

New Nuclear Reactors for Military Purposes - Update

September 2026

Purpose

- The United States has substantial efforts underway to develop new reactors for military purposes.
- This briefing outlines the federal policy framework as well as the projects, concepts, and solicitations in progress to translate statutory mandates and executive policy directives into operational capability.

Federal Policy

The following slides outline the federal policy framework guiding advanced nuclear energy for military use. Recent executive orders, together with congressional mandates, establish a coordinated strategy that links national security with mission assurance. Executive Orders 13972 and 14299 through 14302 direct federal agencies to accelerate and enable: the deployment of advanced reactors for defense and AI infrastructure, the reform of regulatory processes at the Nuclear Regulatory Commission, streamlined testing at Department of Energy laboratories, and rebuilding the nuclear industrial base to reduce reliance on foreign uranium conversion and enrichment. These directives are reinforced by provisions in the National Defense Authorization Acts, which require near-perfect energy reliability for critical missions and authorize new pathways for prototype deployment. Together, these policies provide the foundation for resilient and sustainable energy at military installations and for operational use.

Executive Orders

- **EO 13972 - Promoting Small Modular Reactors for National Defense and Space Exploration**
Directs DoD to plan to demonstrate an NRC-licensed microreactor at a defense facility and directs DoD to coordinate with State, Commerce, DOE, and NASA to pilot a microreactor if beneficial for defense space needs.
- **EO 14299 - Deploying Advanced Nuclear Reactor Technologies for National Security**
Directs DoD and DOE to identify, prioritize, and accelerate pathways for deployment of advanced nuclear reactors to power AI/data centers and critical defense facilities.
- **EO 14300 - Reforming the Nuclear Regulatory Commission**
Orders NRC to modernize licensing, revise many of its rules, pursue fixed licensing timelines (12-18 months), and reduce regulatory barriers to expand domestic nuclear energy.
- **EO 14301 - Reforming Nuclear Reactor Testing at DOE**
Tasks DOE to streamline reactor testing at national labs and expedite approval pathways for qualified test reactors.
- **EO 14302 - Reinvigorating the Nuclear Industrial Base**
Directs DOE, DoD, and other agencies to rebuild nuclear fuel cycle infrastructure, promote recycling/reprocessing, and reduce reliance on foreign uranium.

Other Direct Nuclear Energy Mandates

- **National Security Science And Technology Strategy (August 2026)**

Includes nuclear energy as a key enabling technology to achieve U.S. strategic dominance in critical battlefield domains.

- **FY2026 National Defense Authorization Act provisions:**

Section 318 - Establishes a DoD executive agent for installation and operational nuclear energy deployment.

Section 321 - Establishes a 10-year Navy SMR pilot program to evaluate SMRs and microreactors for Navy energy needs.

- **P.L. 119-21:**

Sect. 20005(a)(15) - Provides \$125M to advance small, portable military reactors.

Sect. 20008(b)(7) - Provides \$120M for National Nuclear Security Administration enrichment services.

- **10 U.S.C. § 4022:**

Allows DoD to use Other Transactional Authority/prototype authority for nuclear energy deployment.

- **10 U.S.C. § 2920 (FY2021 National Defense Authorization Act):**

Requires 99.9% annual energy availability for critical missions at all DoD installations by 2030.

- **FY2019 NDAA - Advanced Reactor Mandate:**

Directs DoD to pursue mobile/transportable nuclear reactors

- **NSTM-3 - National Initiative for Space Nuclear Power**

Provides guidance to agencies to achieve one objective in E.O. 14369, Ensuring American Space Superiority, to enable near-term utilization of space nuclear power by deploying nuclear reactors ready for launch by 2030.

Installation Energy Requirements

- **10 U.S.C. §§ 2667-2668:**

Enables land use and easements for on-base nuclear projects.

- **16 U.S.C. § 824o-1:**

Protects grid assets essential to national defense.

- **FY2022 National Defense Authorization Act:**

Expands requirements for resilient and diversified installation energy systems, including efficiency, on-site generation, and reduced operational risk.

- **DoD Installation Energy Resilience Policy (Ongoing):**

Implements statutory requirements under 10 U.S.C. § 2920 mandating $\geq 99.9\%$ annual availability for critical mission energy by FY 2030, with higher standards for select missions; executed via Installation Energy Plans (IEPs), resilience exercises, and on-site generation.

Projects, Concepts, and Solicitations

Translating Policy Direction & Statutory Authority into Operational Capability

Overview of projects, concepts and solicitations

- The military is pursuing multiple nuclear initiatives to achieve federal policy directives and mandates.
- Several projects have advanced beyond the concept stage.
- Oversight pathways and acquisition models vary across initiatives.
- The Secretary of War has designated the Under Secretary of War for Research and Engineering as the Chief Technology Officer (CTO) for innovation and consolidated under the CTO all of the procurement agencies involved in military nuclear reactors except the Defense Logistics Agency.

Slide 8

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Added the fourth bullet and the footnote (discussing the difference between War and Defense) is deleted.
Revised second bullet based on Radiant comment.

R. Budd Haemer, 2026-05-11T20:14:33.396

Comprehensive List of New Nuclear Reactor Concepts for Military Use

Dept. or Component	Project or Solicitation Title	Date Announced or Initiated	Objective or Mission Requirement	Target Operation Date	Anticipated Oversight Pathway	Commercial Grid Interface
Army	Janus Program	<i>RFI Closed: 15Dec2025</i>	Resilient installation energy & operational energy to support warfighter missions	2028	Army	Yes
Air Force Space Force	Advanced Nuclear Power for Installations (ANPI)	Announced 2024	Resilient installation energy	2028	NRC, alternately through DOE to NRC	Undetermined
Army	Project Pele	Initiated 2018	Mobile reactor for transient applications	2027	DOE	No
Air Force	Eielson Air Force Base Microreactor Project	Initiated 2017	Resilient installation energy	2030	NRC	Yes; contractor owned & operated
Navy	<i>Solicitation for Innovative Energy Resilience Solutions to Power Navy and Marine Corps Installations</i>	<i>Solicitation Issued: 07Aug2025</i>	Resilient installation energy	Solicitation not made public, so target operation date & oversight pathway are unknown; press release specifies “execution-ready prototypes” and “minimal permitting”.		Yes; contractor owned and operated
The Department of the Navy and the Department of the Air Force issued the following sources-sought RFIs to solicit capability and interest information to inform future planning. As of this publication, no public announcements have been made regarding follow-on procurement actions. However, the above Navy solicitation supersedes the RFI below.						
Navy	<i>RFI: Identification of Potential Shore Installation Contractor Owned/Operated Nuclear Power Sites</i>	<i>RFI Closed: 7Nov2024</i>	Resilient installation energy	N/A	NRC	Yes; contractor owned & operated
Air Force	<i>RFI: Strategic Real Estate Opportunities at Joint Base San Antonio (JBSA), Opportunity 5a: Energy Resiliency</i>	<i>RFI Closed: 20Jan2025</i>	Improve resiliency, reduce/optimize demand, assure supply, and ensure security	N/A	NRC	Yes; contractor owned & operated

New Nuclear Reactor Initiatives Underway for Military Use

Dept. or Agency	Project or Solicitation Title	Target Operation Date	Locations & Vendors		Procurement Agency
The following initiatives have either secured funding, completed steps towards procurement action, or achieved technological advancement.					
Army	Janus Program	2028	Fort Benning, Georgia	Radiant Industries, Inc.	Defense Innovation Unit (DIU) under the CTO NOTE: Four other sites under consideration are Fort Wainwright, Alaska Holston Army Ammunition Plant, Tennessee Joint Base Lewis-McChord, Washington Redstone Arsenal, Alabama
		2028	Fort Bragg, North Carolina	Antares Nuclear, Inc.	
		unpublished	Fort Campbell, Kentucky	BWXT Advanced Technologies	
		unpublished	Fort Drum, New York	Westinghouse Government Services	
		unpublished	Fort Hood, Texas	General Atomics Electromagnetic Systems	
DoD SCO	Project Pele	2028	Idaho National Laboratory.	BWXT Advanced Technologies LLC	Strategic Capabilities Office (SCO) under the CTO
Air Force	Eielson Air Force Base Microreactor Project	2030	Eielson Air Force Base, Alaska	Oklo Inc.	Defense Logistics Agency
Air Force and Space Force	Advanced Nuclear Power for Installations (ANPI)	2028	Buckley Space Force Base, Colorado	Radiant Industries Inc.	DIU
		2030	Malmstrom Air Force Base, Montana	Westinghouse Government Services	
		2028	Joint Base San Antonio, Texas	Antares Nuclear, Inc	

Conclusion

- This briefing will be updated periodically to reflect:
 1. Updates to federal policy, executive direction, and statutes
 2. Implementation guidance and regulatory developments
 3. Project updates, announcements, acquisition milestones, and technical progress
 4. Budgetary actions, appropriations, and programmatic changes