

June 1, 2009

MEMORANDUM TO: Stacey L. Rosenberg, Chief
Special Projects Branch
Division of Policy and Rulemaking
Office of Nuclear Reactor Regulation

FROM: Michelle C. Honcharik, Senior Project Manager /RA/
Special Projects Branch
Division of Policy and Rulemaking
Office of Nuclear Reactor Regulation

SUBJECT: SUMMARY OF MAY 15, 2009, MEETING WITH THE BOILING
WATER REACTOR OWNERS' GROUP (TAC NO. MB5757)

On May 15, 2009, a Category 2 public meeting (with portions closed) was held between the U.S. Nuclear Regulatory Commission (NRC) staff and representatives of the Boiling Water Reactor (BWR) Owners' Group (BWROG) at NRC Headquarters, One White Flint North, 11555 Rockville Pike, Rockville, Maryland. The purpose of the meeting was to develop common understanding between the Office of Nuclear Reactor Regulation (NRR) senior management and the BWROG executive members of topics discussed and reach agreement and common understanding of any actions assigned and associated due dates. Members of the public were in attendance. Public Meeting Feedback forms were not received.

Introductions

A complete list of attendees is enclosed. The BWROG handouts are available in the Agencywide Documents Access and Management System (ADAMS) Accession No. ML091420102.

Opening Remarks

Mr. Rich Anderson, BWROG Executive Oversight Committee (EOC) Chairman, welcomed the group and thanked NRR management for the opportunity to meet. He stressed the importance of and appreciation for NRR support of the semi-annual meetings. He reviewed the mission of the BWROG and the current leadership. Mr. Anderson also explained the responsibility between the BWROG and the BWR Vessel Internals Program. He included that the executives on the oversight committees are common between the two, but have different Chair and Vice Chairs.

Mr. Eric Leeds, Director of NRR, also welcomed the group. He thanked the BWROG for inviting Mr. Jack Grobe, NRR Associate Director for Engineering and Safety Systems, to their executive meeting earlier in May. Mr. Leeds relayed that Mr. Grobe felt his time spent at the meeting was extremely valuable and encourages the BWROG to continue to invite NRR management to attend. Mr. Leeds went on to explain how NRC has focused on timeliness of topical report (TR) reviews over the past several years. Based on budget restrictions for the

next two years – we're relying on improvements in the process and BWROG support (i.e., high quality submittals, timely responses to requests for additional information) to continue the trend. Currently, the BWROG only has 2 TRs in for NRC review. He also highlighted the work that is being done to make further improvements in the TR review process, including development of a prioritization scheme.

Review of Key Issues

Generic Letter (GL) 2008-01, "Managing Gas Accumulation in Emergency Core Cooling, Decay Heat Removal, and Containment Spray Systems," dated January 11, 2008.

Mr. Doug Coleman reviewed the BWROG's response to GL 2008-01 and recognized the members of the Gas Accumulation Team and the Technical Support Team for their efforts. Mr. Coleman also reviewed the list of completed products for the 9-month GL responses, provided details of industry's ongoing efforts, and discussed the current status. Mr. Coleman commented that during a May 8, 2009, meeting the BWROG presented their proposal to staff regarding appropriate technical specification changes. Mr. Leeds asked if the NRC staff had any feedback. Mr. Rob Elliot, Technical Specifications Branch Chief, commented that it was too soon; the staff was still digesting the BWROG's proposal.

Mr. Bill Ruland, Division of Safety Systems Director, commented that even though the NRC and the BWROG have not always agreed, we have continued to have healthy dialogue and productive meetings. He commented that the NRC staff is developing a closure plan for GL 2008-01. The NRC staff's goal is not to perform inspections at every site, but to use the information gathered from responses to select particular sites for inspections. Mr. Ruland also commented that the NRC does plan to share its draft temporary instruction (TI) for inspections with the industry.

BWR Emergency Core Cooling System (ECCS) Suction Strainers

Mr. Brian Davenport reviewed the project plan major topics, including downstream effects, potential changes to debris source term, and potential effects on head loss correlations. Mr. Davenport also discussed the relationship of strainer issues and the resolution logic. He then detailed the BWROG's ECCS Suction Strainer Committee's phased approach and current actions as well as the major tasks completed to date and major tasks currently in progress. Mr. Davenport also explained the BWROG's international coordination and the BWROG schedule.

During the discussion on the potential changes to debris source term, Mr. Ruland commented that there has been a lot of debate in the industry regarding the proper zone of influence. Mr. Davenport responded that the BWROG is watching it closely.

During the discussion regarding the committee's phase approach, Mr. Davenport commented that the BWROG will work with the NRC along the way. During the discussion on source term, Mr. Coleman commented that the walk downs which have been completed so far – were preliminary only. Full walk downs will begin during outages after May 2009.

During the discussion on international coordination, Mr. Ruland asked if the WANO workshop in Finland was just for pressurized-water reactor (PWR) designs. Mr. Davenport responded that while the WANO workshop was mostly for PWRs, both plant designs were represented.

During the discussion of BWROG schedule, Mr. Ruland brought up the fact that for the PWRs the testing schedule drug out and they had some findings very late in the process. He requested that the BWROG perform testing early in the “engineering” phase, in lieu of later in the “implementation” phase. John Lane asked if the BWROG built into the schedule communication points with the NRC. Mr. Davenport responded, yes. The BWROG plans to meet with the NRC staff in July to discuss the schedule in more detail.

Generic Safety Issue (GSI)-193, "BWR ECCS Suction Concerns"

Mr. Rick Libra provided an update on the BWROG’s work to support GSI-193. Mr. Libra requested that the BWROG be able to review the testing plan and observe the testing performed at Purdue. Mr. Lane responded that this was a reasonable request. Once the details are worked out the NRC will share the test plan with the BWROG and inform them of when the testing will be performed. The BWROG agreed to supply information to the NRC in regards to plant component orientation to support the Purdue testing plan.

Topical Report and TSTF Submittals

Mr. Coleman provided a current status of BWROG TR submittals. He reported that the following TR reviews were recently completed:

- NEDE-33213P, "ODYSY Application for Stability Licensing Calculations Including Option I-D and II Long Term Solutions," and
- NEDC-33178P, Revision 0, "General Electric Methodology for Development of Reactor Pressure-Temperature [P/T] Curves."

Mrs. Michelle Honcharik, Senior Project Manager in the Special Projects Branch, brought up the fact that during the review of NEDC-33178, the NRC staff analysis indicated that the stress intensities for the analysis of an instrument nozzle could be more limiting during pressure test and cooldown than the stress intensities from the analysis of feedwater nozzles. Mr. Coleman explained that as a result, the BWROG performed additional finite element analysis and presented their results in an appendix to the topical.

Mr. John Lubinski, Division of Component Integrity Deputy Director, explained that because of this, the NRC staff reviewed the previously approved BWROG TR SIR-05-044, "Pressure Temperature Report Methodology for Boiling Water Reactors." SIR-05-044 was prepared for the BWROG by Structural Integrity Associates (SIA). The SIA methodology did not address these small beltline instrument line nozzles. Therefore, in the short term - BWR licensees who have small beltline instrument nozzles which need to be evaluated in the context of facility Pressure Temperature Limits Report (PTLR) generation should supplement the SIA methodology on a plant-specific basis. In the long term – the NRC recommends that the BWROG submit a revision to the SIA methodology in order to address this issue.

Mr. Coleman reported that the following TR reviews were reported as delayed schedule by the BWROG:

- Risk-informed Technical Specification (RITS) Initiatives 4a and 6b

NRC requested that the BWROG withhold re-submittal until May 2009 (following the issuance of the draft safety evaluation (SE) for the similar PWROG submittal). Mrs. Honcharik provided a new date of August 2009 for the PWROG draft SE. Mr. Bruce Boger, Associate Director for Operating reactor Oversight and Licensing, commented that the BWROG should look closely at RITS Initiative 4b, because it will help licensees with pandemic planning.

- NEDO-33349 Revision 1, "BWR Application to Regulatory Guide 1.97 Revision 4," and
- NEDC-33347P, "Containment Overpressure Credit for Net Positive Suction Head (NPSH)."

Mr. Ruland commented that the NRC staff may submit a Commission Paper and that the NRC is researching the history of what has previously been approved on plant-specific bases. Therefore, the review may be delayed. Mr. Coleman reminded Mr. Ruland that this TR was submitted at the NRC's request.

Mr. Coleman also discussed Technical Specification Task Force (TSTF) Travelers 493 and 514.

Both NRC and the BWROG agreed that an agreement has been reached regarding the review path for TSTF-493. The BWROG will submit revision 4 in June 2009. Mr. Elliot and Mr. Coleman thanked each other for the hard work to get to this agreement and the willingness to elevate these issues to upper management.

Mr. Coleman commented that the TSTF-514 review is moving along just fine. Mr. Elliot commented that the most important aspect of TSTF-514 is that it clarifies the operability requirements for all monitors. Mr. Boger asked if this review was fee waived. Mr. Elliot confirmed shortly after the meeting that the fee waiver for TSTF-514 was approved in letter dated March 27, 2009, and is available in ADAMS at Accession No. ML090890032.

Action Item Review:

Michelle Honcharik reviewed the following list of action items. Mr. Ken McCall confirmed the list.

- 1) GL-2008-01: NRC will share the draft TI regarding GL 2008-01 with the BWROG. The target date for issuance of the draft TI, will be known by end of May.
- 2) GSI-191: BWROG will schedule a meeting with the NRC in July 2009 to explain and discuss the schedule for their actions to address issues related to ECCS suction strainers. During the meeting the NRC will discuss the nature of the documents provided on Slide 25 and perhaps recommend some be submitted to the NRC as TRs.
- 3) GSI-193: BWROG to provide NRC RES geometry of torus in June 2009. NRC will share test plan for testing at Purdue, once details have been worked out. NRC will also invite BWROG to observe the testing.
- 4) SIA Methodology: NRC and BWROG to discuss path forward for possible submission of a revision to address small beltline instrument line nozzles.

- 5) Containment Over Pressure: BWROG and NRC will share any historical information regarding NRC previous plant-specific approvals for Mark I containments.
- 6) TSTF-514: NRC to confirm if fee waiver review complete. The NRC approved the fee waiver for TSTF 514 in letter dated 3/27/09 (ADAMS Accession No. ML090890032).
- 7) Regulatory Guide 1.200, Revision 2: BWROG coordinate with industry (PWROG, NEI, and EPRI) to meet with NRC to discuss compliance schedule.

After the action item review, the meeting was closed to the public, due to proprietary discussion on the following topic.

Motor Operated Valve (MOV) Magnesium Rotor Failures

Mr. Coleman provided an update on the MOV magnesium rotor guideline, "Inspection of Motor Operated Valve Limtorque AC Motors with Magnesium Rotors." The guideline was submitted to the NRC for information only on May 14, 2009. A non-proprietary version of the guideline is available in ADAMS Package Accession Number ML091480666. The BWROG will be tracking implementation and report back to NRC on its use. Mr. Lubinski asked if there were any interim milestones for reporting use and what actions will be taken for licensees that do not use this guideline. Mr. Libra indicated that the BWROG can do that. Mr. Lubinski also asked if the PWROG was implementing this same guideline. Mr. Coleman responded that he believes the PWROG is meeting next month (June 2009) and will decide. Several of the BWROG representatives indicated that their plants either have or plan to implement this guideline at their next outage.

Additional Remarks

Mr. Coleman stated that the BWROG (and rest of industry) needs to meet with the NRC to discuss compliance with Regulatory Guide 1.200, Revision 2. Currently industry is to be compliant by February 2010, but this will not be possible for many licensees. They want to meet to explain in detail why they cannot all be compliant by then.

Please direct any inquiries to me at 301-415-1774, or michelle.honcharik@nrc.gov.

Project No. 691

Enclosure: List of Attendees

cc w/encl: See next page

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ADAMS Accession No(s): ML091470138 (Package); ML091400687 (Summary); ML091190671 (Notice); ML091420102 (Handouts)

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Michelle Honcharik (NRR/DPR)
Stacey Rosenberg (NRR/DPR)
Tom Blount (NRR/DPR)
John Lubinski (NRR/DCI)
John Lane (RES)
Robert Elliot (NRR/DIRS)
Asimios Malliokos (RES)
Bill Ruland (NRR/DSS)
Sunil Weerakkody (NRR/DRA)
Eric Miller (NRO)
David Skeen (NRR/DE)
Hukam Garg (NRR/DE)
Alexander Velazquez (RES)
John McHale (NRR/DCI)

BWROG (Utility)

Rich Anderson, BWROG EOC Chair (NextEra Energy)
Rick Libra, BWROG EOC Member (Exelon)
Doug Coleman, BWROG Chair (Energy Northwest)
Ted Schiffley, BWROG Vice Chair (Exelon)
Ray Baker, BWROG Prime Rep (Southern Company)
Ken McCall, BWROG Program Manager (GEH)
Brian Davenport, ECCS Suction Committee Vice Chair (Exelon)
Steve Scammon, ECCS Suction Committee Chair (Energy Northwest)

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