RIC-2005
Session W-A3

10 CFR 50.69 Final Rule
Industry Perspectives

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Overview

- Background
- Final rule
- Risk categorization concepts
- Pilot activities
- Keys to successful implementation
- Conclusions

Background

- PRA strength: Assess relative importance of plant systems, equipment
- §50.69 is fundamental application of this concept:
  - Use risk insights to determine scope of equipment having special regulatory controls
- Lengthy development process
- Enabled by PRA peer review and consensus standard development

10 CFR 50.69 Chronology

- 1997 – NRC approves STP QA program revision for risk-informed graded QA
- 1998 – NRC issues Reg Guide 1.176 on graded QA
- 1999 – STP requests broader regulatory exemption to allow full implementation of graded QA
- 1999 – SECY-99-356 proposes rulemaking
- 2000 – NEI begins work on categorization guideline
- 2001 – NRC approves STP exemption
- 2003 – Proposed rule issued for comment
- 2004 – Proposed final rule issued
- 2004 – Final rule issued with Commission-directed changes
- 2005 – (Planned) Final regulatory guide, pilot plant submittals

Final Rule

- Issued November 22, 2004
- Major milestone for risk-informed, performance based regulation
  - Focus plant activities and resources consistent with risk
  - Achieve better consistency with risk-informed oversight process
- Provides incentive to:
  - Improve PRA models, meet standards
  - Further integrate risk insights into plant culture

Risk Categorization Concepts

- NEI-00-04 provides categorization guidance for rule
  - 4 years in development
  - Many iterations, meetings with NRC
- Prepublication version submitted to NRC on February 2
- Requested endorsement through Reg Guide 1.201

Risk categorization concepts

- Address power operation and shutdown
- Address internal and external events
- Internal events at power PRA with minimum technical capability requirements
- Conservative bounding methods if PRAs not available for shutdown and external initiators
- Uses risk importance measures, sensitivity studies, defense in depth evaluation, final risk impact study, plant decisionmaking panel
- Performance monitoring and feedback

“RISC-3” SSCs

- Safety related, not risk significant
  - Must still meet design basis functions
  - High level treatment requirements
  - Test and inspection
  - Corrective action
  - Performance monitoring
- EPRI developing treatment guidance for EQ, seismic

Piloting of Rule

- Essentially complete
- STP regulatory exemption was initial proof of concept
  - Successful implementation
- Wolf Creek and Surry are pilot plants for rule
  - Have undertaken initial categorization efforts
  - Will submit applications following Reg Guide 1.201 issuance

Keys to success

- Acceptance of performance based methods in lieu of programmatic controls for low risk SSCs
- Regulatory stability going forward
  - License amendment request considerations
  - Inspection and enforcement
  - Commitments associated with special treatment regulations
  - No need for “trial use” Reg Guide

Conclusion

- Widespread implementation is industry goal
- Workshops and other activities to facilitate implementation will be conducted
- PRA improvements to meet rule will provide foundation for other initiatives and processes