

# Pillsbury Guide to Advanced Reactor Designs

Design	Capacity	Details & Status
Pressurized Water Reactor (PWR)		
Nuscale VOYGR	77 MWe	NRC Certified 50 MWe design in 2022, 77 MWe design certification expected in July 2025. Established supply chains with Doosan in Korea, and ability to use commercial fuel.
Holtec SMR-300	300 MWe	\$116 million risk reduction award through DOE ARDP program. Two units to be deployed at Palisades site in Michigan. Pre-application activities with the NRC.
Westinghouse AP300	300 MWe	Smaller version of AP1000. Early discussions with USNRC.
Westinghouse AP1000	1100 MWe	Full size AP1000 PWR. NRC design certified and successfully constructed at Vogtle Units 3 & 4. Installed in many locations in the U.S. and abroad.
Rolls Royce RR SMR	470 MWe	Great British Nuclear selected the RR SMR along with five other SMRs to progress to the next phase of the UK’s innovative nuclear technology competition for potential deployment in the country.
Deep Fission Borehole Reactor 1 (DFBR-1)	15 MWe	Pre-application activities with the NRC.
Last Energy PWR-20	20 MWe	Announced plans to build 30 microreactors in Northwest Texas. Nonbinding commercial agreements to deploy 80 units in UK and EU markets.
Boiling Water Reactor (BWR)		
GE-Vernova BWRX-300	300 MWe	Approved for construction by Ontario Power Generation (OPG) at Darlington New Nuclear Project in Lake Ontario. TVA submitted USA’s first construction permit application for BWRX-300 SMR at the Clinch River site, near Oak Ridge, Tenn.
High-Temperature Gas Reactor (HTGR)		
BWXT BANR	15-20 MWe	Contract with Wyoming Energy Authority to evaluate placement at mining/ industrial sites. Signed a collaboration agreement with Tata Chemicals Soda Ash Partners (TCSAP) to explore the potential deployment of the BANR SMR at the TCSAP’s Green River site in Wyoming.
NANO Nuclear Energy KRONOS MMR	15 MWe	Working with University of Illinois at Urbana-Champaign to go through NRC licensing approvals.
Radiant Energy Kaleidos	1.2 MWe	Selected by U.S. DOE in April 2025 to receive HALEU for first reactor test.
X-Energy XE-100	80 MWe	Selected for DOE ARDP—two units at Dow Texas site. Four units at Amazon/ EnergyNorthwest with direct investment from Amazon. Allocated initial HALEU amounts by DOE.
Molten Salt Reactor (MSR)		
Natura Resources MSR-1	Non-power research	Initial prototype research reactor received construction license for deployment at Abilene Christian University.
	100 MWe commercial	
Terrestrial Energy Integral Molten Salt Reactor (IMSR)	195 MWe	NRC pre-application and CNSC review.
Kairos Power KP-FHR (Fluoride-Cooled High Temperature Reactor)	150 MWe (2x75 MWe plants)	Selected for \$303 million risk reduction award by DOE. First non power units at Oak Ridge. 500 MWe deal with Google. Allocated initial HALEU amounts by DOE.
Liquid Metal-Cooled Reactor (LMR)		
TerraPower Natrium Sodium Fast Reactor	345 MWe 500 MWe (5.5 hrs)	Selected for DOE ARDP demonstration award. Non-Nuclear construction has begun for coal-to-nuclear site in Kemmerer, Wyo. Allocated initial HALEU amounts by DOE.
ARC Clean Technology ARC-100	100 MWe	The ARC-100 reactor has been selected by NB Power, the primary electric utility in the Canadian province of New Brunswick for deployment at their Point Lepreau Nuclear Generating Station.
Oklo Aurora Sodium Fast Reactor	15 MWe	Power agreement signed in December 2014 with Switch, a data center developer.
	50 MWe	
High-Temperature Sodium Heat Pipe		
Westinghouse eVinci Microreactor	5 MWe	\$7.4 million cost share award through DOE ARDP risk reduction program. Allocated initial HALEU amounts by DOE.