

October 15, 2012

MEMORANDUM TO: Sheldon Stuchell, Acting Chief
Licensing Processes Branch
Division of Policy & Rulemaking
Office of Nuclear Reactor Regulation

FROM: Joseph A. Golla, Project Manager /RA/
Licensing Processes Branch
Division of Policy and Rulemaking
Office of Nuclear Reactor Regulation

SUBJECT: SUMMARY OF AUGUST 23, 2012, CATEGORY II PUBLIC
MEETING WITH THE BOILING WATER REACTOR OWNERS
GROUP

On August 23, 2012, U.S. Nuclear Regulatory Commission (NRC) staff met with representatives of the Boiling Water Reactor (BWR) Owners Group (BWROG), in a public meeting at NRC headquarters in Rockville, Maryland. The purpose of the meeting was to discuss the re-baselined schedule for the resolution of BWR emergency core cooling system (ECCS) suction strainer issues. Enclosed is a list of those in attendance. The BWROG's meeting presentation material entitled "BWROG/NRC Meeting, ECCS - Suction Strainer Project Status," dated August 23, 2012, may be viewed at Agencywide Documents Access and Management System (ADAMS) Accession No. ML12236A366. No members of the public were present at the meeting. The following issues were discussed:

NRC Staff Review of Licensing Topical Report NEDC-33608P, Rev. 2, January 2011, "Boiling Water Reactor Emergency Core Cooling Suction Strainer In-Vessel Downstream Effects (Nuclear Fuel)"

- Mr. Ted Schiffley, BWROG Chairman, stated that the BWROG would like to have a working meeting with the NRC staff shortly after receiving the staff's second round of requests for additional information (RAIs).
- Mr. Schiffley stated that the BWROG will not begin fuel testing until all associated RAIs are resolved.
- Mr. Anthony Mendiola, Chief, Nuclear Performance and Code Review Branch, Division of Safety Systems (DSS), Office of Nuclear Reactor Regulation (NRR) stated that an NRC staff audit may be appropriate due to the nature of the RAIs.
- Mr. Craig Nichols, Program Manager, BWROG, stated that an audit before the second round of RAI questions are issued might be the most productive way to go.
- It was agreed that either a working meeting or an audit would be arranged.
- Subsequent to this August 23 meeting, on August 28, 2012, the NRC staff held a conference call with the BWROG to discuss the RAIs. All issues the NRC staff is considering a second round of RAI questions for was briefly discussed.
- Another conference call was held on September 26, 2012, to discuss path forward. The NRC staff iterated concerns with the BWROG's intended room temperature testing and analysis of core blockage. It was decided that the draft RAIs would be sent to the BWROG immediately and subsequent to that a meeting would be held to discuss ways to resolve them.

Zone of Influence Damage Pressure Issue

-A correction factor of 40 percent was applied to insulation damage pressure air jet test results for pressurized water reactors (PWRs). The NRC staff identified this as being disparate treatment between BWRs and PWRs and that the 40 percent correction factor should be applied to BWRs as well.

-The BWROG challenged the need to apply the 40 percent correction factor to BWRs.

-Mr. Schiffley emphasized the need to come to an agreement on this issue and that not resolving it could negatively impact the fuel testing schedule.

-Mr. Stewart Bailey, Chief, Safety Issues Resolution Branch (SSIB), DSS/NRR, stated that a staff member will be dedicated to evaluating the issue for resolution.

Problematic Debris Just Outside the Spherical Zone of Influence Issue

-Mr. Schiffley stated that the BWROG will submit a closure letter to the NRC in November 2012 describing the BWROG's intended resolution of the issue.

Bypass Testing

-Mr. Steve Scammon, ECCS Suction Strainer Committee Chairman, BWROG, stated that bypass testing is complete and the BWROG will be sending a report to the NRC with the results in December 2012.

Mitigative Measures

-Mr. James Beal, SSIB/DSS/NRR, stated that given the two year extension of the schedule, and because it has been a while since the last NRC Commission Memorandum addressing the BWR ECCS suction strainers issue, that it would be appropriate for the BWROG to address mitigative measures once again. (Note this was done initially in an April 13, 2012, letter from Mr. Richard Anderson, BWROG Executive Chairman, to Mr. John Grobe, Associate Director, Engineering and Safety Systems, NRR (ADAMS Accession No. ML092160139)). The BWROG agreed to update this letter by December 2012.

Standby Liquid Control (SLC) Injection & Boron Precipitation

-The issue of SLC injection was discussed. A BWROG representative stated that this was being reviewed by the BWROG Licensing Subcommittee with respect to resultant chemical effects of a SLC injection (i.e., the effect on pH in the suppression pool).

-Representatives of both the NRC staff and the BWROG discussed the need to also review post-LOCA SLC injection with respect to boron precipitation in the reactor vessel. This issue was again discussed in a telecom between the NRC staff and the BWROG on September 7, 2012. Specifically, it was agreed that the BWROG will review the issue with respect to whether the presence of debris exacerbates boron precipitation and if so, does the combined effect become a concern with long term core cooling. One mechanism that might induce this is the reduction in fluid volume, due to displacement by debris, increasing the boron concentration. The BWROG is asked to investigate this in particular as well as any other potential mechanism that may affect boron precipitation.

Overall Suction Strainer Issue Closure

-The method by which licensees will close the overall suction strainer issue was discussed. The BWROG took an action to evaluate how plants will document closure of the issue in their licensing bases upon issuance of the safety evaluation of the updated Utility Resolution Guide.

Enclosure:

As stated

cc w/encl: See next page

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ADAMS Accession Nos.: ML12257A342; ML12212A116 (Notice); ML12236A366 (Presentation); Pkg: ML12262A225 **NRR-106**

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DATE	9/27/2012	10/3/2012	10/15/2012	

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List of Attendees

Public Meeting with the U.S. Nuclear Regulatory Commission (NRC) Staff and Boiling Water
Reactor Owners Group (BWROG) Representatives Held on August 23, 2012

<u>NAME</u>	<u>AFFILIATION/AGENCY</u>
Tony Borger	Entergy/BWROG
Phil Grissom	SNC
Gordon Agrella	GEH/BWROG
Rob Choromokos	Anatech
Dan Fouts	Entergy/BWROG
Steve Scammon	ENW/BWROG
Ted Schiffler	Exelon/BWROG
Craig Nichols	GEH/BWROG
Ed Asbury	GEH/BWROG
Phil Grissom	SNC
Anthony Mendiola	U.S. Nuclear Regulatory Commission
Ervin Geiger	U.S. Nuclear Regulatory Commission
Gregory Makar	U.S. Nuclear Regulatory Commission
Jack Davis	U.S. Nuclear Regulatory Commission
John Burke	U.S. Nuclear Regulatory Commission
Joseph Golla	U.S. Nuclear Regulatory Commission
Paul Klein	U.S. Nuclear Regulatory Commission
Stephen Smith	U.S. Nuclear Regulatory Commission
Stewart Bailey	U.S. Nuclear Regulatory Commission
Matt Yoder	U.S. Nuclear Regulatory Commission
John Lehning	U.S. Nuclear Regulatory Commission
Jim Beall	U.S. Nuclear Regulatory Commission

ENCLOSURE

BWR Owners Group
cc:

Project No. 691

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