/10	02/16/10

*Approval captured electronically in the electronic RAI system.

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Request for Additional Information
Levy County, Units 1 and 2
Progress Energy Florida, Inc.
Docket No. 52-029 and 52-030
SRP Section: 02.05.02 - Vibratory Ground Motion
Application Section: 2.5.2

QUESTIONS for Geosciences and Geotechnical Engineering Branch 2 (RGS2)

02.05.02-22

FSAR Subsections 2.5.2.2.2.5 and 2.5.2.4.1 state that you used the South Texas Project (STP) approach in updating the EPRI-SOG seismic source parameters for the Gulf Coast seismic zones. The STP 3 & 4 FSAR incorporated contributions from seismic sources in the Gulf of Mexico through an update of the seismicity catalog and the maximum magnitude probability distributions of Gulf of Mexico source zones for five of the six EPRI-SOG Earth Science Teams (ESTs) based on the occurrence of two moderate 2006 earthquakes (m_b 5.5 and 6.1) in the Gulf of Mexico. The original probabilities and updates are shown in Levy FSAR Table 2.5.2-209.

In response to STP RAI 2.5.2-21 (ADAMS Accession No. ML092170354), the staff received details of the process that resulted in the updates to Mmax. That RAI response (ML092710096) describes the STP approach and states that the SSHAC TI team's original recommendation was for a Mmax distribution that ranged from magnitude (m_b) 6.1 to 7.2 (6.1 [0.1], 6.6 [0.4], 6.9 [0.4], 7.2 [0.1]). The weighted average of this Mmax distribution is m_b 6.73. However, the SSHAC peer review panel did not approve of this Mmax distribution on the bases that "the Mmax value used by the USGS was not developed through a formal SSHAC process, was not intended to capture the 'legitimate range of technically supportable interpretations among the entire informed technical community' (NUREG/CR-6372, page 6), and was primarily developed to reflect hazard associated with the short return periods of building codes." Instead the SSHAC peer review panel recommended that the individual Mmax distributions for five of the six ESTs Gulf source zones be updated. The weighted average of the updated Mmax values for the five ESTs is m_b 6.14.

Concerning the adopted Mmax distributions for the Gulf of Mexico source zones, the staff requests the following:

1. Please provide details and the basis for updating Mmax for the EPRI ESTs Mmax distributions, as shown in FSAR Table 2.5.2-209. Include a description of the updated information that will be incorporated into the FSAR.

2. Provide justification for rejecting the USGS Mmax value (m_b 7.2) as representing a legitimate end member of the informed technical community.

3. Provide justification for not adopting the original TI team's Mmax distribution. The TI team's original recommendation was for a Mmax distribution that ranged from magnitude (m_b) 6.1 to 7.2, not solely a single value m_b 7.2, on which the USGS 2002 National Hazard Map places a weight of 1.0. There is a significant difference between the two weights (0.1 for TI team versus 1.0 for USGS) for the Mmax value of m_b 7.2.

4. The weighted average of the adopted Mmax distributions for the five ESTs that had updated values is just m_b 6.14. This is about the same magnitude (m_b 6.1) as the September 10, 2006 Gulf earthquake. Considering this result, provide justification for the modest updates to the Mmax values for five of the six ESTs Gulf Coast models.

5. In view of the two 2006 Gulf Coast earthquakes, describe how the limited Woodward Clyde Consultant's source model adequately characterizes the hazard for the Gulf.