

May 19, 2017

Dr. Mirela Gavrilas
Director, Division of Safety Systems
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission

Subject: Regulatory Path for Introduction of Lead Test Assemblies¹ in Commercial Nuclear Reactors

Project Number: 689

Dear Dr. Gavrilas:

On behalf of the nuclear energy industry, the Nuclear Energy Institute (NEI)² wishes to thank the U.S. Nuclear Regulatory Commission (NRC) for providing clarification on the existing regulatory provisions for the introduction of lead test assemblies (LTAs) into commercial nuclear reactors during the Accident Tolerant Fuel (ATF) panel at the 2017 Regulatory Information Conference. The presentation materials and discussions led by Mr. Paul Clifford were informative and supportive of the industry's preparation for the introduction of LTAs of ATF designs in the near future. Establishing clarity and regulatory certainty is important to avoid unnecessary expenditure of NRC and industry resources.

The purpose of this letter is to request confirmation of the following NRC positions expressed during Mr. Clifford's presentation to assure transparency, regulatory certainty and predictability:

- Certain 10 CFR Part 50 licenses contain Technical Specifications allowing for the irradiation of a limited number of LTAs in non-limiting core regions.
 - The number of LTAs may be determined by the licensee based on engineering judgement, and on codes and methods that have not been submitted to the NRC for review and approval.
 - The core region for locating the LTAs may be determined by the licensee based on engineering judgement, and on codes and methods that have not been submitted to the NRC for review and approval.

¹ In the context of this letter, the nomenclature "lead test assembly" is intended to encompass both lead test assemblies and lead test rods.

² 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.

Dr. Mirela Gavrilas

May 19, 2017

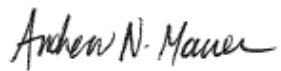
Page 2

- An exemption to 10 CFR Part 50.46 (or 10 CFR Part 50.46c, if finalized) is not required for LTAs irradiated under these Technical Specification provisions.

We request a response from NRC confirming these key regulatory positions by June 16th, 2017 to support the industry's plans for the introduction of LTAs in commercial operating plants in spring 2018.

Please contact me or Kristopher Cummings (kwc@nei.org) if you have any questions regarding this letter.

Sincerely,

A handwritten signature in black ink that reads "Andrew N. Mauer". The signature is written in a cursive, slightly slanted style.

Andrew Mauer

c: Ms. Shana Helton, NRR/DSS, NRC
Mr. Paul Clifford, NRR/DSS, NRC
Mr. Brian Benney, NRR/DPR/PLPB, NRC