



NUCLEAR ENERGY INSTITUTE

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June 7, 2011

Ms. Marissa G. Bailey  
Deputy Director  
Special Projects and Technical Support Directorate  
Division of Fuel Cycle Safety and Safeguards  
Office of Nuclear Material Safety and Safeguards  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555-0001

**Subject:** Industry Comments Relevant to April 11, 2011 Public Meeting on Proposed Staff Approach for Use of Design Features to Meet Part 70 Regulatory Requirements

**Project Number: 689**

Dear Ms. Bailey:

On behalf of the fuel cycle industry, the Nuclear Energy Institute (NEI)<sup>1</sup> appreciates the opportunity to provide comments relevant to our discussions during the above referenced public meeting. We found the staff presentation to be well constructed and informative. We trust your staff will find the general information below and the attached specific comments on NUREG-1520, Revision 1, both informative and useful as we work to identify a mutually acceptable and viable path forward that would recognize the continued and appropriate use of design features within existing requirements for the Integrated Safety Analysis (ISA) to meet 10 CFR 70.

We also appreciate timely issuance of the April 2011 meeting summary. For the record, contrary to the meeting summary, industry continues to support its January 22, 2010 letter to the NRC and does not consider the views expressed in it to be "outdated." Specifically, industry continues to believe that both the NRC and industry would benefit from NRC guidance on this matter. Further, after the April meeting, we provided our June 10, 2010 letter to the newer NRC staff working this topic since

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<sup>1</sup>NEI is the organization responsible for establishing unified nuclear industry policy on matters affecting the nuclear energy industry. 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, nuclear material licensees, and other organizations and individuals involved in the nuclear energy industry.

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they appeared to be unaware of it during the meeting, and it provided useful insight on industry's use of the term "design feature" and other relevant terms and concepts.

As has been acknowledged by the NRC and industry during meetings on design features, certain process feature terms such as "design features," "bounding conditions," and "initial conditions" as well as other terms such as "credible," "highly unlikely," and "unlikely" are not defined in NRC regulations. As a result, licensees defined the terms (through their ISAs and methodologies) to determine that a particular event is not credible while meeting the applicable performance criteria, and the NRC previously approved their use of these terms. Over time, it has become apparent through NRC inspections, facility-initiated reviews, or licensing actions that the lack of a formal definition for certain process feature terms and their use and implementation has resulted in a lack of clear understanding and alignment between the NRC and industry on the use of "design features" versus Items Relied on For Safety (IROFS). While this outcome is undesirable, it is also important to recognize that there is no evidence to suggest that the safe operations of licensed activities has been inadvertently jeopardized or compromised in any way by the facility-specific use of these terms and concepts.

In an attempt to identify a viable path forward on this important issue, the industry suggests specific edits to NUREG-1520, Revision 1. Specifically, three new definitions in the glossary, specific edits to Chapter 3, and specific edits to Appendices B and C are suggested. This mark-up reflects the industry's historical interpretation and current use of key terms that support the continued use of design features at fuel facilities, and we believe it demonstrates compliance with Part 70 requirements. It is also acknowledged that there are key areas where the NRC and industry do not agree, but such discussions have influenced our suggested mark-up. For example, the industry believes that certain design features can be used to designate an event as "highly unlikely" without designating the feature as an IROF. Also, the industry believes that information regarding design features should be included in the facility-specific hazard analysis or process safety information, whereas the NRC believes it should be contained in the licensing basis documentation submitted to the NRC. The industry recently reiterated to the NRC that such an ISA-based approach would cause an unnecessary (from a safety perspective) "re-do" of their comprehensive ISAs where the original ISA methodology and initial ISA summary was approved by the NRC; further, annual ISA summary updates are submitted each January for NRC review and acceptance. Finally, the regulatory basis for the NRC to apply the current Part 70 reporting requirements to design features or impose license conditions to prevent the removal of "sole" design features, as proposed by staff during the April meeting, in the absence of an identified safety issue or rulemaking is not clear and would need to be fully justified from a safety perspective.

As you know, this is an important regulatory matter, and as such, we are ready to discuss our suggested edits to NUREG-1520 in a public meeting to ensure that clear communication has

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occurred. Should you have any questions, please feel free to contact me or Andrew Mauer (202-739-8018; anm@nei.org).

Sincerely,

A handwritten signature in cursive script, appearing to read "Janet R. Schlueter".

Janet R. Schlueter

Attachment

c: Mr. John D. Kinneman, NMSS/FCSS, NRC  
Mr. Larry L. Campbell, NMSS/FCSS/SPTSD, NRC  
Ms. Cinthya I. Román-Cuevas, NMSS/FCSS/SPTSD, NRC