

April 27, 2015

MEMORANDUM TO: Anthony J. Mendiola, Chief
Licensing Processes Branch
Division of Policy and Rulemaking
Office of Nuclear Reactor Regulation

FROM: Jonathan G. Rowley, Project Manager /RA/
Licensing Processes Branch
Division of Policy and Rulemaking
Office of Nuclear Reactor Regulation

SUBJECT: SUMMARY OF FEBRUARY 25, 2015, PARTIALLY CLOSED MEETING
WITH INDUSTRY STAKEHOLDERS REGARDING THE BABCOCK
AND WILCOX LOSS-OF-COOLANT ACCIDENT EVALUATION
MODEL ANALYSIS

On February 25, 2015, a partially closed meeting was held between the U.S. Nuclear Regulatory Commission (NRC) staff, representatives of Babcock and Wilcox (B&W) plants, and AREVA Inc. (AREVA). The purpose of the meeting was to discuss NRC staff actions to verify safe plant operation and the industry (utilities and AREVA) plans to revise the B&W plant large break loss-of-coolant accident (LBLOCA) evaluation model to correct an error in accounting for fuel thermal conductivity degradation and to reanalyze the B&W plant-specific LBLOCA analyses to demonstrate continued compliance with Title 10 of the *Code of Federal Regulations* (10 CFR) 50.46 requirements.

Jeremy Dean (NRC) made opening remarks for the NRC and Tom Byrne (Duke Energy) made opening remarks for the utilities that operate B&W plants. Benjamin Parks (NRC) led the NRC presentation during the open portion of the meeting, which provided the background on the issue. Benjamin also led the NRC presentation during the closed portion of the meeting. Jerry Holm and Jacoben Tone (AREVA) made a presentation of the AREVA plans to revise the B&W plant LBLOCA evaluation model and to perform a reanalysis of the LBLOCA for each of the B&W plants.

The expectations expressed by the NRC, and the AREVA plans to (1) revise the B&W plant LBLOCA evaluation model and (2) perform a reanalysis of the LBLOCA for each of the B&W plants, were in general agreement.

A list of attendees is enclosed. The AREVA presentation can be found in the NRC Agencywide Documents Access and Management System (ADAMS) at Accession No. ML15057A036. The NRC presentation can be found in ADAMS at Accession No. ML15057A032.

CONTACT: Jonathan Rowley, NRR/DPR
(301) 415-4053

Action Items

The following action items were identified.

1. AREVA will submit for NRC review and approval a supplement to Topical Report (TR) BAW-10192PA, Revision 0, to revise the current approach to modeling fuel thermal conductivity degradation in the B&W plant LBLOCA evaluation model. A revision to BAW-10179P will be made to reference this BAW-10192PA, Revision 0, supplement. This supports the NRC position that the revision of the evaluation model requires review and approval by the NRC. The submittal of the proposed TR supplements will provide for an efficient and consistent NRC staff review of the evaluation model revision. The NRC indicated that they will want to review the justification for not redoing sensitivity studies with the revised evaluation model.
2. The utilities plan to have AREVA reanalyze the LBLOCA for each plant after the NRC issues a safety evaluation for the TR supplement. Each utility will notify the NRC when the reanalysis is complete. The reanalysis will be evaluated by each utility under 10 CFR 50.59 to determine if a license amendment request is required.
3. The NRC indicated that they are preparing a regulatory information summary (RIS) to provide guidance for 10 CFR 50.46 evaluation model change reporting requirements. The RIS is anticipated to be issued in late 2015.
4. The NRC stated that they had restarted the review of TR BAW-10192P, Revision 2, which had been suspended in 2010. AREVA indicated that BAW-10192P, Revision 2, was a Pressurizer Water Reactor Owners Group (PWROG) TR. The NRC would need to discuss with the PWROG whether it is desired that the review be restarted. The NRC requested a letter stating whether BAW-10192P, Revision 2, should be withdrawn, reviewed or classified as inactive.

Docket Nos. 50-269, 50-270, 50-287, 50-289, 50-313 and 50-346

Enclosure:
List of Attendees

Action Items

The following action items were identified.

1. AREVA will submit for NRC review and approval a supplement to Topical Report (TR) BAW-10192PA, Revision 0, to revise the current approach to modeling fuel thermal conductivity degradation in the B&W plant LBLOCA evaluation model. A revision to BAW-10179P will be made to reference this BAW-10192PA, Revision 0, supplement. This supports the NRC position that the revision of the evaluation model requires review and approval by the NRC. The submittal of the proposed TR supplements will provide for an efficient and consistent NRC staff review of the evaluation model revision. The NRC indicated that they will want to review the justification for not redoing sensitivity studies with the revised evaluation model.
2. The utilities plan to have AREVA reanalyze the LBLOCA for each plant after the NRC issues a safety evaluation for the TR supplement. Each utility will notify the NRC when the reanalysis is complete. The reanalysis will be evaluated by each utility under 10 CFR 50.59 to determine if a license amendment request is required.
3. The NRC indicated that they are preparing a regulatory information summary (RIS) to provide guidance for 10 CFR 50.46 evaluation model change reporting requirements. The RIS is anticipated to be issued in late 2015.
4. The NRC stated that they had restarted the review of TR BAW-10192P, Revision 2, which had been suspended in 2010. AREVA indicated that BAW-10192P, Revision 2, was a Pressurizer Water Reactor Owners Group (PWROG) TR. The NRC would need to discuss with the PWROG whether it is desired that the review be restarted. The NRC requested a letter stating whether BAW-10192P, Revision 2, should be withdrawn, reviewed or classified as inactive.

Docket Nos. 50-269, 50-270, 50-287, 50-289, 50-313 and 50-346

Enclosure:

List of Attendees

DISTRIBUTION:

PUBLIC	PLPB R/F	RidsNrrDpr	RidsNrrDorl
RidsNrrDprPlpb	RidsNrrLADHarrison	RidsNrrDra	RidsNrrDssSnpb
RidsAcrsAcnwMailCenter	RidsNrrDe	RidsNrrDss	RidsNrrJld
RidsOgcMailCenter	RidsResOd	RidsNroOd	RidsNrrOd
AMendiola (Hardcopy)	RidsNrrDssSrx		

EXTERNAL DISTRIBUTION:

Robert.jaffa@exeloncorp.com	trbyrne@duke-energy.com
Frank.mascitelli@exeloncorp.com	Jerald.holm.ext@areva.com
Jacoben.tone@areva.com	mark.handrick@duke-energy.com
Chris.allison@areva.com	bret.boman@areva.com
Scott.thomas@duke-energy.com	Gregory.heasley@exeloncorp.com
Gayle.elliott@areva.com	john.klingenfus@areva.com
Rusty.cox@areva.com	dbkelly@firstenergycorp.com
plashley@firstenergycorp.com	gbroadb@entergy.com

ADAMS Accession Nos.: ML15089A164 (Summary); ML15089A159 (Package); ML15042A558 (Notice); ML15057A036, ML15057A032 (Presentations)

NRC-001

OFFICE	PLPB/PM	PLPB/LA	PLPB/BC	PLPB/PM
NAME	LAlvarado	DHarrison	AMendiola	JRowley
DATE	04/27/2015	04/07/2015	04/27/2015	04/27/2015

List of Attendees

**Partially Closed Meeting with Industry Stakeholders Regarding the Babcock and Wilcox
Loss-of-Coolant Accident Evaluation Model Analysis**

February 25, 2015

Name	Organization
Gayle Elliot	AREVA Inc. (AREVA)
John Klingenfus	AREVA
Russell Cox	AREVA
Jerald Holm	AREVA
Chris Allison	AREVA
Bret Boman	AREVA
Jacoben Tone	AREVA
Adam Bingham*	Duke Energy
Tracy A Saville*	Duke Energy
Scott Thomas	Duke Energy
Thomas R. Byrne*	Duke Energy
Mark Handrick	Duke Energy
Robert St Clair*	Duke Energy
Stephenie L. Pyle*	Entergy Nuclear Operations (Entergy)
Chip Garbe*	Entergy
Andy Tate*	Entergy
Bret Hawes*	Entergy
Bob Clark*	Entergy
Greg Broadbent	Entergy
Robert Jaffa	Exelon Generation Company (Exelon)
Frank Mascitelli	Exelon
Gregory Heasley	Exelon
Phil Lashley	FirstEnergy Nuclear Operating Company (FENOC)
Daniel B Kelley	FENOC
Jonathan Rowley	U.S. Nuclear Regulatory Commission (NRC)
Andrea George*	NRC
Eva Brown	NRC
Benjamin Parks	NRC
Jeremy Dean	NRC
Reed Anzalone	NRC
Chris Jackson	NRC
Robert Gladney	NRC
Jennifer Whitman	NRC
John G. Lamb	NRC
Jeffrey White	NRC
Shanlai Lu	NRC
Fred Forsaty	NRC
Lydiana Alvarado	NRC

* participated via telephone conferencing

ENCLOSURE