

## **UNITED STATES NUCLEAR REGULATORY COMMISSION**

WASHINGTON, D.C. 20555-0001

June 4, 2025

Mr. John Bolin Senior Staff Engineer, Nuclear Technologies and Materials Division General Atomics – Electromagnetic **Systems** 16530 Via Esprillo San Diego, CA 92127

SUBJECT:

U.S. NUCLEAR REGULATORY COMMISSION STAFF FEEDBACK REGARDING GENERAL ATOMICS ELECTROMAGNETIC SYSTEMS WHITE PAPER, "FAST MODULAR REACTOR SAFETY APPROACH AND PROBABILISTIC RISK INSIGHTS" (EPID L-2024-LRO-0046)

Dear Mr. Bolin:

By letter dated August 21, 2024 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML24234A330) General Atomics Electromagnetic Systems (GA-EMS) submitted a white paper (WP) titled, "Fast Modular Reactor Safety Approach and Probabilistic Risk Insights," (ML24234A331) for the U.S. Nuclear Regulatory Commission (NRC) staff's review. The WP describes a safety approach that uses inherent and passive safety as well as probabilistic risk insights to satisfy safety and environmental protection requirements with a focus on identifying preliminary initiating events.

The enclosure to this letter provides the NRC staff's feedback on the WP for GA-EMS to consider as part of any future submittal that may address this topic.

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If you have questions regarding this matter, please contact me via email at Samuel.CuadradoDeJesus@nrc.gov.

Sincerely,

Samuel Cuadrado, Project Manager Advanced Reactor Licensing Branch 1 Division of Advanced Reactors and Non-Power Production and Utilization Facilities Office of Nuclear Reactor Regulation

Project No.: 99902098

Enclosure: As stated

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INSIGHTS," (EPID L-2024-LRO-0046) DATED: JUNE 4, 2025

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