

PMLevyCOLPEm Resource

From: Habib, Donald
Sent: Wednesday, August 12, 2009 2:36 PM
To: david.waters@pgnmail.com; robert.kitchen@pgnmail.com; tillie.wilkins@pgnmail.com
Cc: LevyCOL Resource
Subject: RAI Letter 064 for Levy County Units 1 and 2
Attachments: Levy-RAI-LTR-064.pdf

Attached is RAI Letter 064 for Levy County. The ML Accession Number for the RAI is ML092240465.

Donald C. Habib
Project Manager
U.S. Nuclear Regulatory Commission
Office of New Reactors, DNRL/NWE1
Room T-6D14
Washington, DC 20555
301-415-1035
dch3@nrc.gov

Hearing Identifier: Levy_County_COL_Public
Email Number: 419

Mail Envelope Properties (D841D501B2C4D244B75AB897F70C14949A4CEF2196)

Subject: RAI Letter 064 for Levy County Units 1 and 2
Sent Date: 8/12/2009 2:36:00 PM
Received Date: 8/12/2009 2:36:01 PM
From: Habib, Donald

Created By: Donald.Habib@nrc.gov

Recipients:

"LevyCOL Resource" <LevyCOL.Resource@nrc.gov>
Tracking Status: None
"david.waters@pgnmail.com" <david.waters@pgnmail.com>
Tracking Status: None
"robert.kitchen@pgnmail.com" <robert.kitchen@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	302	8/12/2009 2:36:01 PM
Levy-RAI-LTR-064.pdf	195728	

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

LevyCountyRAIsPEm Resource

From: Habib, Donald
Sent: Wednesday, August 12, 2009 1:57 PM
To: LevyCountyRAIsPEm Resource
Subject: REQUEST FOR ADDITIONAL INFORMATION LETTER NO. 064 RELATED TO SRP SECTION 12.03-12.04 FOR THE LEVY COUNTY NUCLEAR PLANT, UNITS 1 and 2 COMBINED LICENSE APPLICATION
Attachments: LEVY-RAI-LTR-064.doc

Hearing Identifier: Levy_County_COL_eRAIs
Email Number: 66

Mail Envelope Properties (D841D501B2C4D244B75AB897F70C14949A4CEF2101)

Subject: REQUEST FOR ADDITIONAL INFORMATION LETTER NO. 064 RELATED TO SRP SECTION 12.03-12.04 FOR THE LEVY COUNTY NUCLEAR PLANT, UNITS 1 and 2 COMBINED LICENSE APPLICATION

Sent Date: 8/12/2009 1:56:34 PM

Received Date: 8/12/2009 1:56:39 PM

From: Habib, Donald

Created By: Donald.Habib@nrc.gov

Recipients:

"LevyCountyRAIsPEm Resource" <LevyCountyRAIsPEm.Resource@nrc.gov>

Tracking Status: None

Post Office: HQCLSTR01.nrc.gov

Files	Size	Date & Time
MESSAGE	3	8/12/2009 1:56:39 PM
LEVY-RAI-LTR-064.doc	56826	

Options

Priority: Standard

Return Notification: No

Reply Requested: No

Sensitivity: Normal

Expiration Date:

Recipients Received:

August 12, 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. 064 RELATED TO
SRP SECTION 12.03-12.04 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 301-415-1035 or you may contact Brian Anderson, the lead project manager for the Levy County Nuclear Plant Units 1 and 2 combined license application at 301-415-9967.

Sincerely,

/RA/

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

Docket Nos. 52-029
52-030

Enclosure:
Request for Additional Information

If you have any questions or comments concerning this matter, you may contact me at 301-415-1035 or you may contact Brian Anderson, the lead project manager for the Levy County Nuclear Plant Units 1 and 2 combined license application at 301-415-9967.

Sincerely,

/RA/

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

Docket Nos. 52-029
52-030
eRAI Tracking No. 2368

Enclosure:
Request for Additional Information

Distribution:

Public	BHughes	SHaggerty	ASnyder
RidsNroDnrlNwe1	SCoffin	MComar	CPatel
RidsNroLAKGoldstein	TSimms	JMartin	
RidsOgcMailCenter	BAnderson	TFrye	
RidsAcrsAcnw_MailCenter	ERoach	RJoshi	
RidsRgn2MailCenter	JSebrosky	SGoetz	

NRO-002

OFFICE	CHPB/BC	NWE1/PM	OGC	NWE1/L-PM
NAME	TFrye *	DHabib *	JMartin*	BAnderson*
DATE	7/8/09	7/10/09	7/13/09	7/31/09

*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: 12.03-12.04 - Radiation Protection Design Features
Application Section: Section 12.03-12.04

QUESTION from Health Physics Branch (CHPB)

12.03-12.04-1

Levy County COL FSAR section 12.4.1.9 provides a description of the potential sources of exposure to construction workers. The dose limits to the workers are reviewed by the staff to ensure compliance with 10 CFR 20.1301.

10 CFR 20.1301 (a)(1) states "The total effective dose equivalent to individual members to the public from the licensed operation does not exceed 0.1 rem (1 mSv) in a year".

Review of related Levy County SCOL documents to support an independent assessment of compliance with the regulations, requires the staff to request additional information to make a determination of reasonable assurance.

The NRC staff reviewed supplemental information item LNP SUP 12.4-1, regarding dose to construction workers, in the new Subsection 12.4.1.9 (subsections 12.4.1.9.1 through 12.4.1.9.5). The information provided in FSAR section 12.4.1.9.1-4 was not sufficient for the staff to validate and verify the estimated doses for Unit 2 construction workers. Without this information the staff can not verify that the application meets the acceptance criteria in SRP 12.3-4 and complies with the dose limits in 10 CFR 20.1301 and 1302.

- 1) The applicant states that per DCD Section 12.4.2, the direct radiation contribution from the containment and other plant buildings is negligible. However, neither the DCD nor the applicant provides data as to the source of direct dose or the dose rates expected at locations for construction workers. Furthermore, the same statement is made regarding construction worker dose received from performing the tie-in of Unit 2 liquid effluent piping. The staff requests the applicant to provide additional data, including evaluated potential dose rates, with bases, at reasonably occupied construction worker locations to substantiate these conclusions.
- 2) The applicant uses the worst case X/Q value at 402 meters from Unit 1 to determine the dose to Unit 2 construction workers and assumes a worker residence time of 2080 hours. Dose determined at 402 meters is used with no discussion on the relationship of this distance to actual distances that construction workers will be from the radiation source release points. As indicated by Figure 2.1.1-203, construction workers could be substantially closer to Unit 1 sources than the 402 meters assumed. Furthermore, a construction worker residence time of 2080 hours is used; this value may not necessarily be reflective of anticipated worker exposure times (i.e., non-conservative) considering potential overtime during construction activities for Unit 2, which have been typical for such construction projects. The applicant is requested to provide a justification as to the appropriateness of calculating construction worker doses using the X/Q value for 402 meters, WSW. Additionally, the potential for increased work hours, above the nominal 2080 hours per year, should be considered in estimating construction worker dose.

Provide the information necessary to reproduce the calculations or reference where the information was obtained such that it is available to the staff to make an independent determination of construction worker dose estimates. Include the necessary information in the Levy County FSAR Section 12.4.