



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

November 10, 2021

Andrew Holland  
Chief Executive Officer  
Fusion Industry Association  
800 Maine Avenue, SW  
Suite 223  
Washington, DC 20024

Dear Mr. Holland:

On behalf of the U.S. Nuclear Regulatory Commission (NRC), I am responding to your letter dated October 4, 2021,<sup>1</sup> requesting a 6-month extension for the NRC staff to further engage with public stakeholders before preparing an options paper to present to the Commission on the framework for fusion regulation.

Consistent with Section 103(a)(4) of the Nuclear Energy Innovation and Modernization Act (NEIMA),<sup>2</sup> the Commission directed the NRC staff to initiate a rulemaking to establish a technology-inclusive regulatory framework for optional use by applicants for new commercial advanced reactor licenses by October 2024.<sup>3</sup> The Commission also directed the NRC staff to develop options on the appropriate treatment of fusion technologies within the NRC's regulatory structure for Commission consideration.

In its response<sup>4</sup> to the Commission's direction, the NRC staff provided its plan for developing options for the regulation of fusion energy systems, including building on feedback from recent interactions with stakeholders. The staff will send these options to the Commission in a vote paper to receive early Commission direction for regulating fusion technologies. To date, the NRC staff has held six public meetings, briefed the Advisory Committee on Reactor Safeguards, coordinated with the Department of Energy, and presented at the 2021 International Atomic Energy Agency Consultancy Meeting on Fusion Regulation. The NRC staff will continue to engage with stakeholders, including the Fusion Industry Association to solicit feedback on regulatory topics applicable to fusion energy during and after the development of the options paper to the Commission.

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<sup>1</sup> Available in the Agencywide Documents Access and Management System (ADAMS) at Accession No. ML21278A712.

<sup>2</sup> Public Law 115-439.

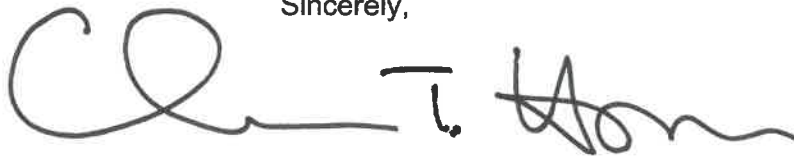
<sup>3</sup> See Staff Requirements Memorandum (SRM)-SECY-20-0032, "Staff Requirements—SECY-20-0032—Rulemaking Plan on 'Risk-Informed, Technology-Inclusive Regulatory Framework for Advanced Reactors (RIN-3150-AK31; NRC-2019-0062)," dated October 2, 2020 (ADAMS Accession No. ML20276A293).

<sup>4</sup> See "Response to Staff Requirements—SECY-20-0032—Rulemaking Plan on 'Risk-Informed, Technology-Inclusive Regulatory Framework for Advanced Reactors (RIN-3150-AK31; NRC-2019-0062)," dated November 2, 2020 (ADAMS Accession No. ML20288A251).

As part of any rulemaking, the NRC is committed to openness in gathering stakeholder input to inform our regulatory decisions. The NRC staff's work on developing a framework for fusion regulation is separate from the staff's preparation of the draft proposed rulemaking package for the technology-inclusive regulatory framework. Should the Commission direct the NRC staff to develop a rulemaking to address fusion technologies, the schedule could extend beyond 2024, but the rulemaking would be completed before 2027 to comply with NEIMA.

Thank you for your continued interest in this topic. If you have any questions or need additional information, please contact John Segala, Chief of the Advanced Reactors Policy Branch, at 301-415-1992 or by e-mail to [John.Segala@nrc.gov](mailto:John.Segala@nrc.gov).

Sincerely,

A handwritten signature in black ink, appearing to read "C. T. Hanson". The signature is fluid and cursive, with a large initial "C" and a distinct "T" and "H".

Christopher T. Hanson