

Current Thoughts on Resolving Low Safety Significant Issues

Office of Nuclear Reactor Regulation

Public Meeting

March 19, 2019

Tim Reed, Division of Operating Reactor Licensing

Don Helton, Division of Risk Assessment

Presentation Purpose

Provide current thoughts on potential process enhancements and encourage feedback from stakeholders



Problem

- In some cases, there is an inappropriate expenditure of resources and attention on low safety significant issues
- While this is the exception, not the rule, it appears to stem, in large measure, from the complexity, uniqueness, and lack of detail in the licensing basis

Nexus of Issues with the Licensing Basis

- The licensing basis (LB), while complex, challenging, and constantly changing, serves its purpose well – but there are exceptions
- Issues arise where the information in the LB is subject to different interpretations
 - e.g., “old” issues that date from the 60’s, 70’s, early 80’s
- When an issue has a clear nexus to the LB it is addressed with the standard approaches (i.e., typically “fix it” or change the LB)
- When it does not have a clear nexus and it is not clearly in the LB then our current view is that we have discretion and flexibility on how to proceed
- One idea to address the “not in” situation: if, based on a complete LB record, the issue does not clearly fall within the LB, then pause and assess safety significance
- What about the scenario when the issue is “in” the LB and it is readily apparent to be low safety significant?

High safety

Not clearly within the existing licensing basis

Evaluate issue to determine regulatory actions with tools such as:

- 50.54(f) or generic communication
- Backfitting
- If generic – screen as a generic issue
- Use LIC-504 and TIA as applicable

Clearly within the existing licensing basis

Address issue with appropriate tools such as:

- Enforcement
- Order
- Consider prompt corrective actions (CAP)

Not within the licensing basis + clearly low safety - EXIT:

- Document decision
- Make public record



Address issue with appropriate tools (i.e., either the licensee comes into compliance or changes the licensing basis):

- Corrective actions (CAP)
- Enforcement discretion
- Change the licensing basis (50.59, LAR, relief, exemptions, etc)
- Assess adequacy of the requirement (i.e., rulemaking)

Low safety

Thoughts on Low Safety Significance Determination

- The good news is that we have lots of ways of determining significance...unfortunately, we have lots of ways of determining significance...
- We should leverage elements of this existing guidance:
 - e.g., PRA-distilled screening questions
 - e.g., Office Instruction LIC-504
 - e.g., Regulatory Guide 1.174
- Some challenges:
 - Assessing safety margin and defense-in-depth upstream of determining oversight vs. backfit standing
 - Having sufficiently characterized the issue to reasonably judge safety significance
 - Handling the nexus between individual plant-specific issues, and emergent issues that apply to multiple plants

Need for Clear and Durable Documentation

- Document the issue and its impacts on SSCs, and human performance
- Document associated LB including if there were different perspectives between the licensee and NRC on the LB
- Document the conclusion: Not clearly in the LB
- Document the basis and conclusion that it is low safety significant
- Conclude no further regulatory action is needed and LB can remain “as is”
- Make the record a public record.

Thank You

