LevyCountyRAIsPEm Resource

From: Anderson, Brian
Sent: Tuesday, November 09, 2010 10:03 AM
To: LevyCountyRAIsPEm Resource
Subject: REQUEST FOR ADDITIONAL INFORMATION LETTER NO. 096 RELATED TO SRP SECTION 2.3.1 FOR THE LEVY COUNTY UNITS 1 AND 2 COMBINED LICENSE APPLICATION
Attachments: LNP-RAI-LTR-096.doc

Importance: High

Hearing Identifier: Levy_County_COL_eRAIs
Email Number: 96

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Subject: REQUEST FOR ADDITIONAL INFORMATION LETTER NO. 096 RELATED TO SRP SECTION 2.3.1 FOR THE LEVY COUNTY UNITS 1 AND 2 COMBINED LICENSE APPLICATION
Sent Date: 11/9/2010 10:03:06 AM
Received Date: 11/9/2010 10:03:08 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	2	11/9/2010 10:03:08 AM
LNP-RAI-LTR-096.doc	62458	

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

November 9, 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. 096 RELATED TO SRP SECTION 2.3.1 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. 5145

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. 5145

Enclosure:
Request for Additional Information

Distribution:

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NRO-002

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DATE	10/05/10	10/18/10	11/09/10

*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: 02.03.01 - Regional Climatology
Application Section: Regional Climatology

QUESTIONS for Siting and Accident Conseq Branch (RSAC)

02.03.01-17

The staff has identified apparent inconsistencies in FSAR Section 2.3.1.2.2, "Tornadoes and Severe Winds." Please clarify the following and make any necessary changes to the FSAR.

- The third to last paragraph in FSAR Section 2.3.1.2.2, Revision 2, states that "[a]n importance factor of 1.15 is applied to this wind speed in the design of safety related functions." The staff finds two errors with this statement:

  1. The design (operating basis) wind speed for the AP1000 standard plant is 145 mph, as indicated in the AP1000 DCD Tier 2, Section 3.3.1.1, not the site characteristic wind speeds listed in FSAR Section 2.3.1.2.2.

  2. The importance factor of 1.15 is applied to the velocity pressure, not the wind speed. An importance factor of 1.15 correlates to a wind speed conversion factor of 1.07.

- The following sentence in the paragraph states, "Therefore, the maximum observed wind speeds for the design-basis tornado would be 119 km/h (74 mph), 143 km/h (89 mph), 195 km/h (121 mph), 153 km/h (95 mph), and 113 km/h (70 mph) for Gainesville, Jacksonville, Orlando, Tallahassee, and Tampa, respectively." The staff finds two errors with this statement:

  1. The term "observed wind speeds" is ambiguous and should be clarified as to the time scale that was used.

  2. These wind speeds are not design-basis tornado wind speeds. The design-basis tornado wind speed for the AP1000 standard plant is 300 mph as indicated in AP1000 DCD Tier 2, Section 3.3.2.1.

02.03.01-18

FSAR Revision 2 provided updated information on operating basis wind speeds. There appears to be some inconsistencies within the context of FSAR Section 2.3.1.2.2, "Tornadoes and Severe Winds." Please clarify the following:

- The first sentence in the second to last paragraph in FSAR Section 2.3.1.2.2 states that "a site characteristic 3-second gust wind speed that represents a 100-year return period for the LNP site has been established at 224 km/h (139 mph)." This sentence conflicts with the next paragraph that states that the (3-second gust 100-year) wind speed site characteristic value in FSAR Table 2.0-201 is 128 mph.

- The second to last paragraph in FSAR Section 2.3.1.2.2 states that, “the maximum published 3-second gust wind speed based on tornado events and severe winds for these stations is 209 km/h (130 mph) (Orlando and Tampa) and is represented as the 50-year return 3-second gust at 10 m (33 ft) above the ground.”

  1. The maximum published 3-second gust wind speed is not based on tornado wind speeds.

  2. The identification of the 50-year return 3-second gust wind speed site characteristic as 130 mph appears to conflict with following paragraph, and FSAR Table 2.0-201, that states that the 50-year return period wind speed is 120 mph.