Project Pele Begins Taking Shape with Start of Core Manufacturing

July 24, 2025

LYNCHBURG, Va.--(BUSINESS WIRE)--Jul. 24, 2025-- BWX Technologies, Inc. (NYSE: BWXT) announced today that work has commenced to fabricate the reactor core for the Pele microreactor at its BWXT Innovation Campus in Lynchburg, Virginia. Pele is a 1.5-megawatt demonstration microreactor for the Department of Defense Strategic Capabilities Office. The technology is expected to begin producing electricity in 2028.

This press release features multimedia. View the full release here: https://www.businesswire.com/news/home/20250724939919/en/



Production platform for the Pele prototype core reactor assembly.

The Pele microreactor is gas-cooled and designed to be transportable. The reactor and its associated systems fit into four 20-foot-long shipping containers, making it ideal to be delivered to forward military bases and other installations, providing resilient and reliable electricity for up to three years without refueling.

“We are proud to develop and deliver the Pele microreactor for the benefit of our armed forces,” said Kate Kelly, president for BWXT Advanced Technologies. “This is a tremendous achievement for the BWXT team and for the advancement of groundbreaking nuclear energy technology as a reliable, resilient source of electricity and heat for multiple applications.”

Pele will be powered by TRISO fuel, a specific design of high-assay low-enriched uranium (HALEU) fuel that can withstand extreme heat and has very low environmental risks. BWXT has completed fabricating the TRISO nuclear fuel for the reactor and will ship it to Idaho National Lab in the months ahead.

Rolls-Royce is developing the power conversion module at its LibertyWorks facility in Indianapolis. The power conversion system is a critical component that enables the microreactor to reliably produce mission-assured electric power in remote or contested environments.

“With decades of experience delivering compact, efficient, and mission-critical power systems, Rolls-Royce LibertyWorks is uniquely positioned to meet the demanding technical and operational requirements of this effort,” said John Shade, Rolls-Royce executive vice president of business development and future programs. “As part of the BWXT team, we’re proud to put our expertise to work to deliver a power conversion system that will enhance energy dominance and operational readiness for the DoD.”

Northrop Grumman is providing the control module for the reactor.

Project Pele began in 2016 following a DoD study that identified a growing need for additional power resources for the military in the future. The SCO awarded BWXT the contract to build the prototype reactor in 2022.

Executive Order (EO) 14299, “Deploying Advanced Nuclear Reactor Technologies for National Security,” signed by President Trump in May, calls for a program using advanced nuclear technology for both installation and operational energy. The EO directs the DoD to commence the operation of a nuclear reactor, regulated by the United States Army, at a domestic military base or installation no later than Sept. 30, 2028. The Pele reactor has the strongest potential to fulfill that objective.

Transportable microreactors deliver power where and when it is needed in a variety of austere conditions for not only the DoD, but also potential commercial applications for disaster response and recovery and power generation at remote locations.

Forward-Looking Statement

BWXT cautions that this release contains forward-looking statements, including, without limitation statements relating to the performance, design, suitability and impact of microreactor technology and TRISO nuclear fuel production. These forward-looking statements involve a number of risks and uncertainties, including, among other things, the timing of technology development; our ability to obtain the necessary regulatory approvals, licenses and permits in a timely manner; and the enforcement and protection of our intellectual property rights. If one or more of these or other risks materialize, actual results may vary materially from those expressed. For a more complete discussion of these and other risk factors, please see BWXT’s annual report on Form 10-K for the year ended December 31, 2024, and subsequent quarterly reports on Form 10-Q filed with the Securities and Exchange Commission. BWXT cautions not to place undue reliance on these forward-looking statements, which speak only as of the date of

this release and undertakes no obligation to update or revise any forward-looking statement, except to the extent required by applicable law.

About BWXT

At BWX Technologies, Inc. (NYSE: BWXT), we are People Strong, Innovation Driven. A U.S.-based company, BWXT is a Fortune 1000 and Defense News Top 100 manufacturing and engineering innovator that provides safe and effective nuclear solutions for global security, clean energy, environmental restoration, nuclear medicine and space exploration. With nearly 10,000 employees, BWXT and its industry partners support the U.S. Department of Energy and National Nuclear Security Administration across more than a dozen major contracts in North America. For more information, visit www.bwxt.com. Follow us on LinkedIn, X, Facebook and Instagram.

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Media Contact
John Dobken
Senior Manager, Media & Public Relations
202.428.6913 jcdobken@bwxt.com

Investor Contact
Chase Jacobson
Vice President, Investor Relations
980.365.4300 investors@bwxt.com

Source: BWX Technologies, Inc.