AP1000TopRptsPEm Resource

From: Bavol, Bruce
Sent: Tuesday, August 23, 2016 8:42 AM
To: AP1000TopRptsPEm Resource
Subject: RAI LETTER NO. 02 (WCAP-17938, REVISION 1) Non-Prop
Attachments: RAI Response Letter_Non Proprietary.docx; RAI_WCAP_17938_Rev 1 Non_Proprietary.docx

Bruce M. Bavol

Project Manager
AP1000, Licensing Projects Branch 4
Office of New Reactors
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Hearing Identifier: AP1000_TR_RAI_Public
Email Number: 6

Mail Envelope Properties (f6f363ccab3d460fb982aac781d0eb89)

Subject: RAI LETTER NO. 02 (WCAP-17938, REVISION 1) Non-Prop
Sent Date: 8/23/2016 8:41:38 AM
Received Date: 8/23/2016 8:41:39 AM
From: Bavol, Bruce

Created By: Bruce.Bavol@nrc.gov

Recipients:
"AP1000TopRptsPEm Resource" <AP1000TopRptsPEm.Resource@nrc.gov>
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Files	**Size**	**Date & Time**
MESSAGE	248	8/23/2016 8:41:39 AM
RAI Response Letter_Non Proprietary.docx	21000	
RAI_WCAP_17938_Rev 1 Non_Proprietary.docx	24697	

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

August 22, 2016

Mr. Zachary Harper, Manager
Regulatory Support
Westinghouse Electric Company
1000 Westinghouse Drive
Cranberry Township, PA 16066

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION LETTER NO. 02
FOR REVIEW OF WESTINGHOUSE ELECTRIC COMPANY'S SUBMITTAL OF WCAP-17938, REVISION 1, "AP1000 IN-CONTAINMENT CABLES AND NON-METALLIC INSULATION DEBRIS INTEGRATED ASSESSMENT"

Dear Mr. Harper:

By letter dated November 20, 2015, Westinghouse Electric Company (WEC) submitted for U.S. Nuclear Regulatory Commission (NRC) staff's review, WCAP-17938, Revision 1, "AP1000 In-Containment Cables and Non-Metallic Insulation Debris Integrated Assessment." The NRC staff is performing a detailed review of this topical report in order to reach a safety conclusion.

The NRC staff has identified that additional information is still needed by WEC in order 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 60 days of the date of this letter. If RAI clarifications are required, please contact me so that arrangements can be made with the applicable technical staff.

If you have any questions or comments concerning this matter, you may contact me at 301-415-6715 or bruce.bavol@nrc.gov.

Sincerely,

/RA/

Bruce M. Bavol, Project Manager
Licensing Branch 4
Division of New Reactor Licensing
Office of New Reactors

Project No. 0811

Enclosures:
Request for Additional Information (Non-Proprietary)

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*Concur by Email NRO-002

OFFICE	DNRL/LB4:PM	DSRA/SCVB:BC (A)
NAME	BBavol	JODriscoll
DATE	08/22/2016	08/22/2016

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WCAP-17938, Revision 1
Request for Additional Information

(Boyce Travis)

ICC&NMI – 036
In RAI-ICC&NMI-034 the staff requested that the applicant describe how gas evolution is addressed in the proposed design of the neutron shield material inside the blocks. In the response, dated July 14, 2016, the applicant provided information that addressed gas evolution as it pertains to the component (i.e., neutron shield block) design, "…internal gas generation doesn't over pressurize the blocks…" and "…blocks maintain their integrity…". The applicant's response also estimated the volume of off-gas from the neutron shield block system as approximately [ ] on average. The applicant did not provide information that assesses the potential impact of the released gases on structures, systems, and components (SSCs) in any part of the containment or the containment system.

Therefore, the staff requests that the applicant assess and identify the gases released (e.g., types and quantities) and their potential impact on SSCs in any part of the containment or the containment system. The staff also requests that the applicant identify the temperature and pressure conditions associated with the estimated gas quantities. As part of the response, the applicant should assess any impacts on safety analysis (both for design basis accidents and severe accident) due to the presence of the released gases inside containment. The applicant should also assess whether the intent of 10 CFR 50 Appendix A General Design Criteria 4 and Standard Review Plan Section 6.2.5 Acceptance Criteria are satisfied. The applicant should ensure that SSCs are designed to accommodate the effects associated with normal operation, that materials within the containment that would yield hydrogen gas are identified and that their use is limited as much as practicable, and that concentrations of combustible gases in any part of the containment are below a level which would support combustion or detonation.