PMTurkeyCOLPEm Resource

From: Comar, Manny
Sent: Friday, December 03, 2010 4:26 PM
To: Comar, Manny; Maria Morell; Russell Shearer; Anderson, Brian; Cruz, Jeffrey; Galletta, Thomas; Goetz, Sujata; Goldstein, Kay; Habib, Donald; Haggerty, Sharon; Hughes, Brian; Joshi, Ravindra; McGovern, Denise; Sebrosky, Joseph; Simms, Tanya; Antonio Fernandez; orthen, Richard; TurkeyCOL Resource; William Maher
Cc: Raione, Richard; Ahn, Hosung; Moulding, Patrick
Subject: RE: REQUEST FOR ADDITIONAL INFORMATION LETTER NO. 010 RELATED TO SRP SECTION 02.04.05 PROBABLE MAXIMUM SURGE AND SEICHE FLOODING FOR THE TURKEY POINT NUCLEAR PLANT UNITS 6 AND 7 COMBINED LICENSE APPLICATION
Attachments: PTN-ltr-010-rai5233.pdf

Attachment

From: Comar, Manny
Sent: Friday, December 03, 2010 4:14 PM
To: Maria Morell; Russell Shearer; Anderson, Brian; Comar, Manny; Cruz, Jeffrey; Galletta, Thomas; Goetz, Sujata; Goldstein, Kay; Habib, Donald; Haggerty, Sharon; Hughes, Brian; Joshi, Ravindra; McGovern, Denise; Sebrosky, Joseph; Simms, Tanya; Antonio Fernandez; orthen, Richard; TurkeyCOL Resource; William Maher
Cc: Raione, Richard; Ahn, Hosung; Moulding, Patrick
Subject: REQUEST FOR ADDITIONAL INFORMATION LETTER NO. 010 RELATED TO SRP SECTION 02.04.05 PROBABLE MAXIMUM SURGE AND SEICHE FLOODING FOR THE TURKEY POINT NUCLEAR PLANT UNITS 6 AND 7 COMBINED LICENSE APPLICATION

All:

Attached is the RAI letter No. 10 related to SRP Section:.02.04.05 - Probable Maximum Surge and Seiche Flooding for Turkey Point Units 6 and 7 Combined License Application.

The Accession number is ML103370087

If you have any further questions, please feel free to contact me. Thanks

Manny Comar
Senior Project Manager
NRO/DNRL/NWE1
Nuclear Regulatory Commission
301-415-3863
mailto:manny.comar@nrc.gov

Hearing Identifier: TurkeyPoint_COL_Public
Email Number: 7

Mail Envelope Properties (377CB97DD54F0F4FAAC7E9FD88BCA6D02BE88FDE98)

Subject: RE: REQUEST FOR ADDITIONAL INFORMATION LETTER NO. 010 RELATED TO SRP SECTION 02.04.05 PROBABLE MAXIMUM SURGE AND SEICHE FLOODING FOR THE TURKEY POINT NUCLEAR PLANT UNITS 6 AND 7 COMBINED LICENSE APPLICATION
Sent Date: 12/3/2010 4:25:56 PM
Received Date: 12/3/2010 4:26:23 PM
From: Comar, Manny

Created By: Manny.Comar@nrc.gov

Recipients:
"Raione, Richard" <Richard.Raione@nrc.gov>
Tracking Status: None
"Ahn, Hosung" <Hosung.Ahn@nrc.gov>
Tracking Status: None
"Moulding, Patrick" <Patrick.Moulding@nrc.gov>
Tracking Status: None
"Comar, Manny" <Manny.Comar@nrc.gov>
Tracking Status: None
"Maria Morell" <mmorell@islinc.com>
Tracking Status: None
"Russell Shearer" <rshearer@islinc.com>
Tracking Status: None
"Anderson, Brian" <Brian.Anderson@nrc.gov>
Tracking Status: None
"Cruz, Jeffrey" <Jeffrey.Cruz@nrc.gov>
Tracking Status: None
"Galletta, Thomas" <Thomas.Galletta@nrc.gov>
Tracking Status: None
"Goetz, Sujata" <Sujata.Goetz@nrc.gov>
Tracking Status: None
"Goldstein, Kay" <Kay.Goldstein@nrc.gov>
Tracking Status: None
"Habib, Donald" <Donald.Habib@nrc.gov>
Tracking Status: None
"Haggerty, Sharon" <Sharon.Haggerty@nrc.gov>
Tracking Status: None
"Hughes, Brian" <Brian.Hughes@nrc.gov>
Tracking Status: None
"Joshi, Ravindra" <Ravindra.Joshi@nrc.gov>
Tracking Status: None
"McGovern, Denise" <Denise.McGovern@nrc.gov>
Tracking Status: None
"Sebrosky, Joseph" <Joseph.Sebrosky@nrc.gov>
Tracking Status: None
"Simms, Tanya" <Tanya.Simms@nrc.gov>
Tracking Status: None
"Antonio Fernandez" <Antonio.Fernandez@fpl.com>
Tracking Status: None
"orthen, Richard" <richard.orthen@fpl.com>

Tracking Status: None
"TurkeyCOL Resource" <TurkeyCOL.Resource@nrc.gov>
Tracking Status: None
"William Maher" <William.maher@fpl.com>
Tracking Status: None

Post Office: HQCLSTR01.nrc.gov

Files	**Size**	**Date & Time**
MESSAGE	1166	12/3/2010 4:26:23 PM
PTN-ltr-010-rai5233.pdf	137247	

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

TurkeyPointRAIsPEm Resource

From: Comar, Manny
Sent: Thursday, December 02, 2010 3:39 PM
To: TurkeyPointRAIsPEm Resource
Subject: REQUEST FOR ADDITIONAL INFORMATION LETTER NO. 010 RELATED TO SRP SECTION 02.04.05 PROBABLE MAXIMUM SURGE AND SEICHE FLOODING FOR THE TURKEY POINT NUCLEAR PLANT UNITS 6 AND 7 COMBINED LICENSE APPLICATION
Attachments: PTN-RAI-LTR-010.doc

Hearing Identifier: TurkeyPoint_COL_eRAIs
Email Number: 12

Mail Envelope Properties (377CB97DD54F0F4FAAC7E9FD88BCA6D02BE86CE471)

Subject: REQUEST FOR ADDITIONAL INFORMATION LETTER NO. 010 RELATED TO SRP SECTION 02.04.05 PROBABLE MAXIMUM SURGE AND SEICHE FLOODING FOR THE TURKEY POINT NUCLEAR PLANT UNITS 6 AND 7 COMBINED LICENSE APPLICATION
Sent Date: 12/2/2010 3:39:05 PM
Received Date: 12/2/2010 3:39:09 PM
From: Comar, Manny

Created By: Manny.Comar@nrc.gov

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

Post Office: HQCLSTR01.nrc.gov

Files	**Size**	**Date & Time**
MESSAGE	3	12/2/2010 3:39:09 PM
PTN-RAI-LTR-010.doc	50682	

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

December 2, 2010

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

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION LETTER NO. 010 RELATED TO SRP SECTION 02.04.05 PROBABLE MAXIMUM SURGE AND SEICHE FLOODING 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 a letters dated August 7, 2009 and September 3, 2010, 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 45 days of the date of this letter. If you are unable to provide a response within 45 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 Projects 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 Projects Branch 1
Division of New Reactor Licensing
Office of New Reactors

Docket Nos. 52-040
52-041
eRAI Tracking No. 5233

Enclosure:
Request for Additional Information

Distribution:

Public	PMoulding	BHughes
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AHosung	SHaggerty	TSpiecher

NRO-002

OFFICE	SBPA/BC	NWE1/PM	OGC	NWE1/L-PM
NAME	RRaione*	MComar*	PMoulding*	MComar*
DATE	11/05/10	11/08/10	11/11/10	12/02/10

*Approval captured electronically in the electronic RAI system.

OFFICIAL RECORD COPY

Request for Additional Information No. 5233

Turkey Point Units 6 and 7
Florida P and L
Docket No. 52-040 and 52-041
SRP Section: 02.04.05 - Probable Maximum Surge and Seiche Flooding
Application Section: FSAR 2.4.5

QUESTIONS from Hydrologic Engineering Branch (RHEB)

02.04.05-1

The NRC staff reviewed the applicant's reasoning regarding the potential for natural oscillations within the Biscayne Bay to produce a resonance. The application discusses seismic forcing and acknowledges the possibility of atmospheric forcing as a contributor to seiche oscillation; please discuss the possible role of ocean currents (such as the Florida Current) in contributing to oscillations (see Soloviev et al. 2003 and Davis et al. 2008).

Provide sufficient reasoning and analysis to demonstrate that natural oscillations in the Biscayne Bay would not coincide with other phenomena to produce flooding that could adversely affect the safety-related facilities of Units 6 and 7. Demonstrate that all potential natural causes of oscillation are accounted for, and provide details for any quantitative analyses, calculations, and comparisons.

References

Davis, K. A., J. J. Leichter, J. L. Hench, and S. G. Monismith (2008), Effects of western boundary current dynamics on the internal wave field of the Southeast Florida shelf, *J. Geophys. Res.*, 113, C09010, doi:10.1029/2007JC004699.

Soloviev, Alexander V., Mark E. Luther and Robert H. Weisberg. 2003. Energetic baroclinic super-tidal oscillations on the southeast Florida shelf. *Geophysical Research Letters*, v. 30, no. 9, 1463, doi:10.1029/2002GL016603

02.04.05-2

Provide an evaluation of the potential for resonance within the makeup water reservoir resulting from the interaction of natural oscillations with storm-driven wind waves.

02.04.05-3

The Applicant's analysis of long-term sea-level rise is based on a linear extrapolation of historical sea-level changes measured at Miami Beach, Florida. Please explain whether a linear extrapolation of sea-level records is conservative compared to a nonlinear model extrapolation approach (e.g., Walton, 2007, etc.). Provide analysis of the effect of a nonlinear model of the future rate of sea-level rise on PMF water levels at Units 6 and 7 resulting from PMH-related storm surge.

References

Walton, Todd L, Jr. 2007. Projected sea level rise in Florida. *Ocean Engineering* 34: 1832-1840. doi:10.1016/j.oceaneng.2007.02.003.