

June 30, 2008

Rick Libra
Exelon
Chairman, BWR Vessel and Internals Project
Electric Power Research Institute
3420 Hillview Avenue
Palo Alto, CA 94304-1395

SUBJECT: SAFETY EVALUATION FOR ELECTRIC POWER RESEARCH INSTITUTE (EPRI) BOILING WATER REACTOR VESSEL AND INTERNALS PROJECT (BWRVIP) REPORT TR-105696-R6 (BWRVIP-03), REVISION 6, "BWR [BOILING WATER REACTOR] VESSEL AND INTERNALS PROJECT REACTOR PRESSURE VESSEL AND INTERNALS EXAMINATION GUIDELINES" (TAC NO. MC2293)

Dear Mr. Libra:

By letter dated January 6, 2004 (Agencywide Documents and Access Management System (ADAMS) Accession No. ML040440261), the EPRI submitted "TR-105696-R6 (BWRVIP-03) Revision 6: Boiling Water Reactor Vessel and Internals Project Reactor Pressure Vessel and Internals Examination Guidelines," to the U.S. Nuclear Regulatory Commission (NRC) staff for information only. By letter dated June 23, 2006 (ADAMS Accession No. ML061740566), the NRC staff sent the BWRVIP a request for additional information (RAI). On March 14, 2007, the NRC staff participated in a meeting with representatives from the BWRVIP program to discuss and clarify the RAI questions. By letter dated May 29, 2007 (ADAMS Accession No. ML071510339), the BWRVIP provided a response to the RAI questions.

The NRC staff has participated in the review of past versions of BWRVIP-03, Revision 6. The NRC staff issued a safety evaluation (SE) to the EPRI on the acceptability of BWRVIP-03 (initial issuance) on June 8, 1998. Since then, the BWRVIP has selectively updated parts of the BWRVIP report. Each update was identified with a subsequent revision number. These new revisions were submitted to the NRC staff for information only. Since the issuance of the initial SE, improvements have occurred in nondestructive examinations (NDE) that enhanced the industry's confidence regarding the reliability of NDE examination findings. Upon receipt of BWRVIP-03 Revision 6, the NRC staff chose to review the relationship between BWRVIP-03, Revision 6, NDE guidelines and the NDE changes and improvements in the American Society of Mechanical Engineers Boiler and Pressure Vessel Code that have occurred since the NRC staff issued its SE dated June 8, 1998.

BWRVIP-03, Revision 6, provides the methodology, inspection standards, and guidelines for the BWRVIP mockups, for the protocol of NDE techniques, for demonstrating the NDE techniques, and for determining NDE and positioning tool uncertainties. The methodology, inspection standards, and guidelines pertain to visual testing, ultrasonic testing, and eddy current testing methods. The BWRVIP report addresses the examination of all components within the scope of the BWRVIP program. The BWRVIP program may augment the ASME Code requirements for components covered by the ASME Code.

The NRC staff have reviewed and evaluated BWRVIP-03, Revision 6, and determined that NDE as supplemented by the reactor vessel component-specific BWRVIP Inspection & Evaluation BWRVIP reports is performing its intended function of detecting flaws in the reactor vessel internals. The Inspection & Evaluation BWRVIP reports will be reviewed independently from BWRVIP-03, Revision 6, and are not part of this SE.

The NRC staff has reviewed BWRVIP-03, Revision 6, and finds that this BWRVIP report is acceptable for referencing in licensing documentation for General Electric-designed boiling water reactors to the extent specified and under the limitations delineated in the BWRVIP report and in the enclosed final SE. The final SE defines the basis for our acceptance of the BWRVIP-03, Revision 6.

Our acceptance applies only to material provided in the subject BWRVIP report. We do not intend to repeat our review of the acceptable material described in the BWRVIP report. When the BWRVIP report appears as a reference in licensing documentation, our review will ensure that the material presented applies to the specific plant involved. Licensees will be expected to implement the provisions of BWRVIP-03, Revision 6, subject to the limitations identified in the enclosed SE, as part of their BWRVIP program unless deviations from the program are justified. Licensees shall identify such deviations to the NRC in accordance with BWRVIP program requirements.

In accordance with the guidance provided on the NRC website, we request that the BWRVIP publish accepted proprietary and non-proprietary versions of this BWRVIP report within three months of receipt of this letter. The accepted versions shall incorporate this letter and the enclosed final SE after the title page. Also, they must contain historical review information, including NRC staff RAIs and your responses. The accepted versions shall include an "-A" (designating accepted) following the BWRVIP report identification symbol.

If future changes to the NRC's regulatory requirements affect the acceptability of this BWRVIP report, the BWRVIP and/or licensees referencing it will be expected to revise the BWRVIP report appropriately, or justify its continued applicability for subsequent referencing.

Sincerely,

/RA/

Mark J. Maxin, Acting Deputy Director
Division of Policy and Rulemaking
Office of Nuclear Reactor Regulation

Project No. 704

Enclosure: SE

cc w/ encl: See next page

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Mark J. Maxin, Acting Deputy Director
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Enclosure: SE
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*No major changes to SE input

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