



NUCLEAR ENERGY INSTITUTE

**Biff Bradley**  
DIRECTOR  
RISK ASSESSMENT  
NUCLEAR GENERATION DIVISION

May 2, 2011

Mr. James Isom  
Reactor Inspection Branch (IRIB)  
Office of Nuclear Reactor Regulation  
Mail Stop: OWFN 07C2A  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555-0001

**Subject:** Comments on NRC Draft Inspection Procedure 37060, "10 CFR 50.69 Risk-Informed Categorization and Treatment of Structures, Systems, and Components Inspection"

**Project Number: 689**

The Nuclear Energy Institute (NEI)<sup>1</sup> submits the following comments on the draft inspection procedure for 10 CFR 50.69 "Risk-informed categorization and treatment of structures, systems and components of nuclear power reactors," as posted to the NRC website. We appreciate the opportunity to comment on this draft procedure. While the draft procedure makes a good start on clarifying regulatory expectations regarding this rule, it is in need of some revision to properly reflect the philosophy and approach of the rule. The categorization provisions, in general, are accurately captured by the draft procedure. However, the treatment provisions are in need of further consideration, in the following general areas.

- 1) 10 CFR 50.69 is a risk-informed, performance-based rule. We would note that the draft inspection procedure emphasizes programmatic considerations, primarily relative to the treatment of low safety significant components. As a general comment, we would suggest the procedure be revised to de-emphasize the programmatic considerations for RISC-3 (low safety significant) treatment and to emphasize considerations for RISC-1 and RISC-2 equipment, which is safety-significant. By volume and emphasis, a tremendous amount of this procedure concentrates on RISC-3 considerations, versus

---

<sup>1</sup> NEI is the organization responsible for establishing unified nuclear industry policy on matters affecting the nuclear energy industry, including the regulatory aspects of generic operational and technical issues. NEI's members include all utilities licensed to operate commercial nuclear power plants in the United States, nuclear plant designers, major architect/engineering firms, fuel fabrication facilities, materials licensees, and other organizations and individuals involved in the nuclear energy industry.

those for safety-significant equipment. It should be noted that the Commission made a deliberate decision not to create a Regulatory Guide for RISC-3 treatment under 10 CFR 50.69. In effect, the draft inspection procedure appears to create regulatory guidance for RISC-3 treatment, and in so doing, goes beyond the rule language and includes words such as "must," reflecting "requirements" that do not exist in the rule. Requirements cannot be established through inspection procedures.

- 2) NRC's risk-informed regulatory approach includes the concept that regulatory resources should be applied commensurate with safety significance, and it is not clear this draft procedure follows that approach. Since all potential findings would be evaluated under the significance determination process, the draft procedure's approach of targeting of RISC-3 treatment for inspection would likely lead to insignificant findings that are incongruent with the inspection resources implied in the approach. These resources would be better used evaluating more safety-significant equipment.
- 3) In some cases, the draft inspection guidance goes beyond the rule language in describing treatment expectations. The draft procedure appears to invoke portions of the rule's statements of consideration into the inspection process rather than the rule language itself.
- 4) Rather than a programmatic baseline inspection, as described in the draft procedure, we believe a reactive performance-based inspection approach would best fit this rule. An example of such an approach is the NRC inspection guidance for paragraph (a)(4) of the maintenance rule, which identifies the risk significance of potential implementation issues as a key aspect of the inspection approach.
- 5) A discussion of "reasonable assurance" versus "reasonable confidence" should be considered in the front matter of the procedure, as this tends to be obscured in the body of the discussion, and often there is a connotation that they are equivalent in the expectations provided for treatment.
- 6) More explicit references to Regulatory Guide 1.201 and NEI 00-04 would help clarify this procedure and could replace some of the existing verbiage.

Specific comments are provided as follows:

02.01 c. NEI 00-04 provides an approach for defense in depth in Section 8 that is endorsed by NRC Regulatory Guide 1.201. Consider providing a reference to this process.

Mr. James Isom

May 2, 2011

Page 3

02.01 d. Use of codes and standards are one way, but not the only acceptable way, to implement the treatment provisions. The last sentence should include the word "reasonable" before "confidence" to be consistent with rule language. This should be done throughout the procedure.

02.01 g. There is no rule requirement to "describe" treatment in procedures. Rule requirement is to "evaluate" treatment to ensure it is consistent with categorization assumptions.

02.01 h Starting with the sentence "This means that the licensee or applicant must establish treatment...." the procedure appears to be interpreting the rule. The word "must" reflects requirements language and should only be used if it appears in the rule itself (this should be checked in all cases where it appears in the procedure). There is no rule requirement that establishes whether general commercial practices would or would not be acceptable. This is dependent on the specific SSC and safety function. There are cases where additional treatments will be needed, but this is not universal. The sentence starting "The licensee must note that combining or omitting provisions of standards might result in ineffective implementation...." again is establishing "requirements" that go beyond the rule language.

02.02 a This paragraph establishes a programmatic inspection approach. For categorization, why is sampling of RISC-3 items emphasized? Would the NRC also want to have assurance that RISC-1 and RISC-2 SSCs have been properly categorized? Is the approach of Regions forwarding questions and interpretations to the Inspection Program Branch a standard approach for inspection procedures? If not, why is this included?

02.02 d Defense in depth (DID) does not imply that the exact level of confidence provided by the existing regulations must be maintained for low safety significant SSCs categorized as RISC-3. The use of "reasonable confidence" versus "reasonable assurance" was deliberate in this regard. The term "must not be degraded" is requirements language. It is true that containment function is an overall defense in depth consideration, but the way it is presented here implies that all existing treatments must be maintained for containment function related SSCs. This is an incorrect interpretation of DID. Containment DID is addressed through Section 6.2 of NEI 00-04, as endorsed by NRC Regulatory Guide 1.201.

02.02 i Throughout this long section on RISC-3 (low safety significant) treatment, the inspection procedure appears to go beyond rule language and establish additional expectations. In many cases, "The Agency has noted" is used as a prelude to establishing expectations beyond rule language. Unless the rule language contains requirements to this effect, it is not clear that a declaration of "Agency has noted" is an appropriate basis for inspection and enforcement, nor is it clear what "Agency has noted" formally means, unless a written Commission policy or rule is explicitly referenced. Has the Office of General Counsel agreed with this approach?

Mr. James Isom

May 2, 2011

Page 4

In addition to the above comments, the attachment provides a markup of the draft inspection procedure with suggested clarifying language, as well as specific comments on the text that are consistent with the above noted issues. These comments reflect operating experience with STP's regulatory exemption that parallels 10 CFR 50.69.

We would be happy to discuss these comments further with the NRC staff. If you have any questions, please contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Biff", followed by a long, horizontal, looping flourish that extends to the right.

Biff Bradley

Attachment