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April 9, 2021

Mr. Micheal R. Smith  
Health Physicist  
Office of Nuclear Reactor Regulation  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555-0001

**Subject:** Industry Comments on Proposed Revisions to Inspection Manual Chapter 0609 Appendix D, "Public Radiation Safety Significance Determination Process," and Inspection Manual Chapter 0308 Attachment 3, Appendix D, "Technical Basis for Public Radiation Safety Significance Determination Process"

**Project Number: 689**

Dear Mr. Smith:

On behalf of the Nuclear Energy Institute's (NEI)<sup>1</sup> members, we provide the following comments for the U.S. Nuclear Regulatory Commission's (NRC) consideration, regarding the proposed revisions to Inspection Manual Chapter (IMC) 0609 Appendix D, "Public Radiation Safety Significance Determination Process," and IMC 0308 Attachment 3, Appendix D, "Technical Basis for Public Radiation Safety Significance Determination Process." We appreciate the related public meeting that was held on February 24 and look forward to discussing our comments at the upcoming public meeting on April 21.

We support revisions to the aforementioned IMCs that strive to achieve a more risk-informed, performance-based Significance Determination Process (SDP). We appreciated the previous opportunities afforded by the NRC to provide input into the radiation safety SDPs<sup>2</sup>. However, in the interest of full transparency and predictability of implementation, we have attached some additional comments that aim to add clarity and specificity to the proposed changes. Specifically, these comments do not change the intent of the draft documents, as written. However, the comments do provide additional context, such that implementation of the public radiation safety SDP is consistent across all NRC Regions, and for all stakeholders.

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

<sup>2</sup> [ML18264A305](#)

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We look forward to future discussions on this matter. Please do not hesitate to reach out to me with any questions on the content of this letter or the attached comments.

Sincerely,

A handwritten signature in black ink, appearing to read "Martin J. Phalen". The signature is fluid and cursive, with a long horizontal stroke at the end.

Martin J. Phalen

Attachment

c: Kevin Hsueh, Branch Chief NRR/DRA/ARCP  
Steven Garry, NRR/DRA/ARCP

## Attachment 1: Summary of Industry Comments

In order to provide full transparency and predictability in the SDP, we provide the following feedback in the interest of providing more specificity and definition in the use of qualitative terms.

Location – NRC Draft	Proposed Text in NRC Draft	Industry Comment
IMC 0609 App D General Industry Comment	RADIOACTIVE EFFLUENT RELEASE PROGRAM	<b>Comment:</b> The Effluent Release Program section is silent on Solid Radwaste Effluent Reporting.  If this is the intent of the NRC, recommend that the IMC explicitly state that all findings on Solid Radwaste Effluent reporting would be Green.
IMC 0609 App D, Bottom of p. 12	Typos re: Significant deficiencies in physical protection of Category 2 material	First bullet: "Failures establish and maintain..." <b>Recommendation:</b> "Failure to establish and maintain..." Last paragraph: "Failure establish and maintain..." <b>Recommendation:</b> "Failure to establish and maintain..."
IMC 0609 App D Section 02.01, Page 2	If the licensee has a substantial failure to implement the radioactive effluent release program, then the finding would be WHITE. <i>Failure to identify a release event</i> , or assess the dose consequences and the impact to the environment in a timely manner, consistent with ODCM requirements, could be considered a substantial failure to implement the radioactive effluent release program.	<b>Recommendation:</b> Insert the word "radiological" as shown below  "Failure to identify a <b>radiological</b> release event ..."
IMC 0609 App D Section 02.01, Page 2	Examples of a substantial failure to implement the radioactive effluent release program are:  a) <i>Significant deficiency</i> in implementing the	<b>Comment:</b> Need more specificity in using qualitative words. Specifically, "significant" and "gross inability" are subjective and subject to broad inspector interpretation.  <b>Recommendation:</b> 1) Bring over the corresponding or summary wording from the basis document IMC 0308 Attachment 3

	<p>effluent release program as defined in the plant's Technical Specifications, resulting in the <i>gross inability or gross inaccuracy</i> in characterizing an effluent release.</p> <p>b) <i>Significant deficiency</i> in evaluating an effluent release (either planned or unplanned) where the resulting dose has been <i>grossly underestimated</i>.</p> <p>c) <i>Significant deficiency</i> in calibrating effluent monitors used to assess effluent releases, resulting in a <i>gross inability or gross inaccuracy</i> in characterizing an effluent release.</p>	<p>Appendix D on page 3; or at a minimum, cross-reference the reader to the basis document.</p>
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