

February 25, 2015

MEMORANDUM TO: Anthony J. Mendiola, Chief
Licensing Processes Branch
Division of Policy and Rulemaking
Office of Nuclear Reactor Regulation

FROM: Joseph J. Holonich, Senior Project Manager /RA/
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SUBJECT: SUMMARY OF JANUARY 21, 2015, MEETING WITH THE ELECTRIC
POWER RESEARCH INSTITUTE ON "TOPICAL REPORT FOR
PRIMARY WATER STRESS CORROSION CRACKING MITIGATION BY
SURFACE STRESS IMPROVEMENT" (MRP-335, REVISION 1)

On January 21, 2015, staff from the U.S. Nuclear Regulatory Commission (NRC) met with representatives from the Electric Power Research Institute (EPRI) and industry. The purpose of the meeting was to discuss the status of MRP-335, Revision 1, "Topical Report for Primary Water Stress Corrosion Cracking Mitigation by Surface Stress Improvement." The meeting presentations and list of attendees can be found in the Agencywide Documents Access and Management System (ADAMS) package for the meeting at Accession No. ML15022A005.

The NRC staff opened the meeting by stating that it was expecting to hear concerns from the industry but would not be making any presentations. Further, the NRC staff said that it recognized there were differences in the current review schedule and the schedule needs of industry. The NRC staff emphasized that it may not be able to reconcile the differences.

Further, the NRC staff mentioned that it was hoping to clearly understand the needs of industry. The NRC staff saw four things that were desired by the industry. These were: 1) industry needed some regulatory certainty about the use of peening presented in MRP-335; 2) once peening was completed at plants, there would be no new requirements or changes to the peening process imposed on completed peening; 3) inspection relief using MRP-335 as a basis would be requested in the future; and 4) items 1) and 2) were needed soon to support planned peening work in the spring 2016.

Industry, in its opening remarks, stated that the items identified by the NRC staff were correct. Further, the industry noted that three utilities were planning for peening work in 2016. Having alignment with the NRC staff on the original review schedule for the safety evaluation (SE) in April 2015 is what industry wanted to achieve as a result of this meeting.

Continuing with its remarks, industry advocated that the NRC staff could issue its SE without the need for independent, confirmatory peening work. The industry members recommended that the NRC staff focus on the end state of what peening accomplished. Its vision was that the review should be performance-based and not include the actual process of peening.

During its presentation, industry stated that peening had been applied in other industries and experience from Japan was very favorable with no negative effects reported. Examples where peening had been used were in military aircraft, space craft, and turbine blades.

Deeper in the presentation, industry provided its view that there was no safety issue associated with peening. The NRC staff indicated that it needed to understand the details of the peening process before it could agree with the statement that there were no adverse effects. In addition, the NRC staff offered that it would need to know what inspections would be done after peening was completed and what the interval for those inspections would be.

The NRC staff further clarified that it needed a basis for the statement about no adverse effects. The industry countered that it believes there is sufficient details to support the statement but that information was not in the meeting presentation. It was agreed a dialogue was needed and industry had to make the case to the NRC staff.

Another point of discussion raised during the presentation was the industry concern about regulatory certainty. The industry stated that it was worried about future NRC actions if it decided to undertake peening with the authority in the Title 10 of the *Code of Federal Regulations* (10 CFR) 50.59. It was also worried that there would be changes in the NRC process that could affect peening work that was already done.

It was emphasized by industry that the application of peening could be done under two regulatory requirements. The regulations at 10 CFR 50.59 provided the frame work that allowed actions to be taken at plants without prior NRC approval. The regulations at 10 CFR Part 50, Appendix B established quality assurance standards. Criterion IX of Appendix B allows for special processes and peening could be considered a special process.

In closing, the NRC staff outlined its view that MRP-335 was in house for review and that the industry wanted to use MRP-335 as a basis for relief from inspections. The NRC staff said that it saw a potential for success with peening and that it believed industry could use 10 CFR 50.55a to get the relief requests.

To assist it in its review, the NRC staff informed industry that it was looking at similar processes to see what was done and what criteria it should use. However, the NRC staff said that it was not in a position to make any regulatory decisions at the meeting. The NRC staff committed to get back to industry with its schedule for completing the review. This schedule would be an agenda for a future meeting.

The only action item from the meeting was the NRC staff providing its review schedule.

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