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April 7, 2015

Ms. Cindy Bladey  
Office of Administration  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555-0001

**Subject:** Draft Interim Staff Guidance on Natural Phenomena Hazards at Fuel Cycle Facilities [80FR9755; NRC Docket 2015-0035]

**Project Number: 689**

Dear Ms. Bladey:

On behalf of the Nuclear Energy Institute's (NEI)<sup>1</sup> fuel cycle facility members, we submit the following comments in response to the subject Federal Register notice on the Draft Interim Staff Guidance (ISG) on Natural Phenomena Hazards at Fuel Cycle Facilities. This ISG is important to industry's response to the Generic Letter (GL) on this same subject issued in draft last August for stakeholder comment<sup>2</sup> and discussed during a March 4, 2015 NRC public meeting in Atlanta.

We appreciate the discussions with NRC management and staff during the March meeting on the Draft ISG and Draft GL, which helped to inform our comments on both documents. While the official comment period on the Draft GL is closed, we offer three comments based on your staff's willingness to consider them. While we continue to believe a GL is unnecessary, if the NRC proceeds to issue one, we encourage NRC to issue the GL and ISG concurrently to help inform industry's response to the GL. Comments are offered below on the Draft ISG and Draft GL, and specific edits to the Draft ISG are attached.

<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 all 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> JRSchlueter, NEI letter to CBladey, NRC dated November 6, 2014 regarding industry comments on Draft Generic Letter on Natural Phenomena Hazards at Fuel Cycle Facilities issued August 8, 2014.

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### **General Comments**

Based on the recent public meeting, and review of the Draft ISG and Draft GL, industry understands items 1-5 below to be true. If our understanding is incorrect or incomplete, please promptly inform industry through NEI to help coordinate dissemination of further clarification on these matters because these items undergird industry's understanding of the justification and burden for complying with the GL.

1. NRC intends to review each licensee's response to the final GL and determine, on a case-by-case basis: 1) whether to conduct additional site audits; and 2) how and whether to close the open Unresolved Items issued in response to the inspections conducted under NRC's Temporary Instruction 2600/015.
2. The majority of, if not all fuel cycle facilities, do not believe a response to Draft GL item (2) will be needed. Specifically, licensees have the independent authority, as well as responsibility, to routinely identify and designate Items Relied on for Safety that do not require NRC pre-approval and do not negatively impact the licensing basis or regulatory compliance. Thus, a response to GL item (2) is required only if additional actions are needed to validate assumptions used by the licensee in their NPH assessments.
3. The ISG supplements NUREG-1520 and does not supersede it. As a result, the ISG would be incorporated into NUREG-1520 during a future revision. Also, we understand that the scope of the ISG is broader than the GL although it could be used to inform licensees' responses to the final GL.
4. 10 CFR 70.64(a) and (a)(2) do not require retrofits to existing facilities when historical data is used to analyze NPH events. Further, consistent with 10 CFR Part 70, Page 3-D-1 of NUREG-1520, Revision 1 regarding the use of historical data states: "The baseline design criteria must be applied to the design of new facilities and new processes at existing facilities but does not require retrofits to existing facilities." Therefore, based on this NRC staff position, the use of historical data to analyze NPH events does not necessarily require retrofits.
5. In responding to the GL, licensees may simply reference information, documents and data already on the NRC docket that supports its response.

In addition, industry offers the following two suggestions for the final ISG:

6. Page 3-D-4 of NUREG-1520, Revision 1 lists a 500-year flood as acceptable to meet the definition of "unlikely" even if the licensee defines unlikely as less than  $10E-3$ . NRC should provide a similar clear statement on seismic events specifying what constitutes an acceptable definition of "unlikely" and "highly unlikely" in the ISG.
7. NRC should add two items to the final ISG: 1) relevant NPH examples, similar to those discussed during the March 2015 public meeting; and 2) an NPH decision flow chart for clarity and completeness. With regard to item 1, industry has found the severity level examples provided in Inspection Manual Chapter 2606, Enclosure 1 helpful and believes incorporating relevant examples into the final ISG would provide additional clarity for current and future licensees as well as NRC

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personnel. Regarding item 2 above, industry provided its flow chart for the treatment of NPH in the ISA via an NEI letter,<sup>3</sup> which should be included in the final ISG.

**Specific Comments on the Draft Generic Letter (issued August 2014 for comment)**

Based on our discussions during the March public meeting, we offer three comments on the Draft GL for your consideration before finalizing it.

1. Page 7, Item (1)c. and Item (2). Use of the term "change" in the Draft GL should be clarified with regard to NRC's intent and be further addressed in the ISG. See related comment 2 above. Also, NRC should clarify that the threshold for responding to GL item (2) is very high, i.e., a response to GL item (2) is required only if additional actions are needed to validate assumptions used by the licensee in their NPH assessments.
2. Page 8, Item (2)b. The terms "safety margin" and "inherent conservatism in the design" should be clarified in the ISG or deleted since they are not routinely used in the NRC oversight of fuel cycle facilities or by fuel facilities. If retained, clarification of these terms would help ensure complete licensee responses to the GL.
3. Page 6, immediately preceding "Requested Actions." A reference to the final ISG should be added under "Applicable Regulatory Requirements" for completeness since it is a stand-alone reference that provides relevant guidance for addressing the GL and supplements NUREG-1520's guidance for the treatment of NPH in the ISA.

We trust the staff will find these comments useful in finalizing the ISG. Again, while a GL is unnecessary, if the NRC proceeds to issue one, we look forward to its issuance coincident with issuance of the final ISG. I am available to answer any questions on these comments.

Sincerely,



Janet R. Schlueter

Attachment: As stated

cc: Ms. Marissa Bailey, NMSS/FCSE, NRC  
Mr. Jonathan Marcano-Lozada, NMSS/FCSE/PORB, NRC  
Mr. Mark Lesser, DFFI/Region II, NRC  
Ms. Annette Vietti-Cook, SECY, NRC

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<sup>3</sup> JSchlueter, NEI letter to JKinneman, NRC dated October 12, 2012 regarding treatment of NPH in the ISA.

**Industry Comments on Draft ISG on Natural Phenomena Hazards at Fuel Cycle Facilities**

<b>ID</b>	<b>Section, Page, and Line #</b>	<b>Comment</b>	<b>Proposed Resolution</b>
1	Page 2, sent 4-5, 6	While industry agrees with the statements as presented, there can be a common approach or method used by the ISA teams with phenomena criteria and assumptions unique for NPH.	ISG should explicitly recognize that ISA teams might use criteria and assumptions unique to NPH.
2	Page 2, para 2, lines 7-8	NRC uses the phrase "standard practice associated with each natural phenomena event." The term "standard practice" is vague and should be clarified or deleted.	Perhaps NRC is referring to USGS standards or some other universally accepted approach in use today. NRC should either clarify this term or delete it to avoid confusion.
3	Page 2, para 3, last line	Phrase: "components may fail". A component failure does not necessarily have to be prevented or mitigated. The intermediate or high consequence event that might result from that component failure (if any) needs to be prevented or mitigated to meet acceptable performance criteria.	ISG should explicitly recognize that a component failure does not necessarily have to be prevented or mitigated.
4	Page 3, first full para, sent 3	This sentence is incomplete.	Add "or highly unlikely" after the words "not credible."
5	Page 3, para 2, sent 1	This sentence is incomplete.	Add "and result in not meeting performance criteria" to the end of the sentence.
6	Page 3, para 2, sent 2	This sentence is incomplete.	After "current condition of the facility" add "or current ISA site status, e.g., new seismic studies."
7	Page 4, item 2	Licensees may designate an SSC as an IROFS and still not need to respond to item (2) of the GL.	NRC should clarify this issue. See industry general comment 2 in the cover letter.

**ATTACHMENT 1**

8	Page 4, item 5	The possible multiple failures that result in a consequence not meeting the performance criteria in the rule need to be addressed. For instance, if total loss of power to the site is postulated within a likely PHA event but no power is needed to meet performance criteria then it is not an issue even though there may have been multiple "failures" of SSC's	NRC should clarify that the common cause analysis is only needed if the "failures" result in not meeting the performance criteria.
9	Page 5, para 3	The terms "primary" and "secondary" systems, structures and components are not terms used routinely by the fuel facilities or used historically by NRC for fuel facilities.	Industry suggests that these qualifiers be removed from the ISG to avoid confusion.
10	Page 5, para 3, sent 3	The phrase, "secondary SSCs or items that indirectly contribute to seismic performance" is unclear and its use unprecedented.	NRC should clarify its expectations with regard to this phrase or delete it avoid confusion.
11	P 6, last sentence	"...earthquake that is highly unlikely..." is confusing at best and possibly incorrect.	"Highly unlikely" should be changed to "unlikely"; otherwise, from a 70.61 perspective, a breach in the containment system is not relevant.
12	Page 7, para 3, sent 1	What about radiological and chemical safety and assessments?	NRC should clarify whether radiological and chemical safety is intended to be included in this effort? If so, they should be explicitly included.