Overview of Industry Comments

Thomas Eichenberg

EPRI Fuel Reliability Program

Chair, Regulatory Technical Advisory Committee

Sr. Specialist, Reactor Safety Analysis
Tennessee Valley Authority

Public Workshop: 10CFR50.46c Implementation

March 17, 2015 • NRC Headquarters, Rockville MD



Purpose

- Review of Industry Comments
 - NEI Comments Dated August 2014
 - ML14237A149



Rule Concept/Structure

- Industry Endorses
 - Use of "zirconium-based cladding" to avoid exemptions
 - Use of performance-based approach
 - Moving details to Regulatory Guides to simplify future needed changes
- Technical basis for long-term cooling criteria not available to change cooling requirements
- Vendor testing for breakaway oxidation will ensure delivery of acceptable cladding to customers – no role for licensee reporting
- Move Appendix K to a new Regulatory Guide "Conservative ECCS Evaluation Models" similar to RG 1.157



Rule Concept/Structure (continued)

- Need a Regulatory Issue Summary (RIS) to standardize submittals and achieve licensing process efficiency
- Need a Review Standard (RS) to guide NRC review and achieve licensing process efficiency

Change Management and Reporting

- Proposed reporting requirements should be deleted
 - Reporting processes outside 46c are sufficient
 - LOCA does not need special consideration
 - Current reporting is addressed elsewhere
 - If additional reporting is desired
 - Industry could develop through NEI new guidance for LOCA change management and reporting
 - Guidance similar to NEI 96-07 for 10CFR50.59
 - NRC to review and endorse
 - Industry to implement



Alternate Risk-Informed Approach for Debris Evaluation

- Industry endorses the intent of avoiding exemptions
- Inserting into the 50.46c rule broadens the original intent
- Licensees to submit an approach consistent with RG 1.174 and RG 1.200
- NRC to review and approve



Regulatory Analysis Comments

- Under estimated resources required
- Industry estimates that NRC was under by at least one order of magnitude
- Other miscellaneous comments
 - Large cost and small safety benefit
 - Cumulative effects of regulation
 - Need consistency between rule and statement-of-considerations to avoid future interpretation problems
 - Don't cause industry to move away from development of advanced claddings (the real safety improvement)



Implementation

- Remove Table 1 with plant names
- Licensees to submit within 180 days of the effective rule date an implementation plan with a living schedule
 - NRC to review and approve
 - Needed changes can be made without exemptions
- Cladding that has been designed, procured, and fabricated according to current regulations must be accommodated
 - Industry proposes a 60 month grandfathering window

