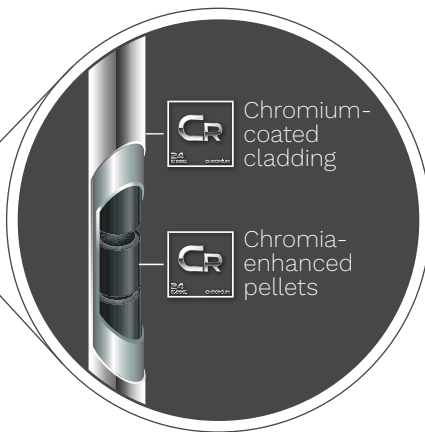


EATF

The Next Evolution of Nuclear Fuel



What is Enhanced Accident Tolerant Fuel?

Fuel designs that can tolerate loss of active cooling in the reactor core for longer time periods in light water reactors while maintaining or improving fuel performance during normal operations.

What are the benefits?



Increased temperature resistance



More affordable, sustainable operations



Increased coping time



Optimized safety systems and operations

How is Framatome bringing EATF to the industry?

Pre-2000

Framatome, EDF & CEA research on enhanced safety margin material concepts

CEA program for multilayer silicon carbide (SiC) concept for Gen IV reactors

Framatome begins experimental work on SiC concept

Testing of Chromia-enhanced pellets

2011 Fukushima Incident

2012

Congress gives \$59M to DOE for EATF program

2012-2015 DOE phase 1A concepts/evaluation

2014

2014-2016 DOE phase 1B concepts/feasibility

2016

2016-2022 DOE phase 2 lead products implementation for Cr-Cr concept

2017

NRC licensing process

Framatome advances to phase 2 of DOE EATF program

Framatome begins Chromia-enhanced fuel pellet production in Richland, Wash.

Chromia-enhanced fuel pellet testing at Idaho National Lab (INL)

2018

Framatome begins EATF production in Richland, Wash.

DOE target for production capabilities

2019

Framatome lead Cr-Cr assemblies in commercial reactor

2020

Framatome lead AT control components in commercial reactor

2021

DOE target for irradiation

2022

Framatome lead fuel rods for SiC concept in commercial reactor

DOE target for lead fuel assemblies in commercial reactor

2025

Framatome ready for production of reload Cr-Cr assemblies



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Who does Framatome work with?

framatomé

Project management & technical lead



Universities
Develop technologies



Utilities
Perspective & operating experience



Stakeholders
Develop technology & perform testing



Labs
Perform testing

Want to know more?

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