NUCLEAR ENERGY INSTITUTE

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Mr. Christopher G. Miller
Deputy Director for Emergency Preparedness
Division of Preparedness and Response
Office of Nuclear Security and Incident Response
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

**SUBJECT:** NEI White Paper — "Range of Protective Actions for Nuclear Power Plant Incidents" Revision 1, October 2007, Submittal and Request for Endorsement

**Project Number: 689**

Dear Mr. Miller:

On June 6, 2005, the NRC Regulatory Issue Summary 2005-08 endorsed the Nuclear Energy Institute (NEI) guidance "Range of Protective Actions for Nuclear Power Plant Incidents."

The post-9/11 risk environment contains threat-related risks not specifically considered in this paper. The industry has responded to this significant change to the threat environment by:

- Revising threat/security-based emergency action levels
- Development of strategies to address ground and air attacks and attacks that result in significant destruction of plant components, infrastructure and environs
- Significant modification of the drill program to improve the readiness of onsite and offsite response entities

The ultimate result of the emergency planning process is providing protective actions to the public. The protective action scheme detailed in the first revision of this paper (Rev 0) was based on the concept of dose avoidance as described in EPA400 Appendix C, which provides a comparison of the risk of evacuation against the health effects of radiation dose. The assumptions utilized in assessing the risk of evacuation referenced in EPA400 were not considerate of those risks that may be present in a threat-based event at a nuclear power plant, as is currently envisioned.

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Response to such a scenario using the current protective action scheme may be counter to one of the four principles that guide the EPA 400-based protective action concepts: namely, principle four which states that "Regardless of the above principles, the risk to health from a protective action should not itself exceed the risk to health from dose that would be avoided."

A reasonable consideration in a threat-based event at a nuclear power plant would be to allow any protective actions decisions developed to undergo an assessment of potential threats against an evacuating public by offsite agencies.

A supplement to the current protective action scheme detailed in the revision to this paper addresses this issue, in which the protective actions suggested by the licensee are not likely to be accepted by offsite officials.

Once the staff has had an opportunity to review the industry's approach and recommendations, we suggest that RIS 2005-08 be revised to include the recommendations in "Range of Protective Actions for Nuclear Power Plant Incidents" Revision 1, October 2007.

If you have any questions regarding this submittal or request a meeting, please contact me at (202) 739-8110 or by e-mail (apn@nei.org).

Sincerely,

Alan Nelson

Enclosure

c: NRC Document Control Desk