

December 3, 2012

Mr. Joseph E. Pollock, Executive Director  
Strategic Programs  
Nuclear Energy Institute  
1776 I St NW, Suite 400  
Washington, DC 20006-3708

SUBJECT: TRIGGER CONDITIONS FOR PERFORMING AN INTEGRATED ASSESSMENT  
AND DUE DATE FOR RESPONSE

Dear Mr. Pollock:

On March 12, 2012, the U.S. Nuclear Regulatory Commission, pursuant to Title 10 of the *Code of Federal Regulations*, Section 50.54(f), issued an information request<sup>1</sup> to all power reactor licensees and holders of construction permits in active or deferred status. The information request was issued in the course of implementing the lessons learned from the accident at the Fukushima Dai-ichi nuclear facility. Enclosure 2 to the information request asked licensees to perform a reanalysis of the flooding hazard for their site and, if the reevaluated flood was not bounded by the current design basis, perform an integrated assessment of the plant's response to the reanalyzed hazard.

On behalf of the NRC, I am responding to a question that was raised by your staff during a public meeting on August 28, 2012,<sup>2</sup> regarding the trigger for performing an integrated assessment. Specifically, your staff indicated that it was unclear whether flood height was the only factor for comparison, or if other factors needed to be considered (e.g., hydrodynamic or debris loading). Subsequently, at a public meeting on September 25, 2012,<sup>3</sup> the NRC staff presented a draft flowchart that clarified the conditions for which performance of an integrated assessment (or portions thereof) would be necessary.

In the discussions, a number of potential scenarios were discussed that may only necessitate a limited evaluation that would be submitted with the hazard reevaluation. The following is a listing of the possible outcomes and associated acceptable responses. It should be noted that, although only licensees in scenario 4 are required to perform an integrated assessment, licensees in scenarios 1, 2, and 3 may elect to perform an integrated assessment, to be submitted 2 years after submitting the reevaluated hazard report.

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<sup>1</sup>The information request is available in the Agencywide Documents Access and Management System (ADAMS) under accession No. ML12053A340.

<sup>2</sup>The meeting summary for the August 28, 2012, meeting is available in the ADAMS under Accession No. ML12269A274.

<sup>3</sup>The meeting summary for the September 25, 2012, meeting is available in ADAMS under Accession No. ML12276A014.

**Scenario 1 - Reevaluated Hazard Bounded by Design Basis**

If the reevaluated flood hazard (i.e., flood height and associated effects<sup>4</sup>) is completely bounded by the current design basis hazard, an integrated assessment is not necessary.

**Scenario 2 - Only Local Intense Precipitation**

If local intense precipitation is the only portion of the reevaluated hazard that is not bounded by the current design basis, the licensee can limit the evaluation to only the site drainage. This evaluation should be performed using Section A.1.1.6 of Appendix A to the integrated assessment interim staff guidance (ISG)<sup>5</sup> and the application of guidance contained in NUREG-0800, "Standard Review Plan for the Review of Safety Analysis Reports for Nuclear Power Plants: LWR [light-water reactor] Edition." The results of this evaluation should be submitted with the hazard report.

**Scenario 3 - All Permanent and Passive Flood Protection**

If all flood protection is permanently installed and passive, as defined in the integrated assessment ISG, a licensee may show that the existing protection is reliable and has margin under the reevaluated hazard. This evaluation should be performed using Section 6 of the integrated assessment ISG, including appropriate considerations described in Appendix A to the integrated assessment ISG and present-day codes and standards. The results of this evaluation should be submitted with the hazard report. If the results of the evaluation do not show that the flood protection is reliable and has margin, a full integrated assessment is necessary, and should be submitted within 2 years of submitting the hazard report.

**Scenario 4 - Integrated Assessment Required**

If none of the above scenarios are applicable, the licensee would need to perform a full integrated assessment. Results should be submitted in accordance with the schedule detailed in the information request.

Enclosed with this letter is a flow chart that provides a visual representation of the aforementioned scenarios.

Additionally, to avoid confusion over the due date for providing an approach for developing an integrated assessment report (Required Response No. 1), the NRC considers issuance of the ISG to be November 30, 2012, which is the date it was made publically available in final form. Therefore, each licensee must submit an approach by January 29, 2013.

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<sup>4</sup> The phrase flood height and associated effects is defined in the integrated assessment ISG as the maximum Stillwater surface elevation plus the following factors; wind waves and run-up effects; hydrodynamic loading, including debris; effects caused by sediment deposition and erosion; concurrent site conditions, including adverse weather conditions; groundwater ingress; and other pertinent factors.

<sup>5</sup> The Integrated Assessment ISG is available under ADAMS Accession No. ML12311A214.

J. Pollock

- 3 -

If you or your staff have additional questions, please contact my office or Mr. G. Edward Miller, of my staff, at 301-415-2481 or [ed.miller@nrc.gov](mailto:ed.miller@nrc.gov).

Sincerely,

*/RA/*

David L. Skeen, Director  
Japan Lessons-Learned Project Directorate  
Office of Nuclear Reactor Regulation

Enclosure:  
As stated

cc: E. Leeds, NRR  
G. Tracy, NRO  
G. Holahan, NRO  
R. Taylor, NRR

J. Pollock

- 3 -

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