
Framatome and General Atomics announce collaboration to develop fast modular reactor

October 13, 2020 – Framatome and General Atomics Electromagnetic Systems (GA-EMS) today announced plans to collaborate on the development of GA-EMS’ helium-cooled, 50-MWe fast modular reactor (FMR). Due to its advanced modular design, the reactor can be built in a factory and assembled on-site, which helps to reduce capital costs and enables incremental capacity additions. Framatome’s U.S. engineering team will be responsible for designing several critical structures, systems and components for the FMR.

“This collaboration builds on our long relationship with General Atomics with a shared interest in advancing nuclear energy technologies to create a cleaner world for generations to come,” said Bernard Fontana, CEO of Framatome. “With our experience and expertise in designing reactor systems and components for advanced and small modular reactors, our team is helping to make that vision a reality.”

“Designing and deploying a safe, cost-effective, modular reactor is critical in helping the world move closer towards a clean energy future,” stated Scott Forney, president of GA-EMS. “We look forward to leveraging our two companies’ decades of experience in advancing nuclear technology and demonstrating the next generation of commercially viable nuclear reactors.”

The FMR is designed for enhanced safety and ease of operation with fast-response load following and overall high efficiency. It offers stability for the electricity grid and can respond to meet demand based on fluctuations in renewable energy sources. The gas-cooled FMR uses a helium coolant while eliminating the need for the graphite common in other helium-cooled designs. Its fuel is optimized to support reactor operations for up to nine years before needing to be replaced. The power conversion system does not use complex steam generators and pressurizers, which helps to drive down costs.

“We are pleased to work with GA-EMS to advance this innovative and promising reactor,” said Gary Mignogna, president and CEO of Framatome in North America. “The synergies between our teams make this an ideal project for demonstration and subsequent commercialization.”

A demonstration of the FMR, which will verify the design, manufacturing, construction and operation of the technology, is targeted for completion in the early 2030s. Commercial deployment is anticipated in the mid-2030s.

[Learn more about Framatome’s Advanced Reactor offering.](#)



About Framatome:

Framatome is an international leader in nuclear energy recognized for its innovative solutions and value added technologies for the global nuclear fleet. With worldwide expertise and a proven track record for reliability and performance, the company designs, services and installs components, fuel, and instrumentation and control systems for nuclear power plants. Its more than 14,000 employees work every day to help Framatome's customers supply ever cleaner, safer and more economical low-carbon energy. Visit us at: www.framatome.com, and follow us on Twitter: [@Framatome](https://twitter.com/Framatome) and LinkedIn: [Framatome](https://www.linkedin.com/company/framatome). Framatome is owned by the EDF Group (75.5%), Mitsubishi Heavy Industries (MHI – 19.5%) and Assystem (5%).

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