

October 24, 2013

Dennis Madison
Southern Nuclear
Chairman, BWR Vessel
and Internals Project
3420 Hillview Avenue
Palo Alto, CA 94304-1395

SUBJECT: U.S. NUCLEAR REGULATORY COMMISSION APPROVAL LETTER FOR
"BWRVIP-145-A: BWR VESSEL AND INTERNALS PROJECT, EVALUATION
OF SUSQUEHANNA UNIT 2 TOP GUIDE AND CORE SHROUD MATERIAL
SAMPLES USING RAMA FLUENCE METHODOLOGY" (TAC NO. MF2697)

Dear Mr. Madison:

By letter dated January 22, 2010, the Boiling Water Reactor (BWR) Vessel and Internals Project (BWRVIP) submitted a proprietary version of the report BWRVIP-145-A, "BWR Vessel and Internals Project, Evaluation of Susquehanna Unit 2 Top Guide and Core Shroud Material Samples Using RAMA Fluence Methodology," for U.S. Nuclear Regulatory Commission (NRC) staff review (Agencywide Documents Access and Management System (ADAMS) Accession No. ML100260953).

A nonproprietary version of this document (ADAMS Accession No. ML100260948) has been placed in the NRC's Public Document Room and added to the NRC Library in ADAMS.

The BWRVIP-145 report was submitted as a means of exchanging information with the NRC staff for the purpose of supporting generic regulatory improvements related to the implementation of a methodology to determine fast neutron fluence values ($E > 1.0$ MeV) in BWR internal components.

BWRVIP-145-A compiles information associated with the NRC staff's review of BWRVIP-145. Namely, it incorporates the NRC safety evaluation as well as other correspondence related to NRC review of the original report. A list of these items is compiled in Table C-1 of Appendix C to BWRVIP-145-A.

Based on its review of the changes documented in BWRVIP-145-A and summarized in Table C-1, the NRC staff has determined that the BWRVIP-145-A report is acceptable to the extent delineated in the NRC staff's original approval letter, dated February 7, 2008 (ADAMS Accession No. ML080390160). The NRC staff approval is subject to the limitation provided in Section 5.0, "Summary and Limitations" of the NRC safety evaluation accompanying the approved report. The revisions to the topical report, submitted in the approved copy, do not affect the NRC's approval status of this topical report.

D. Madison

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The staff safety evaluation notes, in various places, both (1) the limited applicability of NRC regulatory guidance for calculating neutron fluence in locations other than the reactor vessel, and (2) the conservatism and limited precision associated with the fluence values described in the topical report. In its review of licensing requests using the RAMA methodology to calculate BWR core shroud and top guide fluence, the NRC staff will consider both of the above items in its evaluation of the required, supporting justification.

If you have any questions or require any additional information, please feel free to contact the Project Manager for this topical report, Joseph Holonich, at 301-415-7297 or via e-mail at Joseph.Holonich@nrc.gov.

Sincerely,

/RA by Shelton for/

Sher Bahadur, Deputy Director
Division of Policy and Rulemaking
Office of Nuclear Reactor Regulation

Project No. 704

D. Madison

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Sincerely,

/RA by Shelton for/

Sher Bahadur, Deputy Director
Division of Policy and Rulemaking
Office of Nuclear Reactor Regulation

Project No. 704

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NRR-106

OFFICE	PLPB/PM	PLPB/LA	DSS/SRXB	PLPB/BC	DPR/DD
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DATE	9/19/2013	9/13/2013	10/17/2013	10/21/2013	10/24/2013

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