

Status of Resolution of MRP-227-A Action Item 1

November 19, 2013

Action Item 1 (simplified)



Each applicant or licensee must demonstrate MRP-227-A is applicable to its plant.

Staff Concerns Motivating

AI 1

- Aging mechanism screening and functionality analyses done for “representative plant” .
- Does switch to low-leakage core at 30 yrs ensure fluence values will be representative for all plants, given variation in geometry and core power density?
- Metal temperatures due to gamma heating could also vary based on core design, power uprates

Action Item 1 – Background

- Discussed at November 28, 2012 public meeting, EPRI/Westinghouse agreed to perform additional sensitivity studies to demonstrate “broad applicability” of MRP-227-A guidance given variations in design across W and CE fleets, and power uprates.
- Closed meetings held January 22-23, 2013 and May 22, 2013 to present results
- Staff was generally satisfied with these presentations.
- Technical basis documented in WCAP-17780-P, June 30, 2013

Action Item 1 – Background

- Industry and staff agreed licensees can respond to new RAI's to close issue, addressing:
 - Cold worked components not captured by MRP-227-A screening
 - Atypical fuel management
 - For EPU plants, internal metal temperatures
- EPRI issued guidance/template (MRP-2013-025) for responding on October 14, 2013

Next Steps

- Issue the new RAI's.
- Licensees will respond in accordance with the guidance/template.
- Staff will evaluate RAI response in safety evaluations of plant-specific RVI Inspection Plans.
- Document adequacy of technical basis for Action Item 1 guidance/template in SEs of plant-specific RVI Inspection Plans, rather than as a topical report SE.

(Backup) Action Item 1 - Requirement

“Each applicant/licensee is responsible for assessing its plant’s design and operating history and demonstrating that the approved version of MRP-227 is applicable to its facility. Each applicant/licensee shall refer, in particular, to the assumptions regarding plant design and operating history made in the FMECA and functionality analyses for reactors of their design (i.e., Westinghouse, CE, or B&W) which support MRP-227 and describe the process used for determining plant-specific differences in the design of their RVI components or plant operating conditions, which result in different component inspection categories.”