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June 10, 2019

Mr. Michael Layton
Director, NMSS
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

Subject: NEI White Paper on "Defining Used Fuel Performance Margins" – Review and Schedule

Dear Mr. Layton:

The Nuclear Energy Institute (NEI)¹ will be submitting a white paper, "Defining Used Fuel Performance Margins" for NRC staff review. This paper will provide a roadmap for utilizing the extensive base of information that has been acquired as the used fuel dry storage and transportation industry has matured to develop an improved understanding of used fuel performance margins. The roadmap will build on the strong record of demonstrated performance that this industry sector has achieved over the past 30 years, in combination with emerging research and analytical results, to provide the means to identify the existing performance margins between real conditions, modeling predictions, established criteria and actual safety limits. It is our intention to subsequently engage NRC on opportunities to apply this information to better risk-inform the dry storage and transportation regulatory framework.

The white paper will focus on source term, thermal, radiological, and criticality analyses along with risk insights and potential applications. It is expected that it will inform opportunities to replace conservative regulatory inputs and guidance, that were established at a time when less information was available early in the history of the current fleet of dry storage and transportation systems with risk informed criteria and limits that reflect actual risk based on data.

We anticipate submittal by August 31, 2019 and would be interested in presenting it to NRC in a public meeting shortly after that. We would then like to receive NRC feedback, by the end of 2019, on whether or not the process outlined in the proposed roadmap will be sufficient to inform meaningful improvements in NRC's regulatory framework. We will then consider NRC's feedback in defining detailed next steps for 2020

¹ The Nuclear Energy Institute (NEI) is responsible for establishing unified policy on behalf of its members relating to 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 and engineering firms, fuel cycle facilities, nuclear materials licensees, and other organizations involved in the nuclear energy industry.

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and beyond. I would appreciate your reply by no later than July 12 addressing staff's ability to participate in this exchange on the schedule requested.

Please contact me if you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read "Rodney McCullum", written in a cursive style.

Rodney McCullum

c: John McKirgan, NMSS/DSFM/SFLB