



**UNITED STATES  
NUCLEAR REGULATORY COMMISSION**  
WASHINGTON, D.C. 20555-0001

May 11, 2016

MEMORANDUM TO: Kevin Hsueh, Chief  
Licensing Processes Branch  
Division of Policy and Rulemaking  
Office of Nuclear Reactor Regulation

FROM: Dennis Morey, Chief */RA/*  
Aging Management of Reactors and  
Mechanical Systems Branch  
Division of License Renewal  
Office of Nuclear Reactor Regulation

SUBJECT: REVIEW OF THE ELECTRIC POWER RESEARCH INSTITUTE  
TOPICAL REPORT NO. BWRVIP-139, APPENDIX B

On February 21, 2014, (ADAMS Accession No.: ML14071A469), the Electric Power Research Institute (EPRI) Boiling Water Reactor Vessel and Internals Project (BWRVIP) submitted proprietary Appendix B to EPRI BWRVIP technical report (TR) no. 1018794, "BWRVIP-139-A: BWR Vessel and Internals Project Steam Dryer Inspection and Flaw Evaluation Guidelines" for staff approval. The methodology in TR No. BWRVIP-139, Appendix B, provides the EPRI BWRVIP's basis for using the methodology in TR No. BWRVIP-139-A to demonstrate compliance with the Commission's requirements in Title 10 of the *Code of Federal Regulation* (CFR) Part 54, "Requirements for Renewal of Operating Licenses for Nuclear Power Plants."

I am enclosing its proprietary license renewal safety evaluation report (LR-SER) for the staff's review of TR No. BWRVIP-139, Appendix B. The staff of the Aging Management of Reactor and Mechanical Systems Branch (RARB) performed its review of TR No. BWRVIP-139, Appendix B, in accordance with NRR Office Instruction No. LIC-500, Revision 5, "Topical Report Process." The following items summarize important points from the staff's review of the report:

- 1) TR No. BWRVIP-139, Appendix B is a report that contains some proprietary information.
- 2) The staff did not agree that all of the proprietary information in TR No. BWRVIP-139, Appendix B, would meet the proprietary withholding requirements in 10 CFR 2.390. The EPRI BWRVIP has agreed to downgrade the contents in question to a non-proprietary status when the report is upgraded to a -A version. (Refer to Section 3.1 in the enclosed safety evaluations (SEs))
- 3) The staff agrees that the remaining proprietary information in the report is appropriate for withholding under the proprietary withholding requirements in 10 CFR 2.390.

CONTACT: James Medoff, NRR/DLR/RARB  
301-415-2715

- 4) Information in the proprietary LR-SER requiring proprietary withholding is designated in the document by bracketed, yellow highlighted text.
- 5) The LR-SER included one limitation. Specifically, application of the BWRVIP-139-A and BWRVIP-139, Appendix B reports are limited only to those steam dryer designs that were assessed in TR No. BWRVIP-139-A; licensees owning steam dryer designs outside of those assessed in BWRVIP-139-A will need to address aging management of their steam dryer assemblies on a case-by-case basis (Refer to LR-SER Sections 3.8 and 4.1).
- 6) EPRI has drawn a conclusion in TR No. BWRVIP-139, Appendix B that loss of material due to wear does not need to be managed in accordance with 10 CFR 54.21(a)(3). The staff does not agree with this conclusion; therefore, the enclosed SE included one topical report condition item (TRCI). The EPRI BWRVIP will need to address this TRCI in the –A version that will be issued to the Division of Policy and Rulemaking, NRR (Refer to LR-SER Sections 3.4 and 4.3).
- 7) The SEs also include one applicant/licensee action item and two conditions that are consistent with specific requirements in 10 CFR Part 54. (Refer to LR-SER Sections 3.4, 3.6, 3.7, 4.2, and 4.4.)

The enclosed LR-SER incorporates peer comments and recommended edits by Mr. Ganesh Cheruvenki (DE/EVIB), Dr. Chakrapani Basavaraju (DE/EMCB), and Mr. Joseph Holonich (DPR/PLPB). This completes RARB's review for TAC No. ME2188.

Project No. 704

Enclosure:

Proprietary LR-SER for

TR No. BWRVIP-139, Appendix B

- 4) Information in the proprietary LR-SER requiring proprietary withholding is designated in the document by bracketed, yellow highlighted text.
- 5) The LR-SER included one limitation. Specifically, application of the BWRVIP-139-A and BWRVIP-139, Appendix B reports are limited only to those steam dryer designs that were assessed in TR No. BWRVIP-139-A; licensees owning steam dryer designs outside of those assessed in BWRVIP-139-A will need to address aging management of their steam dryer assemblies on a case-by-case basis (Refer to LR-SER Sections 3.8 and 4.1).
- 6) EPRI has drawn a conclusion in TR No. BWRVIP-139, Appendix B that loss of material due to wear does not need to be managed in accordance with 10 CFR 54.21(a)(3). The staff does not agree with this conclusion; therefore, the enclosed SE included one topical report condition item (TRCI). The EPRI BWRVIP will need to address this TRCI in the –A version that will be issued to the Division of Policy and Rulemaking, NRR (Refer to LR-SER Sections 3.4 and 4.3).
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TR No. BWRVIP-139, Appendix B

**DISTRIBUTION:**

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J Holonich, DPR/PLB

G Cheruvenki, DE/EVIB

C Basavaraju, DE/EMCB

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S Bloom, DLR/RSRG:BC

**ADAMS Accession No.: ML16098A326 (package), ML16098A332 (memo), ML16098A348 (SER)**

**\* concurred via e-mail**

<b>OFFICE</b>	DLR/RARB	DLR:LA	DE/EMCB:ABC	DE/EVIB:BC
<b>NAME</b>	JMedoff	IBetts*	YLi	JMcHale
<b>DATE</b>	4/29/2016	4/18/2016	4/29/2016	4/29/2016
<b>OFFICE</b>	DLR/RARB:BC			
<b>NAME</b>	DMorey			
<b>DATE</b>	5/11/2016			

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