

December 07, 2009

MEMORANDUM TO: Joseph Colaccino, Chief
EPR Projects Branch
Division of New Reactor Licensing
Office of New Reactors

FROM: Jason B. Carneal, Project Manager */RA/*
EPR Projects Branch
Division of New Reactor Licensing
Office of New Reactors

PARTICIPANTS: AREVA NP, INC., NRC STAFF, MEMBERS OF THE PUBLIC

SUBJECT: SUMMARY OF THE OCTOBER 8, 2009, PUBLIC MEETING TO
DISCUSS U.S. EPR REALISTIC LARGE BREAK LOSS OF COOLANT
ACCIDENT TOPICAL REPORT

On October 8, 2009, the U.S. Nuclear Regulatory Commission (NRC) held a public meeting at its headquarters, Room T-2B5, 11545 Rockville Pike, Rockville, MD, with representatives of AREVA NP, Inc. (AREVA). The purpose of the meeting was to provide NRC staff's feedback on the path forward for ANP-10278P, "U.S. EPR Realistic Large Break Loss of Coolant Accident Methodology Topical Report," Revision 0, which is available through the Agencywide Documents Access and Management System (ADAMS) Accession Number ML070880737. The meeting followed several audits and public meetings regarding ANP-10278P. Previous audits were held on December 3 and 4, 2008, April 22 and 23, 2009, September 15, 2009, and October 8, 2009. Public meetings regarding ANP-10278P were held on July 9, 2009, and August 6, 2009. The meeting agenda is provided as Enclosure 1 and attendees are identified in Enclosure 2.

This meeting summary is available in ADAMS ML093000361. The presentation materials distributed at the meeting are contained in ADAMS document ML092860108. The original meeting notice is contained in ADAMS document ML092660270. Documents in ADAMS are available electronically at the NRC's Electronic Reading Room at <http://www.nrc.gov/reading-rm/adams.html>. If you do not have access to ADAMS or have problems accessing the documents located in ADAMS, contact the NRC Public Document Room (PDR) staff at 1-800-397-4209, 301-415-4737, or pdr@nrc.gov.

The meeting was a Category 1 public meeting during which members of the public were invited to provide comment at specific times identified in the agenda. The purpose of the meeting was specifically for NRC staff to provide feedback on AREVA's proposed path forward as presented during an audit on September 15, 2009, for each remaining technical issue. The public session of the meeting lasted from 1:00 P.M. to 1:25 P.M. Immediately following the public portion of the meeting, a closed session was held in order to discuss proprietary information. The information presented and discussed in the closed session of the meeting was determined to be proprietary in nature by NRC staff. A summary of the public portions of this meeting is provided below.

At the beginning of the meeting, AREVA stated that the objective for the October 8, 2009, public meeting was to obtain NRC feedback on its proposed approach for revision to ANP-10278P. In order to support a January 8, 2010, submission date, AREVA stated that the feedback was necessary prior to launching the final set of calculations for the topical report revision. NRC staff had previously communicated that a submission date of January 8, 2010, was necessary in order to support the current Phase 2 review schedule for Chapter 15 of the U.S. EPR design certification.

NRC staff reiterated the outstanding issues in the topical report and the respective penalties that the staff proposes in order to account for the deficiencies. These issues include initial stored energy, fuel conductivity adjustments, accumulator temperature, nitrogen injection, decay heat, and lower plenum refill.

NRC staff provided a brief overview of the history of the work performed on Topical Report ANP-10278P. The realistic large break loss of coolant accident Topical Report (RLBLOCA TR), ANP-10278P, was submitted March 26, 2007, and accepted for review May 9, 2007. The first scheduled draft safety evaluation report (DSER) date was December 31, 2007. In July 2008, open issues still existed after two rounds of requests for additional information (RAIs). The remaining issues led to the option of either issuing a DSER with a statement that certain parts of the methodology are unacceptable and imposing a peak cladding temperature (PCT) penalty of about 500 °F, or issuing of a third round of RAIs. A third round of RAIs was issued after a management discussion between AREVA and NRC in August 2008.

Subsequently, additional rounds of RAIs were issued. In a public meeting on July 9, 2009, the staff presented its position on outstanding issues regarding the RLBLOCA TR, which amounted to a PCT penalty of approximately 500 °F if no further information was provided by AREVA. NRC staff explained that this number was a conservative penalty based on first-order approximations of the technical issues. In addition to the penalties, methodology impacts were estimated by AREVA to total approximately 100 °F for a total of 600 °F overall impact on PCT when both penalties and methodology changes were considered.

AREVA informed NRC staff of their intention to provide additional information in a revision to ANP-10278 addressing the underlying issues in an effort to reduce the associated penalties during a public meeting on August 6, 2009. AREVA presented detailed information on the proposed path forward for each outstanding technical issue regarding ANP-10278P to NRC staff during an audit on September 15, 2009.

Taken together, NRC staff estimate that the impact, taking into account the proposed methodology changes on PCT, sums up to approximately 250 °F. However, this number is an estimate since the methodology changes have not yet been implemented and reviewed. This estimated impact was compared to the initial estimated impacts and proposed penalties from the July 9, 2009, public meeting, which totaled approximately 600 °F. The difference in estimated overall PCT impact stems from both additional confirmatory calculations performed by NRC staff and the information obtained during previous audits.

After the NRC staff completed this portion of the presentation, the members of the public in attendance were given an opportunity for comment prior to the close of the public session of the meeting. No comments were provided by the public during this meeting, and the public session of the meeting was adjourned. Immediately subsequent to the closure of the public session, a

closed session was held in order to discuss material that was determined to be proprietary by NRC staff.

During the closed portion of the meeting, NRC staff provided feedback to AREVA for each technical issue as provided in the meeting slides (ML092860108). Although no exact schedules were identified for remaining steps on AREVA's part, AREVA has committed to submit a revision of the topical report on January, 8, 2010.

Members of the public were in attendance. No public feedback forms were received. Please direct any inquires concerning this meeting to Jason Carneal at 301-415-3813 or Jason.Carneal@nrc.gov.

Docket No. 52-020

Enclosures:
Meeting Agenda
Attendee List

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Meeting Agenda
Attendee List

DISTRIBUTION:

PUBLIC	JCarneal, NRO	RidsNroDnrINarpResource
NARP R/F	JColaccino, NRO	RidsNroDnrIResource
GTesfaye, NRO	JMcLellan, NRO	

ADAMS Accession Number: ML093000361

NRO-002

OFFICE	DNRL/NARP:FA	DNRL/NARP:LA	DNRL/NARP:PM	DNRL/NARP:PM	DNRL/NARP:PM
NAME	FJansen	JMcLellan	JCarneal	JDonoghue	GTesfaye
DATE	11/09/09	11/16/09	11/16/09	11/23/09	12/07/09

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REVISED AGENDA
AREVA NP, INC. PUBLIC MEETING

Wednesday October 8, 2009
11:30 AM – 3:45 PM

- | | | |
|-----------|---|----------------|
| 1:00 P.M. | Introduction and Opening Remarks | (NRC/AREVA NP) |
| 1:05 P.M. | Summary of Proposed Path Forward for RLBLOCA Topical Report | (AREVA NP) |
| 1:10 P.M. | NRC Feedback on Proposed Path Forward for RLBLOCA Topical Report | (NRC) |
| 1:24 P.M. | Opportunity for Public Comment* | |
| 1:25 P.M. | Adjourn Public Meeting* | |
| | Large Break Loss of Coolant Accident Methodology Proprietary Session | |
| 1:25 P.M. | Discussion of Proprietary Issues and Content | (NRC/AREVA NP) |
| 3:45 P.M. | Adjourn Closed Session | |

All times listed are approximate and for planning purposes only. Adjustments may be made during the meeting as necessary.

**The public will be given the opportunity to comment prior to these points in the meeting.*

Attendance List

AREVA NP, Inc., Public Meeting October 8, 2009

Name	Affiliation	Contact Information
Sandra M. Sloan	AREVA	sandra.sloan@areva.com
Bert Dunn	AREVA	
Eugene Moore	AREVA	
Jerry Holm	AREVA	
Bob Salm	AREVA	
Liliane Schor	AREVA	
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Carl Beyer	PNNL	
David Caraher	ISL, Inc.	