

BWRX-300 Small Modular Reactor

Powered by licensed and proven fuel

GE Vernova Hitachi Nuclear Energy is working with partners and customers to develop game-changing nuclear technologies like the BWRX-300 small modular reactor (SMR) that will be able to provide carbon-free, reliable and resilient dispatchable capacity. Innovating on 60 years of design and operating experience, our BWRX-300 SMR revolutionizes what is possible when it comes to generating reliable carbon-free power. Designed to be deployed on a time scale that can impact climate goals, the BWRX-300 utilizes a licensed and proven fuel design.

Proven Fuel Technology

- GNF2 is proudly manufactured by Global Nuclear Fuel (GNF), a GE-led joint venture. GE and GNF have continuously designed and produced nuclear fuel for over 50 years.
- With demonstrated load-following capabilities, GNF2 enables the BWRX-300 to be both a reliable and dispatchable source of generation.
- GNF2 is a commercial-scale fuel that more than 25 nuclear power plants around the world over the last decade to provide carbon-free electricity to millions of people.
- Utilizing a licensed fuel like GNF2 - expected to significantly improve licensing certainty in new countries.



Established Supply Chain

- We have safely manufactured, shipped and installed more than 900 reloads (165,000+ bundles) of boiling water reactor fuel.
- Our existing global fuel manufacturing capability and supply chain redundancy is firmly established, something that typically takes many years of significant investment to accomplish.
- Having a trusted and established supply chain can enable reliable fuel delivery at a predictable cost, avoiding the risk and uncertainty of alternate, unproven fuels.



Continuing to Innovate

- On the forefront of technology advancements, we continue to build on our legacy of innovation to improve the performance, safety and economics of our fuel.
- GNF was the first company to test two new fuel technologies (IronClad and ARMOR) at an operating plant as part of a U.S. Department of Energy advanced fuel program.

Nuclear power is the largest source of clean energy and is critical to reducing carbon emissions. The technological innovations behind the BWRX-300 with GNF2 fuel make an ideal solution for the global energy transition and decarbonization goals.

Learn more at governova.com/nuclear

