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April 5, 2017

Mr. William M. Dean  
Director, Office of Nuclear Reactor Regulation  
Office of Nuclear Reactor Regulation  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555-0001

**Subject:** Industry Recommended Screening Criteria for NRC Phase 2 Close-Out for Flooding Integrated Assessments

**Project Number: 689**

Dear Mr. Dean:

On behalf of the nuclear industry, NEI is providing this letter with a recommendation to establish a screening threshold for the implementation of the staff guidance for "Regulatory Decisionmaking for Reevaluated Flooding and Seismic Hazards for Operating Nuclear Power Plants<sup>1</sup>" (hereafter referred to as Phase 2 guidance) in support of the NRC's close out of Near Term Task Force's (NTTF) Recommendation 2.1 for flooding. The industry requests that NRC close-out NTTF 2.1 for flooding for sites that meet the criteria described below with the acceptance of their integrated assessments.

In the Staff Requirements Memorandum to COMSECY-14-0037<sup>2</sup>, the Commission directed "...that the integrated assessments be focused on those plants where there is the greatest opportunity for additional safety enhancements" and that there be flexibility in the Phase 2 guidance that allows "the opportunity for licensees to demonstrate that vulnerabilities identified may be less risk significant when more realistic assumptions are applied in the analyses." The Commission also directed the staff to "take into account the fact that the licensees are protecting mitigating strategies equipment from the reevaluated flood hazard..."

In response to these instructions the industry developed NEI 16-05, "External Flooding Assessment Guidelines." It is expected the majority of sites with reevaluated flooding hazards in excess of their design

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<sup>1</sup> ML16237A114

<sup>2</sup> ML15089A236

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basis flood level will perform a focused evaluation and demonstrate that they have effective protection for the new hazards. Sites that perform a focused evaluation will not require additional staff evaluation to determine the need for additional regulatory action. The remaining sites intend to perform an integrated assessment.

The NRC developed Phase 2 guidance, in part, to consider the results from sites that have performed a flooding integrated assessment to determine the need for further regulatory action. The guidance directs that these sites be put into one of three groups prior to presenting recommendations to a Senior Management Review Panel. The purpose of the panel is to reach a screening decision for each site. The Phase 2 guidance identifies Group 1 sites as having "demonstrated (1) effective protection for severe flood hazards, and (2) that consequential flooding is expected to occur only for hazards with a sufficiently small mean annual frequency of exceedance."

As a part of developing the integrated assessments, plants are given the option of considering the likelihood of flooding events. Initial evaluation results indicate most can demonstrate effective protection of key safety functions without the need to employ mitigating strategies for higher likelihood flooding scenarios (i.e., more frequent than  $1E-4$ /year floods). In situations where the likelihood of floods that result in the need to rely on mitigating strategies is determined to be very low (i.e., less than  $1E-4$ /yr), sites will have demonstrated feasible mitigation through their mitigating strategies assessments. Sites that confirm mitigating strategies remain feasible for the reevaluated flood hazard, and demonstrate effective protection of key safety functions for higher likelihood flooding scenarios, will have appropriately addressed plant vulnerabilities and should be placed in the Group 1 category.

NEI recommends, in consideration of the Commission direction in the Staff Requirements Memorandum to COMSECY-14-0037, that the sites that meet the screening threshold noted in the paragraph above be categorized as Group 1 and that Senior Management Review Panel close-out NTTF 2.1 for flooding with the acceptance of the integrated assessments of those sites. This approach allows a more efficient use of NRC and industry resources by limiting the full Phase 2 decision-making process to only those sites with the greatest potential need for additional safety enhancements.

If there are any questions on this matter, please do not hesitate to contact me.

Sincerely,



Pamela B. Cowan

c: Ms. Jane Marshall, JLD, NRC  
Mr. Mohammed Shams, JLD, NRC