

TurkeyPointRAIsPEm Resource

From: Comar, Manny
Sent: Tuesday, March 17, 2015 3:05 PM
To: TurkeyPointRAIsPEm Resource
Subject: REQUEST FOR ADDITIONAL INFORMATION LETTER NO.83 RELATED TO SRP
SECTION 03.08.05 FOUNDATIONS FOR THE TURKEY POINT NUCLEAR PLANT UNITS 6
AND 7 COL
Attachments: PTN-RAI-LTR-083.doc

Hearing Identifier: TurkeyPoint_COL_eRAIs
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Subject: REQUEST FOR ADDITIONAL INFORMATION LETTER NO.83 RELATED TO
SRP SECTION 03.08.05 FOUNDATIONS FOR THE TURKEY POINT NUCLEAR PLANT UNITS 6 AND 7
COL

Sent Date: 3/17/2015 3:05:27 PM

Received Date: 3/17/2015 3:05:29 PM

From: Comar, Manny

Created By: Manny.Comar@nrc.gov

Recipients:

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

Tracking Status: None

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PTN-RAI-LTR-083.doc	65594	

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Expiration Date:

Recipients Received:

March 17, 2015

Mano K. Nazar
President and Chief Nuclear Officer
Nuclear Division
Florida Power & Light Company
Mail Stop NNP/JB
700 Universe Blvd
Juno Beach, FL 33408-0420

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION LETTER NO.083 RELATED
TO SRP SECTION 03.08.05 FOUNDATIONS FOR THE TURKEY POINT
NUCLEAR PLANT UNITS 6 AND 7 COMBINED LICENSE APPLICATION

Dear Mr. Nazar:

By letter dated June 30, 2009, as supplemented by letters dated August 7, 2009, September 3, 2010, December 21, 2010, December 16, 2011, December 14, 2012, December 16, 2013, and October 29, 2014 Florida Power and Light 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 you are unable to provide a response within 30 days, please state when you will be able to provide the response. In the event the response submitted is incomplete, please indicate in the response when the complete response will be provided. If changes are needed to the final safety analysis report, the staff requests that the RAI response include the proposed wording changes. Your response should also indicate whether any of the information provided is to be withheld as exempt from public disclosure pursuant to 10 CFR 2.390.

If you have any questions or comments concerning this matter, you may contact me at 301-415-3863 or manny.comar@nrc.gov.

Sincerely,

/RA/

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

Docket Nos. 52-040
52-041

Enclosure:
Request for Additional Information

CC: see next page

If you have any questions or comments concerning this matter, you may contact me at 301-415-3863 or manny.comar@nrc.gov.

Sincerely,

/RA/

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

Docket Nos. 52-040
52-041
eRAI Tracking No. 7815

Enclosure:
Request for Additional Information

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OFFICE	SEB1/BC	LB4/PM	LB1/L-PM
NAME	MShams*	MComar*	MComar*
DATE	2/19/15	2/23/15	3/17/15

*Approval captured electronically in the electronic RAI system.

Request for Additional Information 083

Issue Date: 03/17/2015

Application Title: Turkey Point Units 6 and 7

Operating Company: Florida P and L

Docket No. 52-040 and 52-041

Review Section: 03.08.05 - Foundations

Application Section:

QUESTIONS

03.08.05-3

In its revised response to RAI 6433, Question 03.08.05-1 dated December 11, 2014, the applicant stated that the lean concrete fill beneath the Nuclear Island (NI) structure will be design and constructed using the guidelines of the American Concrete Institute (ACI) 207, "Guide to Mass Concrete." The staff reviewed Section 2.5.4.5.1.2, "Power Block and Site Grade Raising," of the FSAR, Revision 6, and noticed that the applicant provided a description of a thermal control plan for reducing thermal cracking of the lean concrete fill beneath the NI. The FSAR, however, did not describe the design and construction approach for the lean concrete fill to attain the required fill mechanical properties. The information is necessary for the staff to assess the ability of the fill material to perform its function to support the NI. The applicant is requested to describe in sufficient detail the design and construction approaches of the lean concrete fill in Section 2.5.4.1.2 of the FSAR.

03.08.05-4

SRP Section 3.8.5 requires confirmation that the Nuclear Island (NI) remains stable under design basis demands. AP1000 DCD Section 3.4.1.1.1.1, "Waterproofing," states that the waterproofing membrane between the mudmat must provide adequate shear to transfer forces due to seismic loading and that this function is a seismic Category I. The DCD also provides a requirement for the COL applicant to demonstrate that the coefficient of friction (COF) for the waterproofing membrane to be used beneath NI is equal to or greater than 0.55. The staff reviewed Section 14.3.3.4, "Waterproofing Membrane ITAAC," of the FSAR, and noticed that the applicant provided a brief description of the Waterproofing Membrane ITAAC. The applicant stated that, "Site-specific ITAAC for the waterproof membrane will be developed to verify by testing that the mudmat-waterproofing-mudmat interface beneath the Nuclear Island basemat has a minimum coefficient of friction to resist sliding of 0.55." To ensure that the COF of 0.55 is met, the applicant is requested to provide in Appendix B to Part 10 of the FSAR an ITAAC table that describes the design commitment; the inspection, testing or analyses to be performed; and the as-built design criteria of the waterproofing membrane.