

# Framatome, US Department of Energy secure \$150 million cooperative agreement to advance accident tolerant fuel

**December 16, 2021** – Framatome and the U.S. Department of Energy secure a new 4-year cooperative agreement valued at more than \$150 million to continue the development of its PROtect enhanced accident tolerant fuel (EATF) technology. These technologies increase the safety performance of commercial nuclear reactors while providing operators more flexibility during normal operating conditions.

This agreement supports work to extend fuel cycle design and licensing methodologies, as well as fabrication capabilities needed to increase burnup and enrichment limits for fuel products. These efforts support DOE's goals to drive rapid adoption of accident tolerant fuel technology, offering operators enhanced efficiency and reliability for safe, low carbon electricity generation. Funding support from DOE, along with access to the national laboratories technical complex, has significantly expedited the advancement of PROtect EATF technologies.

"With support from the DOE and our industry partners, we are accelerating the development and deployment of PROtect EATF technologies to enhance the safety and operating efficiency of today's nuclear energy plants," said Ala Alzaben, senior vice president of the Commercial and Customer Center for Framatome's Fuel Business Unit. "Our speed to market with a successful PROtect EATF technology reflects the strength and effectiveness of our team. We innovate and industrialize the next-generation fuel technologies as part of our commitment to the future of safe and low carbon nuclear energy generation."

Through Framatome's PROtect EATF program, near-term solutions are currently operating in five commercial reactors. These lead test assemblies contain uranium dioxide or uranium chromia-enhanced fuel pellets. Fuel cladding for pressurized water reactors (PWR) have chromium coated zirconium alloy cladding, and boiling water reactors use another type of innovative coating on Zircaloy-2 cladding adapted to the specific BWR conditions.

These products are designed to deliver additional safety and economic benefits to plant operators. In parallel, Framatome is continuing development on a longer-range EATF concept to advance a metallic lined silicon carbide (SiC) PWR cladding to achieve even greater benefits.

## 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](http://www.framatome.com), and follow us on Twitter:

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[@Framatome](#) and LinkedIn: [Framatome](#). Framatome is owned by the EDF Group (75.5%), Mitsubishi Heavy Industries (MHI – 19.5%) and Assystem (5%).

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