

**MRP** Materials Reliability Program \_\_\_\_\_ MRP 2015-045

(via email)

Date: December 21, 2015

To: Document Control Desk  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555-001

From: David Czufin, Chairman, PMMP Executive Committee  
Anne Demma, EPRI, MRP Program Manager

Subject: Request for Exemption of NRC Review Fees for MRP-227, Revision 1 (Ref. EPRI Project Number 689)

References:

1. *Materials Reliability Program: Pressurized Water Reactor Internals Inspection and Evaluation Guidelines (MRP-227 Rev.1)*. EPRI, Palo Alto, CA: 2015. 3002005349.
2. *NRC letter from J. E. Dyer-CFO to C. B. Larsen-EPRI dated 2/20/2009 (ML090510035)*
3. MRP Letter 2015-040, Report Transmittal: *Materials Reliability Program: Pressurized Water Reactor Internals Inspection and Evaluations Guideline (MRP-227 Revision 1)*, EPRI, Palo Alto, CA, 2015, 3002005349. Ref.: EPRI Project Number 689

The purpose of this letter is to request that Reference 1, the document entitled "Materials Reliability Program: Pressurized Water Reactor Internals Inspection and Evaluation (I&E) Guidelines (MRP-227 Rev.1)", EPRI Palo Alto, CA: 2015. 3002005349, be exempt from NRC review fees in accordance with 10CFR170.11 (a) (1) (iii) (A) (1).

The original version of MRP-227, Rev.0, was previously submitted to NRC for review in 2008 and approved via Safety Evaluation Report (SER) as MRP-227-A in 2011 (ref. NRC letter ML11308A770). The industry's fee-waiver request for MRP-227 Rev.0 was approved by NRC (Reference 2, NRC letter ML090510035). The current rationale for requesting a fee-waiver for MRP-227 Rev.1 remains consistent with that for MRP-227 Rev.0, as detailed below.

MRP-227 Rev.1 has been submitted to the NRC for review by Reference 3. The review requested is for the incremental changes made to MRP-227-A, many of which were requested by NRC, and not a re-review of the entire document. The submittal also indicates that the document is provided as a means of exchanging information for the purpose of supporting generic regulatory improvements related to methodologies for demonstrating pressurized water reactor (PWR) safety-related internals integrity throughout the life of the plant, including the extended period authorized by license renewal in accordance with 10CFR Part 54. In addition,

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many licensees have made commitments as part of power up-rate submittals to incorporate the applicable program elements of an industry reactor vessel internals inspection program.

The guidelines in the MRP-227 series of documents serve as an effective means to address the aging of reactor internals components and meet or exceed NRC guidance provided in the Generic Aging Lessons Learned (GALL) Report (NUREG-1801, Revision 2). The subject I&E guideline is applicable to reactor internal structural components for Babcock & Wilcox (B&W), Combustion Engineering (CE) and Westinghouse designed PWRs.

The NRC staff SER of MRP-227 Rev. 0 had included several conditions and plant-specific applicant-licensee action items for utility owners to address as part of license-specific submittals related to license renewal. Each of these actions required owner-specific assessments and evaluations to be performed repetitively and submittals to be made to the NRC staff for review and approval via utility-specific license renewal SER. The subject revision of MRP-227 was produced to address these items on a fleet-wide generic basis to the maximum extent practical such that owner-specific assessments and submittals to NRC staff for review would be eliminated. The major intent of this revision is to satisfactorily address NRC staff technical concerns related to managing the aging effects of PWR reactor internals and to ensure that continued generic fleet-wide applicability of the I&E guideline is maintained. Given the overall thrust of changes to accommodate NRC staff concerns we believe the staff effort for review of the revision would be limited and small compared to the repetitive efforts of addressing them individually for each licensee.

It remains industry's understanding through numerous meetings with NRC staff that this I&E guideline is an important document for the NRC staff in support of agency review of licensee activities. As noted during these meetings, the industry considers that this is a "living and evolving" guidance document of which this is the most recent version. Industry intends to continue revising the document based on operating experience, improved state of knowledge of aging mechanisms and processes, and utility needs such as extended licenses (SLR). As such, NRC review and acceptance of the MRP-227 Rev.1 document is the most efficient use of industry and NRC resources to support the agency's generic regulatory improvements in an area that is not fully addressed by current NRC regulations.

In conclusion, all PWR utility owners are expected to use (and reference) MRP-227 in developing or updating plant-specific aging management programs for their safety-related reactor internals. MRP-227, Rev. 1 represents a generic standard that addresses operating experience to date and resolves NRC SER issues with the original document. The NRC's one-time review of MRP-227 Rev.1 document should substantially increase the efficiency and reduce the staff effort required for individual plant reviews, thereby enhancing agency regulatory effectiveness.

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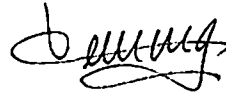
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If you have any questions about this project, please contact Anne Demma at EPRI ([ademma@epri.com](mailto:ademma@epri.com), 650-855-2026) or Kyle Amberge ([kamberge@epri.com](mailto:kamberge@epri.com), 650-855-2039).

Sincerely,



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cc: Joe Holonich, NRC

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