



July 1, 2023

Docket No: 99902098

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555-0001

Subject: Transmittal of GA-EMS Accelerated Fuel Qualification Plan of the Fast Modular Reactor Fuel in a Thermal Reactor

General Atomics - Electromagnetic Systems (GA-EMS) is submitting to the Nuclear Regulatory Commission (NRC) the Accelerated Fuel Qualification Plan of the Fast Modular Reactor (FMR) Fuel in a Thermal Reactor for pre-application license review. The white paper in Enclosure 2 contains proprietary information to be withheld from public disclosure under 10 CFR 2.390. The technical report in Enclosure 2 also contains export control information under 10 CFR 810.

This activity is in support of the DOE award for the cost-share funding opportunity DE-NE0009354. GA-EMS requests that the NRC review and provide schedule and resource estimates on the proposed Accelerated Fuel Qualification Plan within 30 days of receipt of this letter. Specific feedback is requested on whether the accelerated, pseudo-prototypic thermal reactor tests discussed in the white paper meet the NRC's expectation of fuel performance and qualification demonstration for the FMR fuel. Additional interactions to respond to NRC requests for additional information on the white paper is anticipated to take 3 months with an NRC staff effort of around 200 hours. A meeting between GA-EMS and NRC staff can be scheduled to address any early questions and feedback on this pre-application license submittal.

If you have any questions or need any additional information, please contact John Bolin by email at john.bolin@ga.com or by phone at 858-762-7576.

Sincerely,

A handwritten signature in black ink that reads "John Bolin". The signature is written in a cursive style with a large initial "J" and "B".

John Bolin
Nuclear Technologies and Materials Division
General Atomics – Electromagnetic Systems

Enclosure: 1. Affidavit supporting request for withholding from public disclosure (10 CFR 2.390).
2. "Accelerated Fuel Qualification Plan of the Fast Modular Reactor Fuel in a Thermal Reactor," 30702R00003 Rev. 1, July 1, 2025.

cc: Samuel.CuadradoDeJesus@nrc.gov
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