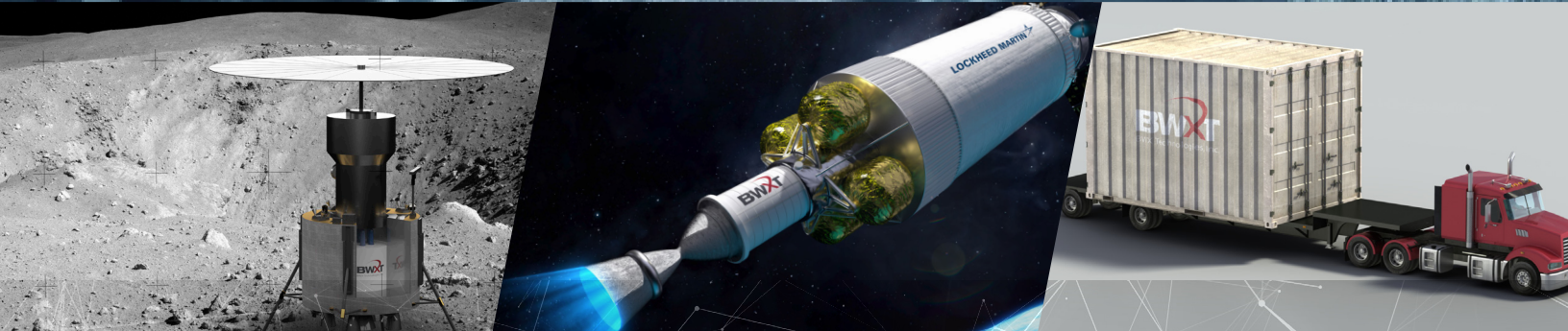


# RAPID INNOVATION IN NUCLEAR



Advanced Technologies LLC is an innovative, forward-leaning and evolving organization with the ultimate goal of creating new, first-of-a-kind nuclear reactors to be developed, tested, demonstrated and produced by BWXT.

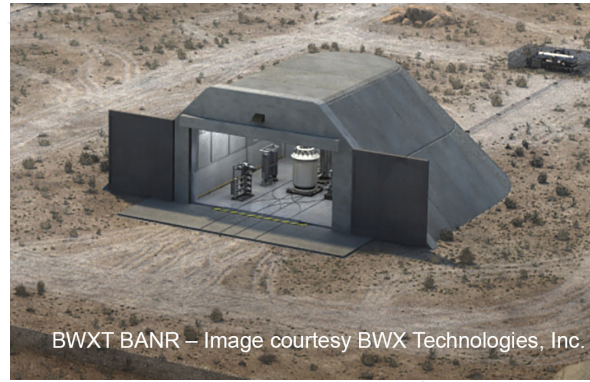
## The Future of Nuclear

Our cutting-edge technologies are setting the stage for the future of nuclear. Fully utilizing our already licensed U.S. NRC Category 1 facilities, we are paving the pathway to new product lines, working to design and deliver new, advanced nuclear technologies for both government and commercial applications. >

**BWXT**<sup>®</sup>  
BWXT Technologies, Inc.

## BWXT Advanced Nuclear Reactor (BANR)

The BANR project is developing a modular, factory-fabricated system that is small and light enough to be transported via rail, ship or truck and that can deliver 50 MW of thermal nuclear reactor power. It employs mature and manufacturable high-temperature gas reactor (HTGR) technology with inherent safety features and a high working fluid temperature. It provides flexible options for energy output - including electricity, steam for process heat, or both in a mode called "cogeneration" - while minimizing greenhouse gas (GHG) emissions. The Advanced Technologies BANR design is part of the U.S. Department of Energy's Advanced Reactor Demonstration Program (ARDP),



BWXT BANR – Image courtesy BWX Technologies, Inc.

## Nuclear Thermal Propulsion (NTP)

BWXT's engagement in NTP traces back to the 1960s, and today we are delivering coated fuels and nuclear reactor designs to NASA in support of its space nuclear propulsion initiatives. Rocket engines based on NTP technology are designed to propel a spacecraft from Earth's orbit to Mars and back in half the time of traditional chemical propulsion.

## Project Pele

A BWXT-led team is tasked with manufacturing and delivering the first advanced microreactor in the U.S. as part of a contract awarded by the U.S. Department of Defense Strategic Capabilities Office. This BWXT-designed 1-5 MWe transportable microreactor will provide clean, zero-carbon energy, meeting mission-critical power needs.

## Fission Surface Power (FSP)

Teamed with Lockheed Martin, BWXT is developing design concepts for a fission surface power system for NASA and the U.S. Department of Energy. FSP technologies are reliable, small and lightweight and could enable continuous power for deep exploration missions regardless of location, available sunlight and other natural environmental conditions.

## Advanced Manufacturing

Additive manufacturing technologies will be transformational for the nuclear industry, enabling the creation of improved thermal energy transfer concepts to benefit final designs, increased safety margins and accident-tolerant characteristics. We are using our unique design expertise, capabilities and methods to create cost-effective enhancements to future reactor performance.

People Strong

**INNOVATION DRIVEN** > . . . . .

At BWX Technologies, Inc. (NYSE: BWXT), we are People Strong, Innovation Driven. Headquartered in Lynchburg, Virginia, BWXT is a 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 more than 7,000 employees, BWXT has 14 major operating sites in the U.S., Canada and the U.K. In addition, BWXT joint ventures provide management and operations at a dozen U.S. Department of Energy and NASA facilities. For more information, visit [www.bwxt.com](http://www.bwxt.com). Follow us on LinkedIn, X, Facebook and Instagram.

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**BWX Technologies, Inc.**  
800 Main St.  
Lynchburg, VA 24504  
Phone: + 434.522.6000  
Fax: +1 434.522.6805

[www.bwxt.com](http://www.bwxt.com)

