PMBeICOL PEmails

From: Creek, Carolyn P [cpcreek@tva.gov]
Sent: Tuesday, July 01, 2008 10:03 AM
To: Joseph Sebrosky; Brian Anderson
Subject: Letters mailed to NRC on June 30, 2008
Attachments: RAI LTR to NRC - Recirculation COL Item.pdf; LTR to NRC - Hydrology Schedule Update - Review.pdf; LTR to NRC - Update Schedule for Response to NOV.pdf; RAI-NRC Letter to 28 - Fire Protection Equipment Testing.pdf; RAI - NRC Letter 000 S2 - Seismology Information Supplement 2.pdf

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<<RAI LTR to NRC - Recirculation COL Item.pdf>> <<LTR to NRC - Hydrology Schedule Update -Review.pdf>> <<LTR to NRC - Update Schedule for Response to NOV.pdf>> <<RAI-NRC Letter to 28 - Fire Protection Equipment Testing.pdf>> <<RAI - NRC Letter 000 S2 - Seismology Information Supplement 2.pdf>>

Hearing Identifier: Bellefonte_COL_Public_EX
Email Number: 854

Mail Envelope Properties (28921B76CDD05940A918AEEC9EBCA7C007B4C035)

Subject: Letters mailed to NRC on June 30, 2008
Sent Date: 7/1/2008 10:03:25 AM
Received Date: 7/1/2008 10:08:23 AM
From: Creek, Carolyn P

Created By: cpcreek@tva.gov

Recipients:
"Joseph Sebrosky" <Joseph.Sebrosky@nrc.gov>
Tracking Status: None
"Brian Anderson" <Brian.Anderson@nrc.gov>
Tracking Status: None

Post Office: TVACOCXVS1.main.tva.gov

Files	Size	Date & Time
MESSAGE	471	7/1/2008 10:08:23 AM
RAI LTR to NRC - Recirculation COL Item.pdf	608384	
LTR to NRC - Hydrology Schedule Update -Review.pdf	1024980	
LTR to NRC - Update Schedule for Response to NOV.pdf	803200	
RAI-NRC Letter to 28 - Fire Protection Equipment Testing.pdf	463617	
RAI - NRC Letter 000 S2 - Seismology Information Supplement 2.pdf	2096350	

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

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

June 30, 2008

10 CFR 52.79

U.S. Nuclear Regulatory Commission
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Washington, D.C. 20555

In the Matter of) No. 52-014 and 52-015
Tennessee Valley Authority)

BELLEFONTE COMBINED LICENSE APPLICATION – RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION – RECIRCULATION COL ITEM

Reference: Letter from Ravindra G. Joshi (NRC) to Andrea L. Sterdis (TVA), Request for Additional Information Letter No. 030 Related to SRP Section 06.02.02 for the Bellefonte Units 3 and 4 Combined License Application, dated June 6, 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 each NRC request in the subject letter is addressed in the enclosure which also identifies any associated changes that will be made in a future revision of the BLN application.

If you should have any questions, please contact Phillip Ray at 1101 market Street, LP5A, Chattanooga, Tennessee 37402-2801, by telephone at (423) 751-7030, or via email at pmray@tva.gov.

I declare under penalty of perjury that the foregoing is true and correct.
Executed on this 30th day of June, 2008.

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

Enclosure
cc: See Page 2

cc: (Enclosure)
J. P. Berger, EDF
E. Cummins, Westinghouse
S. P. Frantz, Morgan Lewis
M. W. Gettler, FP&L
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T. Simms, NRC/HQ
J. M. Sebrosky, NRC/HQ

Enclosure
TVA letter dated June 30, 2008
RAI Responses

Responses to NRC Request for Additional Information letter No. 030 dated June 6, 2008

(3 pages, including this list)

Subject: Quality Assurance

RAI Number	Date of TVA Response
06.02.02-01	This letter – see following pages

Attachments / Enclosures	Pages Included
None	

NRC Letter Dated: June 6, 2008

NRC Review of Final Safety Analysis Report

NRC RAI NUMBER: 06.02.02-01

With regard to the containment recirculation systems, please describe TVA's plan to include the recent AP1000 recirculation submittals into the Bellefonte licensing basis and address the two COL items associated with them, COL items 6.3-1 (FSAR Section 6.3.8.1) and 6.3-2 (introduced in Enclosure 2 of TVA letter dated January 14, 2008).

BLN RAI ID: 0569

BLN RESPONSE:

COL item 6.3-1 is addressed in the BLN COL Application, Part 2, FSAR, Table 1.8-202 and Subsection 6.3.8.1, and in Part 10, Proposed License Condition 2, item 6.3-1. This portion of the COL application was not affected by the revisions in the TVA letter dated January 14, 2008.

COL item 6.3-2 was introduced in the TVA letter dated January 14, 2008, in response to a proposed change to the incorporated by reference AP1000 DCD Revision 16 identified in the Westinghouse TR134, Revision 3 dated January 14, 2008. The necessary associated changes to the COLA were shown in the January 14, 2008, letter referenced in the question. These revisions will be included in a future application revision as indicated in that letter with the exception that the title of the COL item will be revised in COLA Part 2, FSAR, Chapter 1, Table 1.8-202 and COLA Part 10, Proposed License Condition 2, COL holder item 6.3-2 to match the DCD. These associated changes are repeated in the Application Revisions section below with the title correction.

Note, however, that Westinghouse is addressing COL item 6.3-2 with APP-GW-GLR-147 (TR147) and this is expected to result in the eventual removal of the COL holder item from the DCD. This is anticipated to occur during a future submittal of a Westinghouse TR134 revision or the eventual submittal of Revision 17 of the DCD. The WEC submittal would then be followed by the associated COLA removal of the associated changes shown below.

This response is expected to be STANDARD for the S-COLAs.

ASSOCIATED BLN COL APPLICATION REVISIONS:

1. COLA Part 2, FSAR Chapter 1, Table 1.8-202, will be revised to add a new line item:

6.3-2	Verification of Containment Resident H Particulate Debris Characteristics	6.3.8.2	6.3.8.2

2. COLA Part 2, FSAR Chapter 6, Section 6.3.8 will be revised to add new Subsection 6.3.8.2 (with an LMA of STD COL 6.3-2) to read:

6.3.8.2 Verification of Water Sources for Long-Term Recirculation Cooling Following a LOCA

Insert the following information between the first and second paragraphs of DCD Subsection 6.3.8.2.

An assessment of the acceptability of the screen performance will be provided by performing testing and analysis of the screens. Downstream effects will be assessed to confirm the coolability of the core. The testing, analysis, and assessments will be completed prior to fuel load.

3. COLA Part 10, Proposed License Condition 2, "COL Holder Items," will be revised to include an additional COL holder 6.3-2, to read:

6.3-2	Verification of Water Sources for Long-Term Recirculation Cooling Following a LOCA	6.3.8.2	Prior to initial fuel load
After a Combined License is issued, the following activities are completed by the COL holder: The combined license holder referencing the AP1000 design will provide an assessment of the acceptability of the screen performance by performing testing and analysis of the screens. Downstream effects will be assessed to confirm the coolability of the core.			

ATTACHMENTS/ENCLOSURES:

None

Tennessee Valley Authority, 1101 Market Street, Chattanooga, Tennessee 37402

June 30, 2008

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10 CFR 52.79

In the Matter of)
Tennessee Valley Authority)

Docket No. 52014 and 52-015

BELLEFONTE COMBINED LICENSE APPLICATION - HYDROLOGY SCHEDULE UPDATE AND PROPOSED REVIEW PROCESS

Reference Letters: 1) Letter from Tennessee Valley Authority (TVA), to Nuclear Regulatory Commission dated April 17, 2008, Review of BLN Application White Paper - Hydrologic Analysis Description.

2) Letter from TVA to NRC dated March 14, 2008, Review of Hydrology Calculation.

This letter documents TVA's schedule for confirming the Bellefonte (BLN) Units 3 and 4 COL application probable maximum flood (PMF) level calculation and results. This letter also proposes the adoption of a parallel phased NRC review process of the results. TVA is proposing this phased review because it will allow the NRC to continue the utilization of Staff resources on the previously-arranged schedule while at the same time allow TVA to complete the verification and confirmation of the existing, high quality PMF and probable maximum precipitation (PMP) levels included in the BLN Units 3 and 4 COL application. The proposed parallel review will enable the existing NRC schedule for review of the BLN COL application to be maintained, resulting in the delivery of the Draft Safety Evaluation Report with Open Items (DSER with OIs) to the ACRS by July 2009.

On March 14, 2008 TVA submitted a letter to the NRC outlining the overall plan and schedule for TVA to verify and confirm the BLN Units 3 and 4 COLA PMF calculation (reference letter 2). On April 17, 2008, TVA submitted a Hydrology White Paper (reference letter 1, "White Paper") discussing the plan to confirm the TVA River Operations input data used in the Bellefonte Nuclear Plant (BLN) Units 3 and 4 Probable Maximum Flood (PMF) height calculation. The White Paper also discussed the efforts to perform Software Verification and Validation on the SOCH (Simulated Open Channel Hydraulics) code and the subprograms utilized to calculate the PMF height. The detailed activities associated with the software verification and validation are provided in the White Paper, which also provides the process for confirming that the Bellefonte site remains a dry site in the event of a PMF condition. Work performed thus far confirms the quality and accuracy of the existing PMF analyses, and even with some small changes attributable to additional data and an identified data error, continues to confirm BLN is a dry site. The March 14, 2008 letter included a commitment for TVA to revise the White Paper on May 26, 2008 to reflect NRC comments. Per discussions during the May 2008 hydrology site visit, it was agreed that this revision would be provided 30 days following the June 23-27 hydrology workshop, to allow for additional NRC comments and questions. This revision is scheduled for submittal to the NRC on July 25, 2008.

Subsequent to the TVA 's submittal of the White Paper in March, NRC issued a letter to TVA on March 25, 2008 indicating that the Staff intended to re-evaluate the review schedule issued in February 2008. The re-evaluation would include consideration of TVA's verification of the BLN Units 3 and 4 PMF calculation, SOCH code, and input data. As stated, the purpose of this letter is to propose a process for maintaining the existing NRC review schedule resulting in the generation of the Draft Safety Evaluation Report with Open Items (DSER with OIs) for COLA sections 2.4.3 and 2.4.4 by July 6, 2009. This date reflects the current schedule date for the NRC to begin Phase 3 of the COLA review (DSER with OIs to ACRS) assuming no credit for management reserve schedule time. TVA believes that this schedule is still achievable and appropriate, and proposes the approach outlined in this letter to ensure review efficiency and effectiveness. This proposed approach will be supplemented with additional interim milestones defining the schedule for detailed supporting package activities for each of the key milestones. TVA is confident that maintaining the current schedule is appropriate because the PMP and PMF descriptions in the BLN Units 3 and 4 COLA continue to be accurate, any changes resulting from the verification and validation process will reflect clarifications and minor revisions, and any open issues will be satisfied by the confirmation of these existing descriptions.

The table enclosed with this letter provides the key milestones and dates for the activities outlined in the White Paper. TVA conducted the technical workshop demonstrating the functionality of the codes (methods and procedures) that have been used to define the design basis flood levels at BLN. During the workshop, the software for the SOCH model along with the User's Manual were provided to the NRC. In addition, the User's Manuals for the subprograms are nearing completion and will be provided to the NRC in July and August 2008 (with the final manual provided for NRC use no later than August 22, 2008). TVA has also indicated that the verified input packages will be made available in Rockville starting on July 21, 2008 to facilitate NRC review.

TVA proposes that NRC initiate their review with the software and user's manuals that have been provided. The table enclosed with this letter provides the dates for completion of each of the key milestones, but many of the milestones involve multiple package deliveries. TVA plans to make these packages available when each is completed. For example, the final Geometry Input Data Package is scheduled to be verified by October 31, 2008. However, there are 11 of these packages with the first one planned for completion by July 21, 2008 and the final one planned for completion by October 31, 2008. The key milestones listed on the table include multiple packages with the exception of those identifying dates for revising the white paper, establishing the new controlling PMF level, and providing a proposed FSAR markup. Availability of all of the individual packages associated with a key milestone are not necessary for the NRC to initiate the review process.

Therefore, TVA proposes a parallel NRC review process with the NRC initiating review of the existing documentation including the documentation supplied at the recent workshop. NRC review will then continue as TVA provides additional documents confirming the PMF and PMP results as they are completed individually (and consistent with the forthcoming interim milestone schedule). This parallel review process should facilitate an effective NRC review that progresses concurrently with the TVA milestone progress. This review process is appropriate because the TVA efforts underway are expected to confirm the COL application PMF and PMP levels, and any updates are expected to be minor and continue to positively demonstrate BLN as a dry site.

TVA recognizes that the current schedule identifies October 21, 2008 as the date for RAIs and PSER draft input to be completed. In light of the proposed parallel review, TVA proposes that NRC develop the draft RAIs and PSER input based on the information provided to date, and that to be provided over the next several months, and document open items (both RAIs that remain outstanding as well as documentation that the NRC review team still needs to review or confirm). NRC reviewers have indicated that their review will include both an independent run of the SOCH code and some independent verifications of a subset of the river basin data. The enclosed table indicates that the completed Input Data File Packages will be signed and available for NRC review no later than January 5, 2009. Again, the interim schedule for these packages will be provided by July 11, 2008, allowing the NRC to plan review schedule milestones. TVA believes

that the NRC can perform parallel reviews including independent verifications of the subset of river basin data, and identify open items that will require confirmation when the overall effort is completed. In January 2009, the independent NRC SOCH calculation can be performed with a minimal risk for any additional changes. The key to maintaining the current schedule is to treat the review of the verified data packages, hydrographs and calculations as an Open Item or as Confirmatory Items once the formal scheduled RAI period is completed (i.e., Phase 2B instead of Phase 1B in the February NRC review schedule).

The TVA plan includes efforts to finalize the software V&V documents, as well as Phase 1 (controlling) documentation and Phase 2 (non-controlling) documentation from January 2009 through April 28, 2009. These activities include the efforts to finalize the documentation and procedures. These activities have minimal risk for requiring any significant technical changes to the code software, the input data packages or the calculated PMF level.

For purposes of this proposal, controlling analyses are those that define a maximum PMF elevation during a normal PMP design storm and during the worst cases seismic dam failure scenario. Non-controlling analyses include any analyses which determine a PMF level less than the maximum design basis value. Non-controlling analyses also include any beyond design basis sensitivity runs.

The TVA proposal provides a commitment to continuous communication of progress to NRC, including regular monthly status telecons, identification of any issues that arise in a timely manner, and weekly updated status reports indicating the materials that are available for NRC review.

This proposal allows for an effective parallel review of the calculation, code and input data to support the current planned delivery of a DSER with Open Items (Phase 3) to the ACRS in July 2009. As noted previously, the February 2008 NRC review schedule includes an additional management reserve for this DSER with Open Items (Phase 3) which is scheduled to be issued to the ACRS on August 24, 2009. Further more, the ACRS review period extends to January 2010. TVA believes that a parallel review process, including continuous and open communications, can be successful in maintaining the July 6, 2009 date for DSER with Open Items delivery to the ACRS. Key elements of the review can be performed in parallel with the phased delivery of the deliverables for NRC review. This proposed approach, along with confirmation of any open items in the April through June 2009 time-frame, allows the current schedule for the Bellefonte COL application review to remain on the existing plan. TVA is confident that this parallel review process does not represent a significant risk to the NRC's review of the COL application, because the reviews that TVA has performed to date have substantially confirmed that the SOCH code and utilized input data have resulted in a high quality PMF calculation.

If you have any questions, or required additional information, please do not hesitate to contact me at 423-751-7119, by mail at 1101 Market Street, LP5A, Chattanooga, Tennessee 37402-2801.

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

Enclosure
cc: See Page 4

cc: (Enclosures)
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R. W. Borchardt, NRC/HQ
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L. Reyes, NRC/RII
T. Simms, NRC/HQ

BLN Units 3 and 4
Hydrologic Analysis Schedule
Key Milestones

Activity	Milestone Date
Issue Interim Milestone Schedule	7/11/08
Whitepaper revision	07/25/08
All Users Manuals Complete	08/22/08
All Excel codes - issue document	08/29/08
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All Input Data File Packages signed/available for review	01/05/09
All Software V&V Documents Issued	02/27/09
Phase 1 Documentation (Controlling) Complete	03/16/09
Phase 2 Documentation (Non-Controlling) Complete	04/28/09

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Docket No. 52-014
52-015

BELLEFONTE COMBINED LICENSE APPLICATION– NRC INSPECTION REPORT No. 05200014/2008-001 and 05200015/2008-001 – UPDATE SCHEDULE FOR RESPONSE TO NOTICE OF VIOLATION.

References: 1) Letter from Andrea L. Sterdis to USNRC Document Control Desk, Response to Notice of Violation (NOV) No. 05200014/2008-001 and 05200015/2008-001, dated April 18, 2008.

2) Letter from Andrea L. Sterdis to Joseph Sebrosky (NRC), Whitepaper Hydrologic Analysis, dated April 17, 2008

This letter amends the Tennessee Valley Authority's (TVA's) response to the NOV issued by the NRC following their February 2008 QA inspection of the Bellefonte Units 3 and 4 COL application probable maximum flood (PMF) hydrology calculation. The response was provided in TVA letter Reference 1, which indicated that schedule revisions for the activities to confirm the PMF calculation and the date when full compliance with the NOV would be achieved would be provided in June 2008. This letter provides the schedule revisions discussed with NRC Staff during the PMF workshop conducted from June 23-27, 2008. The detailed key milestones, as described in the Hydrologic Analysis Whitepaper transmitted to the NRC in Reference 2, are scheduled for completion as indicated in the table enclosed with this letter.

TVA proposes that the re-inspection to verify the hydrologic analysis calculation be performed following completion of the final documentation signoff (April 28, 2009). This QA re-inspection will serve to address final closure of the NOV. TVA believes that the technical review of the PMF information included in the BLN Units 3 and 4 COLA can continue to progress on the existing NRC schedule and is not dependent on this QA re-inspection.

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Letter Dated June 30, 2008
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Re-inspection to verify hydrologic analysis calculation	TBD

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In the Matter of) Docket No. 52-014 and 52-015
Tennessee Valley Authority)

BELLEFONTE COMBINED LICENSE APPLICATION – RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION – FIRE PROTECTION EQUIPMENT TESTING

Reference Letter: Letter from Brian C. Anderson (NRC) to Andrea L. Sterdis (TVA), Request for Additional Information Letter No. 028 Related to SRP Section 14.02 for the Bellefonte Units 3 and 4 Combined License Application, dated May 28, 2008.

This letter provides the Tennessee Valley Authority (TVA) response to the Nuclear Regulatory Commission (NRC) request for additional information (RAI) items included in the reference letter. The items address the startup testing requirements for fire protection equipment.

A response to each NRC request in the subject letter is addressed in the enclosure which also identifies any associated changes that will be made in a future revision of the BLN application.

If you should have any questions, please contact Phillip Ray at 1101 Market Street, LP5A, Chattanooga, Tennessee 37402-2801, by telephone at (423) 751-7030, or via email at pmray@tva.gov.

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

Executed on this 30th day of June, 2008.

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

Enclosure
cc: See Page 2

cc: (Enclosure)
B. C. Anderson, NRC/HQ
J. P. Berger, EDF
E. Cummins, Westinghouse
S. P. Frantz, Morgan Lewis
M.W Gettler, FP&L
R. C. 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
G. A Zinke, NuStart

cc: (w/o Enclosure)
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. Register, DOE/PM
L. Reyes, NRC/RII
T. Simms, NRC/HQ
J. M Sebrosky, NRC/HQ

Enclosure
TVA letter dated June 30, 2008
RAI Responses

Responses to NRC Request for Additional Information letter No. 028 dated May 28, 2008
(2 pages, including this list)

Subject: Electrical power in the Final Safety Analysis Report

RAI Number	Date of TVA Response
14.02-09	This letter – see following pages

Attachments / Enclosures	Pages Included
None	

NRC Letter Dated: May 28, 2008

NRC Review of Final Safety Analysis Report

NRC RAI NUMBER: 14.02-09

RG 1.189, Regulatory Position 3.4.2, Hydrants and Hose Houses, states that "Threads compatible with those used by local fire departments should be provided on all hydrants, hose couplings, and standpipe risers. Alternatively, a sufficient number of hose thread adapters may be provided." The importance of ensuring that installed plant fire equipment be compatible with the equipment used by local fire departments warrants the inclusion of installed plant fire equipment (hydrants, hoses, couplings, and standpipe risers) in the Initial Test Program to verify either the compatibility of threads or the provision of an adequate supply of hose thread adaptors that will be readily available in the event of a fire. Please revise the Bellefonte COLA FSAR Section 14.2.9.4.26 to address this issue.

In addition, with respect to FSAR Section 14.2.9.4.26(c), please specifically identify any portable "communication equipment" that is credited for fire brigade use.

BLN RAI ID: 0370

BLN RESPONSE:

COLA FSAR Section 14.2.9.4.26 will be revised as described below in the Application Revision section to address these issues. The particulars of the portable communication equipment to be used will be provided in response to NRC question 09.05.01-07.

This response is expected to be STANDARD for the S-COLAs.

ASSOCIATED BLN COL APPLICATION REVISIONS:

1. COLA Part 2, FSAR Chapter 14, Section 14.2.9.4.26, item c, will be revised from:

c. Operation of communication equipment is verified.

To read:

c. Operation of portable communication equipment is verified.

2. COLA Part 2, FSAR Chapter 14, Section 14.2.9.4.26, will be revised to add new item h:

h. Compatibility of threads for hydrants, hose couplings, and standpipe risers with the local fire department equipment is verified, or alternatively, an adequate supply of readily available hose thread adaptors is verified.

ATTACHMENTS/ENCLOSURES:

None

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

June 30, 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 – SEISMOLOGY INFORMATION, SUPPLEMENT 2

References:
1. Letter from Joseph M. Sebrosky (NRC) to Ashok S. Bhatnagar (TVA), Request for Additional Information, Tennessee Valley Authority Combined License Application for Bellefonte Units 3 and 4, dated February 15, 2008.
2. Letter from Jack A Bailey (TVA) to Document Control Desk (NRC), Bellefonte Nuclear Plant (BLN) Combined License (COL) Application – Response to Request for Additional Information (RAI) Seismology, dated March 19, 2008.
3. Letter from Andrea L. Sterdis (TVA) to Document Control Desk (NRC), Bellefonte Nuclear Plant (BLN) Combined License (COL) Application – Supplemental Seismology Information, dated May 30, 2008.

This letter provides supplemental information to the responses to the request for information in Reference 1 which were provided in References 2 and 3. Subsequently, the NRC verbally requested that the data files associated with item 2.5.2-01(e) of the original request be submitted for NRC use. These requested data files are enclosed.

If you should have any questions, please contact Phillip Ray at 1101 Market Street, LP 5A, Chattanooga, Tennessee 37402-2801, by telephone at (423)751-7030, or via email at pmray@tva.gov.

I declare under penalty of perjury that the foregoing is true and correct.
Executed on this 30th day of June, 2008.

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

Enclosure
Attachment 02.05.02-01A
cc: See Page 2

cc: (Enclosure/Attachment)
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
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B. C. Anderson, NRC/HQ
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B. Hughes/NRC/HQ
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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 June 30, 2008
RAI Responses

Responses to NRC Request for Additional Information from NRC letter dated February 15, 2008 (2 pages, including this list)

Subject: Seismology in the Final Safety Analysis Report

RAI Number	Date of TVA Response
2.5.2-01(a)	May 30, 2008
2.5.2-01(b)	March 19, 2008
2.5.2-01(c)	May 30, 2008
2.5.2-01(d)	March 19, 2008
2.5.2-01(e)	March 19, 2008 Supplemental info in this letter
2.5.2-01(f)	March 19, 2008

Attachments / Enclosure	Pages Included
Attachment 02.05.02-01A	Pages 1-8

NRC Letter Dated: February 15, 2008

NRC Review of Final Safety Analysis Report

NRC RAI NUMBER: 2.5.2-01(e)

The following additional information is requested:

e) Provide the mean 1 Hz and 10Hz hazard curves for each EPRI team for each of their sources.

Follow-up verbal request: Also provide the data files for these curves.

BLN RAI ID: 0008

BLN RESPONSE:

The requested curves were provided in response to the original request on March 19, 2008.

The requested data files are attached.

This response is PLANT-SPECIFIC.

ASSOCIATED BLN COL APPLICATION REVISIONS:

No COLA revisions have been identified associated with this request.

ATTACHMENTS/ENCLOSURES:

Attachment 02.05.02-01A

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h_1hz
  ampl.
BEC-25     BEC-25A    BEC-30     BEC-BZ0    BEC-BZ3-B BEC-BZ5    BEC-BZ6
DAM-04     DAM-4A     DAM-08     DAM-21     DAM-41     DAM-54     DAM-B71
LAW-115    LAW-17     LAW-18     LAW-217
RND-1      RND-13     RND-25     RND-26     RND-9      RND-C02-B
WCC-29     WCC-29A    WCC-31A    WCC-40     WCC-B39
WGC-24     WGC-31     WGC-32     WGC-C11    WGC-C17    WGC-C19
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8.589E-06 1.016E-05 2.162E-05 7.479E-08
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6.715E-07 6.152E-07 1.000E-05 2.592E-05 3.877E-05
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3.154E-10 6.633E-14 8.250E-15 7.318E-15 8.097E-12 1.055E-12
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8.292E-15 7.539E-12 4.831E-11 8.047E-20 1.606E-17 1.484E-18
1.732E-15 9.159E-16 5.342E-12 4.024E-10 1.006E-11
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BEC-25     BEC-25A    BEC-30     BEC-BZ0    BEC-BZ3-B BEC-BZ5    BEC-BZ6
DAM-04     DAM-4A     DAM-08     DAM-21     DAM-41     DAM-54     DAM-B71
LAW-115    LAW-17     LAW-18     LAW-217
RND-1      RND-13     RND-25     RND-26     RND-9      RND-C02-B
WCC-29     WCC-29A    WCC-31A    WCC-40     WCC-B39
WGC-24     WGC-31     WGC-32     WGC-C11    WGC-C17    WGC-C19
 1.000E-03
9.507E-07 1.908E-06 2.444E-05 6.036E-06 1.592E-05 1.070E-05 1.154E-06
4.828E-05 2.379E-05 1.949E-07 1.617E-05 2.333E-07 7.071E-08 5.111E-07
8.589E-06 1.016E-05 2.162E-05 7.480E-08
2.203E-05 2.698E-05 4.269E-05 3.903E-07 2.278E-06 2.172E-07
6.715E-07 6.152E-07 1.000E-05 2.592E-05 3.877E-05
8.583E-05 7.684E-06 9.311E-07 1.132E-06 3.102E-06 3.390E-06
 1.500E-03
9.507E-07 1.908E-06 2.444E-05 6.036E-06 1.592E-05 1.070E-05 1.154E-06
4.828E-05 2.379E-05 1.949E-07 1.617E-05 2.333E-07 7.071E-08 5.111E-07
8.589E-06 1.016E-05 2.162E-05 7.480E-08
2.203E-05 2.698E-05 4.269E-05 3.903E-07 2.278E-06 2.172E-07
6.715E-07 6.152E-07 1.000E-05 2.592E-05 3.877E-05
8.583E-05 7.684E-06 9.311E-07 1.132E-06 3.102E-06 3.390E-06
 2.000E-03
9.507E-07 1.908E-06 2.444E-05 6.036E-06 1.592E-05 1.070E-05 1.154E-06
4.828E-05 2.379E-05 1.949E-07 1.617E-05 2.333E-07 7.071E-08 5.111E-07
8.589E-06 1.016E-05 2.162E-05 7.480E-08
2.203E-05 2.698E-05 4.269E-05 3.903E-07 2.278E-06 2.172E-07
6.715E-07 6.152E-07 1.000E-05 2.592E-05 3.877E-05
8.583E-05 7.684E-06 9.311E-07 1.132E-06 3.102E-06 3.390E-06
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9.507E-07 1.908E-06 2.444E-05 6.036E-06 1.592E-05 1.070E-05 1.154E-06
4.828E-05 2.379E-05 1.949E-07 1.617E-05 2.333E-07 7.071E-08 5.111E-07
8.589E-06 1.016E-05 2.162E-05 7.480E-08
2.203E-05 2.698E-05 4.269E-05 3.903E-07 2.278E-06 2.172E-07
6.715E-07 6.152E-07 1.000E-05 2.592E-05 3.877E-05
8.583E-05 7.684E-06 9.311E-07 1.132E-06 3.102E-06 3.390E-06
 5.000E-03
9.507E-07 1.908E-06 2.444E-05 6.036E-06 1.592E-05 1.070E-05 1.154E-06
4.828E-05 2.379E-05 1.949E-07 1.617E-05 2.333E-07 7.071E-08 5.111E-07
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2.203E-05 2.698E-05 4.269E-05 3.903E-07 2.278E-06 2.172E-07
6.715E-07 6.152E-07 1.000E-05 2.592E-05 3.877E-05
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 7.000E-03
9.507E-07 1.908E-06 2.444E-05 6.036E-06 1.592E-05 1.070E-05 1.154E-06
4.828E-05 2.379E-05 1.949E-07 1.617E-05 2.333E-07 7.071E-08 5.111E-07
8.589E-06 1.016E-05 2.162E-05 7.480E-08
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6.715E-07 6.152E-07 1.000E-05 2.592E-05 3.877E-05
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8.589E-06 1.016E-05 2.162E-05 7.480E-08
2.203E-05 2.698E-05 4.269E-05 3.903E-07 2.278E-06 2.172E-07
6.715E-07 6.152E-07 1.000E-05 2.592E-05 3.877E-05
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4.828E-05 2.379E-05 1.949E-07 1.617E-05 2.333E-07 7.071E-08 5.111E-07
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6.715E-07 6.152E-07 1.000E-05 2.592E-05 3.877E-05
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4.294E-10 6.721E-12 3.162E-14 1.325E-17
8.847E-15 6.124E-09 3.517E-09 2.783E-18 9.747E-16 4.089E-13
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