

Our Mission

Kairos Power's mission is to enable the world's transition to clean energy, while improving people's quality of life and protecting the environment. We are singularly focused on advancing this mission by commercializing the fluoride salt-cooled, high-temperature reactor (KP-FHR).

550+ Full-time employees across the U.S.

Headquarters
Alameda, CA

Manufacturing Development Campus
Albuquerque, NM

Reactor Demonstration Campus
Oak Ridge, TN



The KP-FHR Commercial Reactor

Kairos Power's fluoride salt-cooled high-temperature reactor (KP-FHR) is informed by thousands of hours of operational data. The compact unit is designed for modular deployment with a two-over-one plant configuration that balances complexity, efficiency, and cost.



Inherently safe
Simplified design



Scalable
Multi-unit deployment



Modular design
Efficient construction



Made in the U.S.
In-house manufacturing



Minimum Configuration



150 MWe for grid operations, data centers, or industrial users

Standard Configuration



450 MWe for baseload generation and large infrastructure

Key Partnerships



Binding Order Book Agreement for Advanced Reactor Fleet

In 2024, Kairos Power and Google signed a Master Plant Development Agreement, creating a path to deploy a U.S. fleet of advanced nuclear power projects totaling 500 MW by 2035. The Hermes 2 plant in Oak Ridge is the first deployment under the agreement. Hermes 2 will supply up to 50 MW to the TVA grid that powering Google data centers in Tennessee and Alabama through the country's first-ever binding advanced reactor PPA.

Advanced Reactor Demonstration Program

The U.S. Department of Energy (DOE) is investing up to \$303 million in the Hermes demonstration reactor project under a performance-based, milestone agreement to support technology commercialization.

HALEU Availability Program

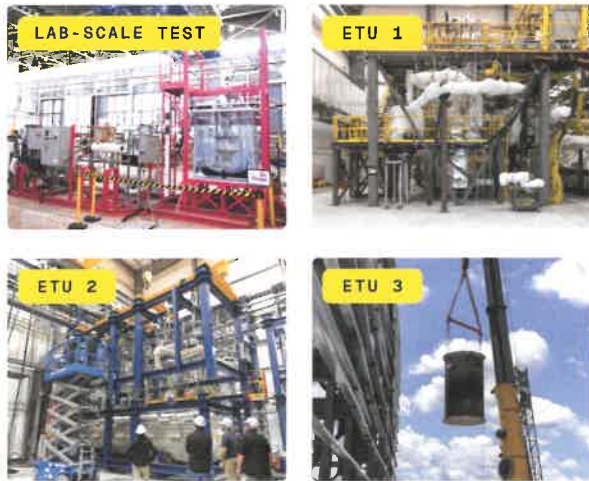
DOE and Kairos Power have finalized a contract securing High-Assay Low-Enriched Uranium (HALEU), sourced from DOE material, for the startup and operation of the Hermes demonstration reactor currently under construction in Oak Ridge, Tennessee.





Iterative Development Approach

Kairos Power embraces a rapid iterative development model enabled by in-house manufacturing to accelerate the learning curve ahead of commercial deployment.



Engineering Test Units (ETUs)

The ETUs are a series of non-nuclear tests that will demonstrate the design and integration of reactor components, generate operational experience with large-scale Fluoride systems, establish manufacturing infrastructure, and exercise the supply chain.



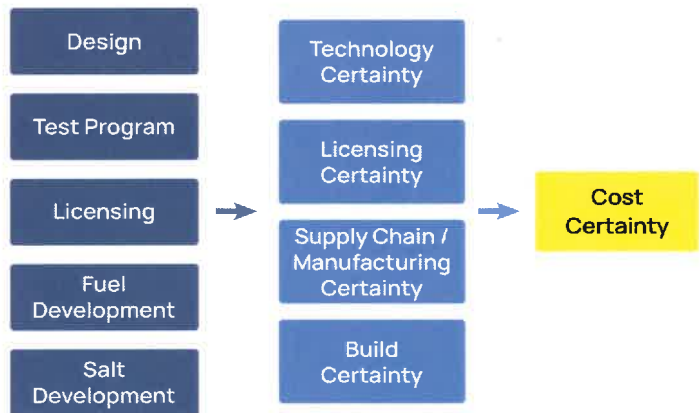
Hermes Demonstration Reactor Series

Hermes 1 (currently under construction) is the first Gen IV reactor with an NRC construction permit.

The Hermes 2 commercial-scale demonstration plant is the first electricity-producing Gen IV reactor with an NRC construction permit. It will incorporate lessons learned from Hermes 1 to demonstrate complete plant architecture and supply up to 50 MW of clean electricity to the TVA grid.

Driving Toward Cost Certainty

Kairos Power's rapid iterative approach and vertical integration strategies work together to deliver cost certainty by mitigating technical, construction, licensing, and supply chain risk over successive hardware iterations.



Vertical Integration

Kairos Power is mitigating supply chain risk by manufacturing critical components in-house. Our Manufacturing Development Campus in Albuquerque has dedicated facilities for reactor component manufacturing, pressure vessel production, and plant equipment modularization.



Salt Production

Kairos Power is producing molten salt coolant using a proprietary lithium enrichment process that closes a critical domestic supply chain gap. The new, environmentally responsible method could have broad applications within the nuclear industry.



Fuel Fabrication

At our fuel labs in Albuquerque, we are developing processes and equipment to manufacture our novel TRISO pebble fuel form. Kairos Power and BWXT have agreed to explore opportunities to collaborate on commercial fuel production for the advanced reactor industry.