

UNITED STATES NUCLEAR REGULATORY COMMISSION ADVISORY COMMITTEE ON REACTOR SAFEGUARDS WASHINGTON, DC 20555 - 0001

September 28, 2009

Mr. R. W. Borchardt Executive Director for Operations U.S. Nuclear Regulatory Commission Washington, DC 20555-0001

SUBJECT: PLANT-SPECIFIC OPERATING EXPERIENCE FOR LICENSE RENEWAL

APPLICATIONS

Dear Mr. Borchardt:

During our reviews of license renewal applications, we have noted some inconsistencies in the methods and the extent to which applicants have considered plant-specific operating and maintenance experience. This letter summarizes our position on the use of plant-specific operating experience during the license renewal process.

Reviews of plant-specific operating and maintenance records by site personnel are an important input to the plant license renewal process. Critical examination of the plant-specific experience can provide unique insights about aging-related susceptibilities of structures, systems, and components (SSCs) that are within the scope of license renewal. These insights include site-specific conditions, historical trends, and corrective actions that may affect the scope, frequency, implementation, or enhancements of existing or new Aging Management Programs (AMPs).

Regulatory Guide 1.188 endorses Revision 6 of Nuclear Energy Institute guideline NEI 95-10, "Industry Guideline for Implementing the Requirements of 10 CFR Part 54 – The License Renewal Rule." The guidance in NEI 95-10 recommends a review of five to ten years of plant-specific operating and maintenance history to supplement and confirm consistency with broader industry experience. The purpose of this review is to identify where plant-specific experience differs from documented industry experience. These differences could include new aging effects or a lack of observed aging effects. The review should be used to refine the applications of generic aging management requirements and programs.

It is apparent that applicants may not consistently apply this guidance during preparation and submittal of their license renewal applications. For example, in its application, one recent applicant used information in the Electric Power Research Institute (EPRI) report, "Non-Class 1 Mechanical Implementation Guideline and Mechanical Tools, Revision 4," as a surrogate for approximately three years of plant-specific operating experience. Plant-specific operating and maintenance records were reviewed for only two years of the five-year experience base.

The EPRI report summarizes industry experience and generic issues that are related to potentially significant aging effects. However, the report does not contain detailed summaries of the actual operating and maintenance records from each site. Section 4.4 of NEI 95-10 explicitly notes that plant-specific experience reviews are necessary to identify aging effects that are "not identified by the industry guidance documents (such as EPRI tools)."

Insights and recommendations derived from industry operating experience are an important input to aging management. However, that input should supplement, not replace, a critical examination of plant-specific experience. The staff should ensure that applicants consistently examine a minimum of five to ten years of plant-specific operating and maintenance experience during the preparation of license renewal applications.

Sincerely,

/RA/

Mario V. Bonaca Chairman

REFERENCES

- 1. U.S. Nuclear Regulatory Commission, Regulatory Guide 1.188, "Standard Format and Content for Applications to Renew Nuclear Power Plant Operating Licenses," Revision 1, September 2005 (ML051920430)
- 2. Nuclear Energy Institute, "Industry Guideline for Implementing the Requirements of 10 CFR Part 54 The License Renewal Rule," NEI 95-10, Revision 6, June 2005 (ML051860406)
- 3. Electric Power Research Institute, "Non-Class 1 Mechanical Implementation Guideline and Mechanical Tools, Revision 4," Technical Report 1010639, January 2006

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Mario V. Bonaca Chairman

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Letter to R. W. Borchardt, Executive Director for Operations, from Mario V. Bonaca, Chairman, ACRS, dated September 28, 2009

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APPLICATIONS

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