

Westinghouse ADOPT fuel gets NRC approval

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The US Nuclear Regulatory Commission has given approval to Westinghouse's Advanced Doped Pellet Technology (ADOPT) fuel pellets for use in pressurised water reactors in the USA.



Westinghouse says the fuel boosts safety, reliability and improves fuel cycle economics (Image: Westinghouse)

Westinghouse's president of nuclear fuel, Tarik Choho, called it an "important milestone" with the ADOPT fuel becoming the first in the company's EnCore Accident Tolerant Fuel programme licensed for PWRs in the USA.

The company, with funding from the US Department of Energy, has developed its advanced pellet technology to increase the accident tolerance of conventional uranium dioxide fuel pellets.

Westinghouse last year announced an agreement with Southern Nuclear Company to load rods using High-Assay Low-Enriched Uranium (HALEU) ADOPT pellets, "with licensing and manufacturing in 2023". Westinghouse said it is contracted to deliver reload quantities of ADOPT fuel for three units beginning in 2025.

It said: "HALEU designates uranium enriched between 5 and 19.75% which is above the traditional threshold for commercial reactors. Through its increased uranium density, ADOPT fuel also enables US customers to improve fuel cycle economics and extend their operating cycles."

Choho added: "ADOPT fuel is the result of two decades of in-reactor experience and provides our customers with improved fuel cycle economics and safety margins. This major achievement illustrates Westinghouse's commitment to the future of nuclear power."

Researched and written by World Nuclear News

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