

PMLevyCOLPEm Resource

From: Brian Anderson
Sent: Tuesday, May 19, 2009 3:17 PM
To: robert.kitchen@pgnmail.com; david.waters@pgnmail.com; tillie.wilkins@pgnmail.com; PMLevyCOLPEm Resource
Cc: Brian Anderson
Subject: REQUEST FOR ADDITIONAL INFORMATION LETTER NO. 045 RELATED TO SRP SECTION 2.4.3 FOR THE LEVY COUNTY UNITS 1 AND 2 COMBINED LICENSE APPLICATION
Attachments: LNP RAI 045 - ML091390664.pdf
Importance: High

Attached is RAI Letter No. 045 related to SRP Section 2.4.3 for the Levy County Units 1 and 2 combined license application. The ADAMS Accession number is ML091390664.

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: 149

Mail Envelope Properties (CB87FC66F95637428C5E0D066E756B6FC00015FB0B)

Subject: REQUEST FOR ADDITIONAL INFORMATION LETTER NO. 045 RELATED TO SRP SECTION 2.4.3 FOR THE LEVY COUNTY UNITS 1 AND 2 COMBINED LICENSE APPLICATION
Sent Date: 5/19/2009 3:17:00 PM
Received Date: 5/19/2009 3:17:03 PM
From: Brian Anderson

Created By: Brian.Anderson@nrc.gov

Recipients:

"Brian Anderson" <Brian.Anderson@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
"PMLevyCOLPEm Resource" <PMLevyCOLPEm.Resource@nrc.gov>
Tracking Status: None

Post Office: HQCLSTR01.nrc.gov

| Files | Size | Date & Time |
|-------------------------------|-------------|------------------------|
| MESSAGE | 326 | 5/19/2009 3:17:03 PM |
| LNP RAI 045 - ML091390664.pdf | | 154658 |

Options

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

LevyCountyRAIsPEm Resource

From: Brian Anderson
Sent: Tuesday, May 19, 2009 2:58 PM
To: LevyCountyRAIsPEm Resource
Subject: REQUEST FOR ADDITIONAL INFORMATION LETTER NO. 045 RELATED TO SRP SECTION 2.4.3 FOR THE LEVY COUNTY UNITS 1 AND 2 COMBINED LICENSE APPLICATION
Attachments: LNP-RAI-LTR-045.doc
Importance: High

Hearing Identifier: Levy_County_COL_eRAIs
Email Number: 46

Mail Envelope Properties (CB87FC66F95637428C5E0D066E756B6FC00015FAF0)

Subject: REQUEST FOR ADDITIONAL INFORMATION LETTER NO. 045 RELATED TO SRP SECTION 2.4.3 FOR THE LEVY COUNTY UNITS 1 AND 2 COMBINED LICENSE APPLICATION
Sent Date: 5/19/2009 2:58:10 PM
Received Date: 5/19/2009 2:58:12 PM
From: Brian Anderson

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 | 5/19/2009 2:58:12 PM |
| LNP-RAI-LTR-045.doc | 62970 | |

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

May 19, 2009

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. 045 RELATED TO
SRP SECTION 2.4.3 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. 2159

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. 2159

Enclosure:
Request for Additional Information

Distribution:

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|-------------------------|-----------|-----------|----------|
| Public | SCoffin | TSimms | HJones |
| RidsNroDnrINwe1 | JSebrosky | SGoetz | NTiruneh |
| RidsNroLAKGoldstein | BHughes | SHaggerty | RRaione |
| RidsOgcMailCenter | MComar | JMartin | |
| RidsAcrsAcnw_MailCenter | CPatel | SBrock | |
| RidsRgn2MailCenter | RJoshi | BAnderson | |

NRO-002

| | | | | |
|--------|-----------|-------------|----------|------------|
| OFFICE | RHEB/BC | NWE1/PM | OGC | NWE1/L-PM |
| NAME | RRaione * | BAnderson * | JMartin* | BAnderson* |
| DATE | 02/12/09 | 02/13/09 | 04/16/09 | 05/19/09 |

*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: 02.04.03 - Probable Maximum Flood (PMF) on Streams and Rivers
Application Section: FSAR Section 2.4

QUESTIONS for Hydrologic Engineering Branch (RHEB)

02.04.03-1

To meet the requirements of GDC 2, 10 CFR 52.17, and 10 CFR Part 100, estimates of the following characteristics are needed, and should be based on conservative assumptions of hydrometeorologic characteristics in the drainage area: (a) the area of the watershed used to estimate flooding in streams and rivers, (b) the total depth of PMP and the PMP hyetograph, (c) the maximum PMF water surface elevation in streams and rivers with coincident wind-waves, and (d) hydraulic characteristics that describe dynamic effects of PMF on SSC important to safety. Please describe the process followed to determine the conceptual models for floods in streams and rivers and in site drainage system to ensure that the design basis flood is based on the most conservative of plausible conceptual models.

02.04.03-2

To meet the requirements of GDC 2, 10 CFR 52.17, and 10 CFR Part 100, the applicant should include information concerning design basis flooding at the plant site, including consideration of appropriate combinations of individual flooding mechanisms in addition to the most severe effects from individual mechanisms themselves. Please clarify the combined events criterion used to identify the design basis flood at the LNP site and to explicitly state the value of the design basis flood in the FSAR including a description of any adjustment made for long-term sea level rise.

02.04.03-3

To meet the requirements of GDC 2, 10 CFR 52.17, and 10 CFR Part 100, estimates of the following characteristics are needed, and should be based on conservative assumptions of hydrometeorologic characteristics in the drainage area: (a) the area of the watershed used to estimate flooding in streams and rivers, (b) the total depth of PMP and the PMP hyetograph, (c) the maximum PMF water surface elevation in streams and rivers with coincident wind-waves, and (d) hydraulic characteristics that describe dynamic effects of PMF on SSC important to safety. Please justify (1) the use of unit hydrograph method for estimating the runoff from precipitation falling on the surface of Lake Rousseau and (2) the appropriateness of Snyder's unit hydrograph under PMP conditions given the assumption of linearity in the unit hydrograph approach of runoff generation.

02.04.03-4

To meet the requirements of GDC 2, 10 CFR 52.17, and 10 CFR Part 100, estimates of the following characteristics are needed, and should be based on conservative assumptions of hydrometeorologic characteristics in the drainage area: (a) the area of the watershed used to estimate flooding in streams and rivers, (b) the total depth of PMP and the PMP hyetograph, (c) the maximum PMF water surface elevation in streams and rivers with coincident wind-waves, and (d) hydraulic characteristics that describe dynamic effects of PMF on SSC important to safety. Please clarify the estimation of baseflow used in the determination of the PMF discharge.