HarrisRAIsPEm Resource

From: Manny Comar
Sent: Sunday, March 01, 2009 11:24 AM
To: HarrisRAIsPEm Resource
Subject: REQUEST FOR ADDITIONAL INFORMATION LETTER NO. 59 RELATED TO SRP SECTION 12.03-12.04 FOR THE SHEARON HARRIS UNITS 2 AND 3 COMBINED LICENSE APPLICATION
Attachments: HAR-RAI-LTR-059.doc

Hearing Identifier: HarrisCOL_eRAIs
Email Number: 62

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Subject: REQUEST FOR ADDITIONAL INFORMATION LETTER NO. 59 RELATED TO SRP SECTION 12.03-12.04 FOR THE SHEARON HARRIS UNITS 2 AND 3 COMBINED LICENSE APPLICATION
Sent Date: 3/1/2009 11:24:02 AM
Received Date: 3/1/2009 11:24:04 AM
From: Manny Comar

Created By: Manny.Comar@nrc.gov

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

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

February 27, 2009

James Scarola
Senior Vice President and
Chief Nuclear Officer
PO Box 1551
411 Fayetteville Street Mall
Raleigh NC 27602

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION LETTER NO. 059 RELATED TO SRP SECTION 12.03-12.04 - RADITION PROTECTION DESIGN FEATURES FOR THE SHEARON HARRIS UNITS 2 AND 3 COMBINED LICENSE APPLICATION

Dear Mr. Scarola:

By letter dated February 18, 2008, Progress Energy submitted its application to the U. S. Nuclear Regulatory Commission (NRC) for a combined license (COL) for two AP1000 advance 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 Ravindra Joshi, the Project Manager at 301-415-6191 or you may contact me at 301-415-3863.

Sincerely,

/**RA**/

Manny Comar, Lead Project Manager
AP1000 Projects Branch 1
Division of New Reactor Licensing
Office of New Reactors

Docket Nos. 52-022
52-023

Enclosure:
Request for Additional Information

CC: see next page

If you have any questions or comments concerning this matter, you may contact Ravindra Joshi, the Project Manager at 301-415-6191 or you may contact me at 301-415-3863.

Sincerely,

/**RA**/

Manny Comar, Lead Project Manager
AP1000 Projects Branch 1
Division of New Reactor Licensing
Office of New Reactors

Docket Nos. 52-022
52-023

ERAI Tracking No. 2074

Enclosure:
Request for Additional Information

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NAME	TFrye*	RJoshi*	SBrock*	MComar*
DATE	02/09/09	02/09/09	02/18/09	02/24/09

*Approval captured electronically in the electronic RAI system.

OFFICIAL RECORD COPY

Request for Additional Information No. 2074

2/27/2009

Shearon Harris
Progress Energy Carolinas, Inc.
Docket No. 52-022 and 52-023
SRP Section: 12.03-12.04 - Radiation Protection Design Features
Application Section: FSAR Section 12.4

QUESTIONS from Health Physics Branch (CHPB)

12.03-12.04-1

RG 1.206, Section C.I.12.3.5 requests that an applicant should provide estimated annual dose to construction workers in a new unit construction area, as a result of radiation from onsite sources from the existing operating plant(s). The applicant should provide bases, models, assumptions, and input data.

Harris 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 against the standards of 10 CFR 20.1301.

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

The staff reviewed related Harris SCOL documents to support an independent assessment of compliance with the regulations. The staff, however, needs additional information to make a determination of reasonable assurance.

Harris COL FSAR Subsection 12.4.1.9 appears to use one year of environmental monitoring data from Thermo Luminescent Dosimeters (TLDs) to evaluate the potential direct radiation dose to construction workers associated with Unit 1 & 2 operations. Please provide the following bases information:

i) Sufficient bases information to demonstrate that the TLD data used is consistent with previous years of data collected and why the selected single year (2004) is appropriate;
ii) Include a discussion in the bases of the effect of capacity factor for Unit 1 during 2004 on results;
iii) The bases for detection level and error bounds for doses based on the single year of TLD Data that provide an estimate of construction worker exposure meeting the standards of 10 CFR 20.1301; and
iv) A description of the specific TLD locations that are used to estimate the dose to construction workers and justification for the assumption that the selected TLD locations are representative of the exposure that is estimated to be received by the construction workers.