PMBelCOL PEmails

From: Spink, Thomas E [tespink@tva.gov]
Sent: Monday, October 27, 2008 8:05 AM
To: Joseph Sebrosky
Cc: Sterdis, Andrea Lynn; Ray, Phillip M; Eddie.Grant@EXCELServices.com
Subject: Courtesy email copy of TVA's Response to RAI Letter 126
Attachments: BLN-RAILTR 126 Final 10_24_2008.pdf

Joe,

I have enclosed a pdf copy of our response to RAI Letter 126 with this email as a courtesy. As always, the official submittal has been submitted to the Document Control Desk via paper copy using Federal Express services. The paper copy should arrive on October 27, 2008.

If you have any questions, please do not hesitate to call me.

Thomas E. Spink

Licensing Project Manager
Nuclear Generation Development
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Sent Date: 10/27/2008 8:04:50 AM
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From: Spink, Thomas E

Created By: tespink@tva.gov

Recipients:
"Sterdis, Andrea Lynn" <alsterdis@tva.gov>
Tracking Status: None
"Ray, Phillip M" <pmray@tva.gov>
Tracking Status: None
"Eddie.Grant@EXCELServices.com" <Eddie.Grant@EXCELServices.com>
Tracking Status: None
"Joseph Sebrosky" <Joseph.Sebrosky@nrc.gov>
Tracking Status: None

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Recipients Received:

Tennessee Valley Authority, 1101 Market Street, LP 5A, Chattanooga, Tennessee 37402-2801

October 24, 2008

10 CFR 52.79

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D.C. 20555

In the Matter of)
Tennessee Valley Authority)

Docket No. 52-014 and 52-015

BELLEFONTE COMBINED LICENSE APPLICATION – RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION – VIBRATORY GROUND MOTION

Reference: Letter from Joseph Sebrosky (NRC) to Andrea L. Sterdis (TVA), Request for Additional Information Letter No. 126 Related to SRP Section 02.05.02 for the Bellefonte Units 3 and 4 Combined License Application, dated September 19, 2008

This letter provides the Tennessee Valley Authority's (TVA) response to the Nuclear Regulatory Commission's (NRC) request for additional information (RAI) items included in the reference letter.

A response to the NRC request in the referenced letter is addressed in the enclosure which does not identify any associated changes to be made in a future revision of the BLN application.

If you should have any questions, please contact Tom Spink at 1101 Market Street, LP5A, Chattanooga, Tennessee 37402-2801, by telephone at (423) 751-7062, or via email at tespink @tva.gov.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on this 24th day of Oct, 2008.

Andrea L. Sterdis
Manager, New Nuclear Licensing and Industry Affairs
Nuclear Generation Development & Construction

Enclosure
cc: See Page 2

cc: (w/ Enclosures)
J. P. Berger, EDF
J. M. Sebrosky, NRC/HQ
E. Cummins, Westinghouse
S. P. Frantz, Morgan Lewis
M. W. Gettler, FP&L
R. Grumbir, NuStart
P. S. Hastings, NuStart
P. Hinnenkamp, Entergy
M. C. Kray, NuStart
D. Lindgren, Westinghouse
G. D. Miller, PG&N
M. C. Nolan, Duke Energy
N. T. Simms, Duke Energy
K. N. Slays, NuStart
G. A. Zinke, NuStart

cc: (w/o Enclosure)
B. C. Anderson, NRC/HQ
M. M. Comar, NRC/HQ
B. Hughes/NRC/HQ
R. G. Joshi, NRC/HQ
R. H. Kitchen, PGN
M. C. Kray, NuStart
A. M. Monroe, SCE&G
C. R. Pierce, SNC
R. Reister, DOE/PM
L. Reyes, NRC/RII
T. Simms, NRC/HQ

Enclosure
TVA letter dated October 24, 2008
RAI Response

Response to NRC Request for Additional Information letter No. 126 dated September 19, 2008
(2 pages, including this list)

Subject: Vibratory Ground Motion in the Final Safety Analysis Report

RAI Number	Date of TVA Response
02.05.02-09	This letter – see following pages

Associated Additional Attachments / Enclosures	Pages Included
None	

NRC Letter Dated: September 19, 2008

NRC Review of Final Safety Analysis Report

NRC RAI NUMBER: 02.05.02-09

The ETSZ sensitivity study uses a hypothetical site located in the center of the ETSZ to assess the impact of the proposed changes to the Mmax values. This location is selected based on the assumption that any change in the ETSZ parameters will impact this central location the most. However, as seen in the sensitivity results, the New Madrid Seismic Zone is the dominant hazard at lower frequencies at the test site. To fully evaluate the sensitivity study results, please provide a discussion on how the calculated percent increases would vary at alternative test site locations, especially at those sites that might be further away from the NMSZ where the impact of the NMSZ is not as dominant, and where ETSZ still contributes significantly to the total hazard.

BLN RAI ID: 1663

BLN RESPONSE:

The ETSZ sensitivity study (Reference 1) examined the effect of alternative assumptions on Mmax values for sources representing the ETSZ, by calculating hazard at a site within the ETSZ using modified values for Mmax and modified seismicity parameters with an updated earthquake catalog. It is correct that, at lower frequencies, the New Madrid Seismic Zone (NMSZ) contributed to seismic hazard for this test site within the ETSZ. The Bellefonte site lies closer to the NMSZ than the test site used for the ETSZ sensitivity study, so the hazard from the NMSZ would be higher at Bellefonte than calculated for the ETSZ test site. At sites east or south of the ETSZ, the hazard from the NMSZ would be lower than for the ETSZ test site because those sites are farther away, but those results would not apply to Bellefonte. Note also that those alternative sites would be closer to the Charleston seismic zone, and the hazard from the Charleston seismic zone might increase at those sites, compared to the ETSZ test site.

References

1. Risk Engineering, Inc. (2008). "White Paper on Seismic Hazard in the Eastern Tennessee Seismic Zone," Elec. Power Res. Inst., Palo Alto, CA, May 12, 2008.

This response is PLANT-SPECIFIC

ASSOCIATED BLN COL APPLICATION REVISIONS:

No COLA revisions have been associated with this response.

ASSOCIATED ATTACHMENTS/ENCLOSURES:

None