November 13, 2009

MEMORANDUM TO: Michael L. Scott, Chief
Safety Issues Resolution Branch
Division of Safety Systems
Office of Nuclear Reactor Regulation

FROM: Joseph A. Golla, Project Manager ***/RA/***
Generic Communications and Power Uprate Branch
Division of Policy and Rulemaking
Office of Nuclear Reactor Regulation

SUBJECT: SUMMARY OF OCTOBER 21, 2009, PUBLIC MEETING WITH THE BOILING WATER REACTOR OWNER'S GROUP (BWROG), TO DISCUSS THE BWROG REVIEW OF IN-VESSEL DOWNSTREAM EFFECTS FOR BOILING WATER REACTORS (BWRs)

On October 21, 2009, Nuclear Regulatory Commission (NRC) staff met with representatives of the BWROG, in a public meeting in Rockville, Maryland. Enclosure 1 provides a list of those in attendance. Enclosure 2 is the meeting agenda. Non-proprietary information presented at the meeting is available in the NRC Agencywide Documents Access and Management System (ADAMS) under Accession No. ML093000601.

The purpose of the meeting was to discuss the final analytical results of the review of in-vessel downstream effects performed for BWRs by the BWROG and General Electric-Hitachi (GEH). A portion of this meeting was closed to public participation.

After opening remarks by NRC and the BWROG, Mr. Harry Goodman, Vice-Chairman of the BWROG Suction Strainers Committee, presented a briefing regarding the BWROG's overall plans to address in-vessel downstream effects. Mr. Goodman presented a brief review of background information concerning the efforts of the BWROG thus far, including the proposal of the BWROG to submit up to four licensing topical reports (LTRs) for NRC review and approval of BWROG plans. Mr. Goodman then reviewed the status of the schedule of activities of the BWROG. It was noted that the current scheduled date for submittal of the first LTR (fuel effects analysis results and test plan) is May 31, 2010. This has been moved 3 months from the February 28, 2010, date reported at the July 23, 2009, meeting with the BWROG. Mr. Goodman stated that this was to permit time for NRC staff feedback on the fuel testing plan.

It was stated by Mr. Doug Coleman, Chairman of the BWROG, that the BWROG will be looking for rapid turn-around from the staff on the first LTR. Mr. Stewart Bailey, NRC Acting Branch Chief of the Safety Issues Resolution Branch of the Office of Nuclear Reactor Regulation, stated that this would only be possible if the NRC staff could review the detailed BWROG/GEH analysis, and develop high confidence in the methods and results, prior to receipt of the first LTR.

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Following this, a briefing was given by Mr. Jose Luis Casillas and Mr. Curt Robert of GEH on analysis results of BWR loss-of-coolant accident (LOCA) long term cooling fuel effects from debris blockage. Since this briefing presented information that is proprietary to GEH, no further discussion of it will be presented here. Two members of the public who were present for the first presentation were excused from the meeting room for this presentation. A non-proprietary version of this presentation is included in the package of materials for this meeting summary.

A briefing was then given by Mr. Gerald Luciano of Global Nuclear Fuel entitled "GNF Perspectives on Testing Debris Effects on GNF BWR Fuel." This briefing presented general considerations that will go into the development of the BWROG/GEH test plan for fuel effects testing.

The staff had a number of questions about the GEH presentation. The staff had several questions on the computer modeling that supports the proposed testing criteria. The staff also asked for a better understanding of how the new computer codes used to evaluate in-vessel effects would be incorporated into the staff-approved LOCA accident analyses methodologies that are used to demonstrate compliance with Title 10 of the *Code of Federal Regulations*, Section 50.46. The staff stated that it needed a better understanding of GEH's analysis before it could provide feedback on the test plan, and asked for a more detailed presentation by the end of 2009.

Enclosure 1: List of Attendees
Enclosure 2: Meeting agenda

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DISTRIBUTION: See next page

ADAMS ACCESSION NUMBERS: ML093000601 (Package)
ML093000602 (Memo)
ML093000604 (BWR LOCA Presentation)
ML093000606 (BWROG Presentation)
ML093000613 (GNF Presentation)

OFFICE	LA:DPR:PGCB	PM:DPR:PGCB	BC:DPR:PGCB	BC:DCI:CSGB	BC:DSS:SSIB
NAME	CHawes	JGolla	MMurphy	RTaylor	MScott
DATE	10/28/2009	10/28/2009	11/09/2009	11/10/2009	11/13/2009

List of Attendees for October 21, 2009,
Meeting With The BWROG

Jose Luis Casillas	GEH
Curt Robert	GEH
Harry Goodman	BWROG
Fred Emerson	GEH/BWROG
Gerald Luciano	GNF
William Slagle	Westinghouse
Craig Nichols	GEH/BWROG
Carl Prather	CCI
Doug Coleman	BWROG
Zeechung Wang	NRC/RES
Roberto Torres	NRC/NRR
Paul Klein	NRC/NRR
Steve Smith	NRC/NRR
Hanry Wagage	NRC/NRO
Matt Yoder	NRC/NRR
Len Ward	NRC/NRR
Tony Mendiola	NRC/NRR
Erv Geiger	NRC/NRR
Stew Bailey	NRC/NRR
William Krotiuk	NRC/RES
Steve Bajorek	NRC/RES
Joe Golla	NRC/NRR

Enclosure 1

MEETING AGENDA
U.S. NUCLEAR REGULATORY COMMISSION (NRC)
WORKING LEVEL MEETING WITH BOILING WATER REACTOR OWNER'S GROUP
(A PORTION OF THIS MEETING WILL BE CLOSED TO THE PUBLIC)

October 21, 2009

1:00-1:10	Introductions and meeting purpose	NRC
1:10-2:15	Presentation by BWROG and GEH, analysis results of in-vessel downstream effects evaluation ****this portion closed to the public****	BWROG/GEH
2:15-2:35	Perspectives on testing debris effects on GNF BWR fuel	BWROG/GNF
2:35-3:00	Proposed schedule for resolving in-vessel downstream Effects issues	BWROG
3:00-3:20	Discussion	NRC/BWROG
3:20-3:30	Opportunity for public comment	Public/NRC
3:30	Adjourn	

Enclosure 2

Memorandum to Michael Scott from Joe Golla, dated

SUBJECT: SUMMARY OF PUBLIC MEETING ON OCTOBER 21, 2009, WITH THE BWROG TO DISCUSS THE BWROG REVIEW OF IN-VESSEL DOWNSTREAM EFFECTS

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