

**ADDITIONAL COMMENT ON 10 CFR PART 61 PRELIMINARY RULE LANGUAGE AND REGULATORY BASIS**

DOCKET ID - NRC-2011-0012  
Roger Seitz – Aiken, SC

I appreciate the opportunity to provide comments on the 10 CFR Part 61 preliminary rule language and regulatory basis. I would appreciate it if the NRC would consider one additional comment that was inadvertently left out of my initial comments.

**§ 61.13 Technical analyses**

§61.13(a): The focus on a Features, Events and Processes (FEPs)-based approach can be perceived as limiting licensees to a single method of achieving a conceptual site model and scenarios to be considered. The FEPs centric view also does not reflect the most recent recommendations from the IAEA Safety Guide on the safety case and safety assessment (SSG-23 IAEA (2012)) and information from the OECD/NEA (2012), more recent international practices as well as current practices for DOE performance assessments and other assessments conducted for cleanup of contaminated areas and disposal of those wastes in the United States (e.g., 10 CFR Part 20 or CERCLA).

The IAEA (2012) and OECD/NEA (2012) describe two classes of approaches: FEPs centric or conceptual model/safety function centric. It is recognized that “bottom-up” FEPs-centric approaches received a lot of attention in the 90s and early 2000s and were being proposed as recommendations in technical reports (e.g., IAEA Improvement of Safety Assessment Methodologies for Near Surface Disposal Facilities approach in 2004). However, in recommendations that have been issued more recently, the IAEA (2012) and OECD/NEA (2012) recognize the value of FEPs in the scenario development process, but deliberately stop short of requiring documentation of the rationale for including or excluding every possible FEP. The NEA report is more direct and suggests that, in practice, recent safety assessments conducted globally have practically included more use of “top-down” approaches using the concept of safety functions to focus on key aspects of the system that can be supplemented using FEPs in an audit role, reflecting a shift in the view of preferred approaches in the last 5-10 years. This change reflects the practical view of focusing on developing and building an understanding of the conceptual model, focusing on the expected roles of barriers as part of the system to drive scenario development rather than starting from a collection of possible FEPs and trying to develop scenarios from the bottom-up. This perspective was also reinforced in presentations at the NRC workshop held in August 2012.

Given that FEPs-focused, bottom-up approaches are practically being replaced in many cases with new approaches (OECD/NEA 2012), it does not seem appropriate to focus specifically on a FEPs-based approach in a rule expected to last for decades. I suggest that the Staff consider taking a more objective perspective that acknowledges the practical use of top-down alternatives internationally, by DOE, by NRC for assessments for Part 20, and by the EPA for assessments under CERCLA. The IAEA, NEA, DOE, EPA, and NRC under Part 20 are supportive of top-down approaches, thus for the rule language to be overly focused on a bottom-up FEPs-based approach appears to disregard those views. I suggest that NRC describes the alternatives that have been more recently recommended such as the “top-down, bottom-up” approach and expectations for Part 20 and CERCLA to include approaches that are being used. The recent recommendations from the NEA and more flexible guidance from the IAEA should also be discussed as part of the basis.

IAEA (2012), The Safety Case and Safety Assessment for the Disposal of Radioactive Waste, IAEA Specific Safety Guide No. SSG-23, International Atomic Energy Agency, Vienna.

OECD/NEA (2012), Methods for Safety Assessment of Geological Disposal Facilities for Radioactive Waste – Outcomes of the MeSA Initiative, OECD Nuclear Energy Agency, Paris.

**From:** [Roger Jolene](#)  
**To:** [RulemakingComments Resource](#)  
**Subject:** Comments for Docket ID NRC-2011-0012  
**Date:** Thursday, January 10, 2013 7:17:06 AM  
**Attachments:** [Seitz additional comment.pdf](#)

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Dear Sir/Madame,

I ask that you consider one additional comment on the subject docket. I understand that given the holidays during the 30 day comment period extensions to the comment period have been accepted in other cases. I would appreciate the willingness to consider this comment, which I believe will improve the technical basis for the new rule language.

Thank you for your consideration.

Sincerely,  
Roger Seitz