



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

July 10, 2025

The Honorable Shelley Moore Capito
Chairman, Committee on Environment
and Public Works
United States Senate
Washington, DC 20510

Dear Chairman Capito:

On behalf of the U.S. Nuclear Regulatory Commission (NRC), I am submitting the NRC's "Study on Risk-Informed, Performance-Based, Design-Specific Regulatory Frameworks to Support Licensing of Mass-Manufactured Fusion Machines" as directed by the Accelerating Deployment of Versatile, Advanced Nuclear for Clean Energy Act of 2024 (ADVANCE Act), Section 205(c)(2). The enclosed report describes the results of the NRC's study on risk-informed, performance-based, design-specific regulatory frameworks and identifies related concepts that the NRC will consider leveraging for the licensing of mass-manufactured fusion machines. Per the ADVANCE Act, the NRC staff solicited input from a diverse range of stakeholders and will stay engaged as fusion technology evolves. The NRC will also continue to identify potential improvements to its byproduct material framework to support efficient licensing of mass-manufactured fusion machines.

Please contact me or have your staff contact Eugene Dacus, Director of the Office of Congressional Affairs, at (301) 415-1776, if you have questions or need additional information.

Sincerely,

A handwritten signature in blue ink, appearing to read "Annie Caputo", is positioned below the word "Sincerely,".

Annie Caputo

Enclosure:
As stated

cc: Senator Sheldon Whitehouse

Identical letter sent to:

The Honorable Shelley Moore Capito
Chairman, Committee on Environment
and Public Works
United States Senate
Washington, DC 20510
cc: Senator Sheldon Whitehouse

The Honorable Brett Guthrie
Chairman, Committee on Energy
and Commerce
United States House of Representatives
Washington, DC 20515
cc: Representative Frank Pallone, Jr.