



Framatome, EDF sign agreement to test PROtect enhanced accident tolerant fuel in French reactor

June 29, 2023 – Framatome signed a collaboration agreement with EDF to test its enhanced accident tolerant fuel (EATF) technology in an operating nuclear power plant in France. As part of its [PROtect EATF program](#), Framatome will manufacture and deliver four lead fuel assemblies (LFAs) that will be inserted in one of the EDF's reactors in 2023.

Supported by the French Recovery Plan and the U.S. Department of Energy (DOE), Framatome's EATF technology is based on advanced chromium coating applied to zirconium alloy cladding, and chromia-enhanced fuel pellets. This innovative technology is designed to improve the safety for nuclear plant operators in the case of an unlikely event, while improving fuel performance during normal operations.

"Our ambitious PROtect program puts us at the forefront of developing and implementing inherently safe fuel technologies for long-term plant operations," says Lionel Gaiffe, senior executive vice president of the Framatome Fuel Business Unit. "This agreement cements our position and confirms the confidence of our customers in our EATF technology, developed together with the knowledge, skills and expertise of our partners and leaders across the nuclear sector."

Framatome, EDF and CEA have collectively worked on the chromium coated cladding concept for nearly a decade. Framatome's development efforts led to the first lead fuel rods inserted in a Swiss and U.S. reactor in 2019, followed by the [first complete fuel assembly](#) comprised of 100% chromia-enhanced pellets and chromium-coated rods delivered and inserted at a U.S. nuclear power plant in the spring outage of 2021, and the recent completion of the [second 18-month fuel cycle](#) in a U.S. operating plant. In total, Framatome's PROtect EATF solutions have been implemented in four different nuclear power plants in the U.S. and one in Europe.

These LFAs will be manufactured in Framatome facilities in France. The results obtained during the EDF irradiation campaign will serve to confirm the performance of this technology in a French reactor and support the final approval from the French Safety Authority.

Framatome's collaboration with EDF marks a significant step forward in the development and implementation of enhanced accident tolerant fuel technology. By leveraging the expertise and support of industry leaders, Framatome continues to drive innovation and enhance the safety and performance of nuclear power plants.

About Framatome

Framatome is an international leader in nuclear energy recognized for its innovative, digital and value added solutions 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 16,000 employees work every day to help Framatome's customers supply ever cleaner, safer and more economical low-carbon energy.

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Framatome is owned by the EDF Group (75.5%), Mitsubishi Heavy Industries (MHI – 19.5%) and Assystem (5%).