

PMLevyCOLPEm Resource

From: Anderson, Brian
Sent: Tuesday, February 16, 2010 2:07 PM
To: robert.kitchen@pgnmail.com; david.waters@pgnmail.com; tillie.wilkins@pgnmail.com
Cc: PMLevyCOLPEm 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 081 - ML100470481.pdf
Importance: High

Attached is RAI Letter No. 081 related to SRP Section 2.5.2 for the Levy County Units 1 and 2 combined license application. The ADAMS Accession number is ML100470481.

Brian Anderson
301-415-9967
Lead Project Manager, AP1000 Projects Branch 1
Office of New Reactors
U.S. Nuclear Regulatory Commission

Hearing Identifier: Levy_County_COL_Public
Email Number: 593

Mail Envelope Properties (B46615B367D1144982B324704E3BCEED214E2AC23B)

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 2:07:02 PM
Received Date: 2/16/2010 2:07:05 PM
From: Anderson, Brian

Created By: Brian.Anderson@nrc.gov

Recipients:

"PMLevyCOLPEm Resource" <PMLevyCOLPEm.Resource@nrc.gov>
Tracking Status: None
"robert.kitchen@pgnmail.com" <robert.kitchen@pgnmail.com>
Tracking Status: None
"david.waters@pgnmail.com" <david.waters@pgnmail.com>
Tracking Status: None
"tillie.wilkins@pgnmail.com" <tillie.wilkins@pgnmail.com>
Tracking Status: None

Post Office: HQCLSTR01.nrc.gov

Files	Size	Date & Time
MESSAGE	326	2/16/2010 2:07:05 PM
LNP RAI 081 - ML100470481.pdf		158108

Options

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

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

Mail Envelope Properties (B46615B367D1144982B324704E3BCEED214E2AC11F)

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>
Tracking Status: None

Post Office: HQCLSTR01.nrc.gov

Files	Size	Date & Time
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

Distribution:

Public	SCoffin	TSimms	WBieganousky
RidsNroDnrlNwe1	JSebrosky	SGoetz	GStirewalt
RidsNroLAKGoldstein	BHughes	DHabib	RKaras
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RidsAcrsAcnw_MailCenter	DMcGovern	TSpicher	VGraizer
RidsRgn2MailCenter	RJoshi	BAnderson	

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.

OFFICIAL RECORD COPY

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 M_{max} . That RAI response (ML092710096) describes the STP approach and states that the SSHAC TI team's original recommendation was for a M_{max} 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 M_{max} distribution is m_b 6.73. However, the SSHAC peer review panel did not approve of this M_{max} distribution on the bases that "the M_{max} 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 M_{max} distributions for five of the six ESTs Gulf source zones be updated. The weighted average of the updated M_{max} values for the five ESTs is m_b 6.14.

Concerning the adopted M_{max} distributions for the Gulf of Mexico source zones, the staff requests the following:

1. Please provide details and the basis for updating M_{max} for the EPRI ESTs M_{max} 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 M_{max} 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 M_{max} distribution. The TI team's original recommendation was for a M_{max} 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 M_{max} 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.