## LevyCountyRAIsPEm Resource

**From:** Anderson, Brian
**Sent:** Monday, October 04, 2010 2:19 PM
**To:** LevyCountyRAIsPEm Resource
**Subject:** REQUEST FOR ADDITIONAL INFORMATION LETTER NO. 095 RELATED TO SRP SECTION 2.4.5 FOR THE LEVY COUNTY UNITS 1 AND 2 COMBINED LICENSE APPLICATION
**Attachments:** LNP-RAI-LTR-095.doc

**Importance:** High

**Hearing Identifier:** Levy_County_COL_eRAIs
**Email Number:** 95

**Mail Envelope Properties** (B46615B367D1144982B324704E3BCEED305AD1BD16)

**Subject:** REQUEST FOR ADDITIONAL INFORMATION LETTER NO. 095 RELATED TO SRP SECTION 2.4.5 FOR THE LEVY COUNTY UNITS 1 AND 2 COMBINED LICENSE APPLICATION
**Sent Date:** 10/4/2010 2:18:40 PM
**Received Date:** 10/4/2010 2:18:40 PM
**From:** Anderson, Brian

**Created By:** Brian.Anderson@nrc.gov

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

**Post Office:** HQCLSTR01.nrc.gov

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| MESSAGE | 6 | 10/4/2010 2:18:40 PM |
| LNP-RAI-LTR-095.doc | 57338 | |

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

October 4, 2010

Mr. John Elnitsky
Vice President, Nuclear Plant Development
Progress Energy Florida, Inc.
P.O. Box 14042
Saint Petersburg, FL 33733

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION LETTER NO. 095 RELATED TO SRP SECTION 2.4.5 FOR THE LEVY COUNTY NUCLEAR PLANT, UNITS 1 and 2 COMBINED LICENSE APPLICATION

Dear Mr. Elnitsky:

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

Docket Nos. 52-029
52-030

eRAI Tracking No. 5107

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

Docket Nos. 52-029
52-030

eRAI Tracking No. 5107

Enclosure:
Request for Additional Information

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|---|---|---|---|
| NAME | RRaione * | BAnderson * | BAnderson* |
| DATE | 09/22/10 | 09/28/10 | 10/04/10 |

*Approval captured electronically in the electronic RAI system.

**OFFICIAL RECORD COPY**

**Levy County, Units 1 and 2**
**Progress Energy Florida, Inc.**
**Docket No. 52-029 and 52-030**
**SRP Section: 02.04.05 - Probable Maximum Surge and Seiche Flooding**
**Application Section: FSAR Section 2.4**

**QUESTIONS for Hydrologic Engineering Branch (RHEB)**

02.04.05-10

In RAI 2.4.5-09 (RAI ID 4629, Question 17567) , the staff requested the applicant to provide the following information: (a) an analysis of the probable maximum storm surge (PMSS) event using a technically sound and conservative approach such as that predicted by a storm surge model (e.g., Sea, Lake, and Overland Surges from Hurricanes (SLOSH)) with input from appropriate Probable Maximum Hurricane (PMH) scenarios, (b) an estimate of sea level rise accounting for current climatic predictions, and (c) if factored into the PMSS analysis (i.e., application of margins), a detailed description of the process for determining uncertainty estimations.

The applicant's response, dated June 18, 2010, does not appear to describe an estimation of PMSS at and near the LNP site using PMH scenarios input into a currently-accepted hydrodynamic storm surge model. NRC requests that the applicant:

(1) utilize a set of plausible PMH scenarios consistent with National Oceanic and Atmospheric Administration (NOAA) National Weather Service (NWS) Report 23 (NWS 23) as input to a currently-accepted storm surge model (such as SLOSH)
(2) use initial open-water conditions that are consistent with current understanding of long-term sea-level rise and are valid for the life of the proposed plant
(3) provide estimates of coincident wind wave runup
(4) maps of highest PMSS water surface elevation at and near the LNP site, and
(5) provide updates to FSAR Section 2.4.5 including descriptions of data, methods, model setup, PHM scenarios and how they are consistent with NWS 23, treatment of uncertainty in the analysis, and available margins.