




Kairos Power

Non-Power and Advanced Reactors: Merging of Two Worlds

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Kairos Power's mission is to enable the world's transition to clean energy, with the ultimate goal of dramatically improving people's quality of life while protecting the environment.

In order to achieve this mission, we must prioritize our efforts to focus on a clean energy technology that is *affordable* and *safe*.

Introducing Kairos Power

- Nuclear energy engineering, design and manufacturing company *singularly focused* on the commercialization of the fluoride salt-cooled high-temperature reactor (FHR).
 - Founded in 2016
 - Current Staffing:
 - 244 Employees (*and growing*)
 - ~90% Engineering Staff
- Private funding commitment to engineering design and licensing program and physical demonstration through nuclear and non-nuclear technology development program.
- Schedule driven by the goal for U.S. commercial demonstration by 2030 (or earlier) to enable rapid deployment in 2030s.
- Cost targets set to be competitive with natural gas in the U.S. electricity market.

Kairos Power Headquarters

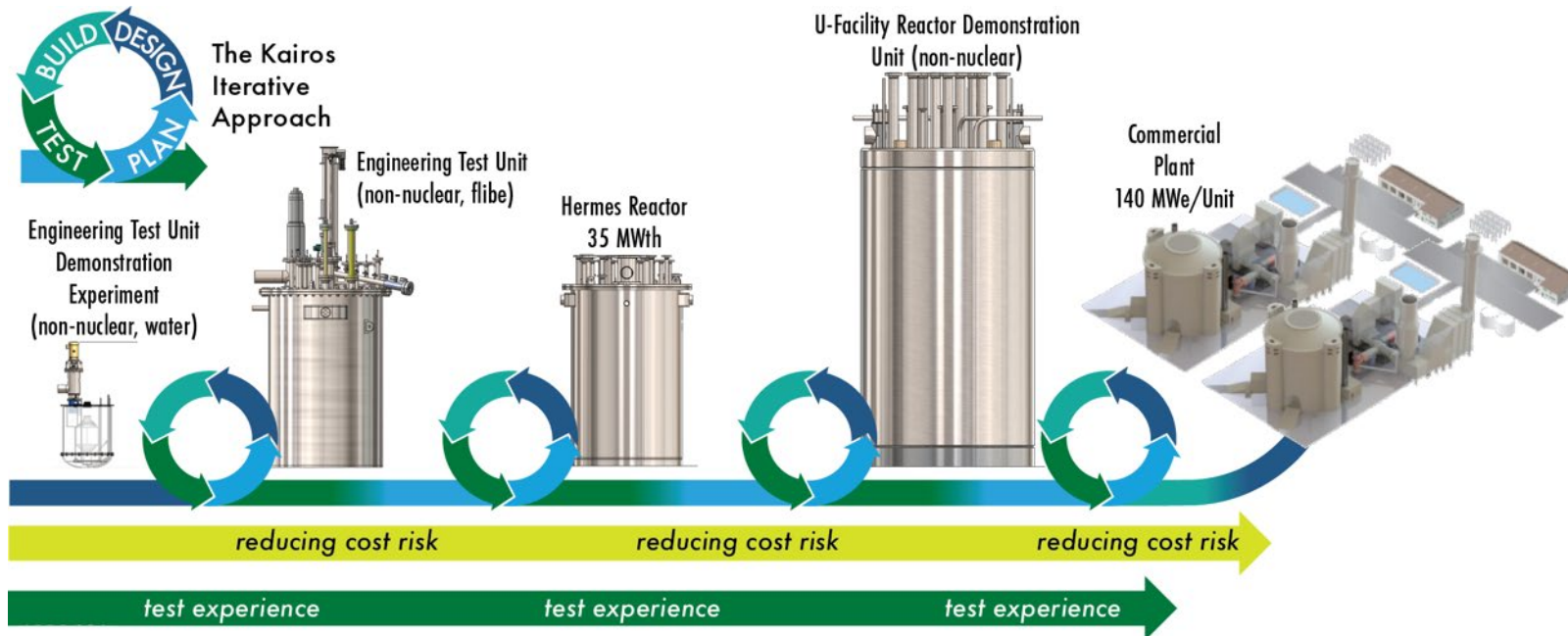


Kairos Power Team



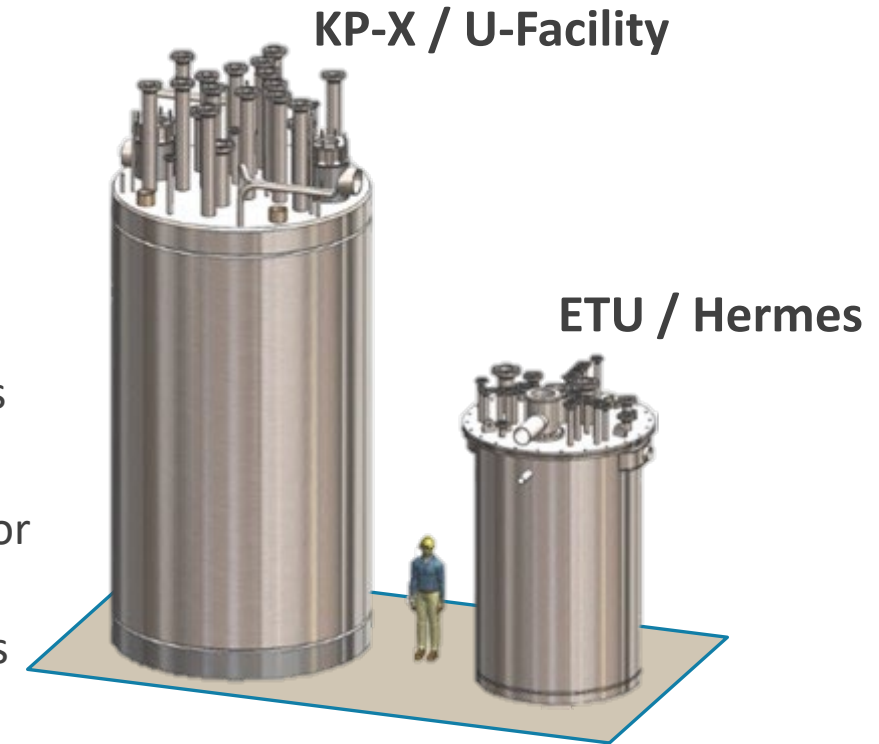
Kairos Power Design Approach

- Kairos Power believes *“hardware is worth 1000 calculations”* and ETU will be the proof case for this philosophy since it integrates all the major systems of Hermes in a non-nuclear environment
- Iterative strategy is supported by capabilities in Material Testing, Tritium Testing, Chemistry Control, Mod/Sim, Core Design and Neutronics, and Instrumentation and Controls



Kairos Power Hermes Reactor Overview

- What?
 - A **low power demonstration reactor** that will prove Kairos Power's capability to deliver low-cost nuclear heat
- Why?
 - **Cost:** Establish competitive cost through iterative learning cycles
 - **Supply Chain:** Advance the supply chain for KP-FHR specialized components and materials while vertical integrating critical systems
 - **Design / Test:** Deliberate and incremental risk reduction
 - **Licensing Approach:** NRC will license Hermes as a non-power reactor and facilitate licensing certainty for KP-FHR
 - **Operations:** Provide a complete demonstration of nuclear functions including reactor physics, fuel and structural materials irradiation, and radiological controls



Hermes will ultimately demonstrate the U.S. aptitude to license an advanced reactor in a timely manner

KP-FHR Licensing Strategy

