

Chain reactions **start here.**

Epithermal Power delivers next-generation reactor engineering — uniting cutting-edge multiphysics software, hands-on hardware, and systems integration in a single, fast-moving, capital-efficient shop for the space-nuclear and advanced-reactor era. One team across the full reactor lifecycle.

CORE COMPETENCIES

Reactor design & multiphysics

- Reactor & core design
- High-fidelity modeling & simulation
- Criticality safety
- Radiation transport & shielding
- Reactor dynamics & transients
- Accident & launch-load analysis

Integration & test

- HMI & digital twin
- Systems integration
- Prototyping & testing
- TVAC modeling & test
- Separate-effects V&V
- Instrumentation & controls

In-house hardware

- Metal & ceramic machining
- Precision manufacturing
- Brazing & welding
- Vacuum design & build
- High-temperature testing

CRISP — Comprehensive Reactor Integrated Simulation Platform.

Our wholly-owned platform models a reactor end-to-end, from raw nuclear data to accident and launch conditions, in a single automated run — available as SaaS. Requested by DOE & NASA; trained NASA MSFC & GRC.

PROVEN — NATIONAL PROGRAMS

- FSP & NEP reference designs — NASA / DOE
- DRACO cislunar demonstrator — DARPA / NASA
- DOE reference microreactor cores
- DARPA “Fat Cat” reactor
- Army Fast Burst Reactor
- Space-reactor test hardware — criticality & 28 h full power (2018)
- NNSA / DAF critical experiments

WHY EPITHERMAL

The only full-stack reactor team

Authored U.S. government reference designs, run the only integrated 4D platform, own in-house fab, and contributed test hardware to a reactor taken to full power.

Integrated 4D platform (CRISP)

Models a reactor end-to-end — raw nuclear data to accident & launch — in one automated run. Requested by DOE & NASA; trained NASA MSFC & GRC.

Deep-tech materials moat

Six active R&D programs (metal-ceramic bonding, compact shielding, monolithic heat pipes, multifunctional materials) competitors can’t copy.

COMPANY DATA

BUSINESS

Minority-Owned Small Business

HEADQUARTERS

Los Alamos, NM

SAM.GOV

Registered · UEI & CAGE on file

CLEARANCES

Active DOE clearances

MARKETS

Space-nuclear · Defense · Advanced reactors

READY FOR

SBIR/STTR · OTA · subcontracts · IDIQ · IV&V

9+

REACTOR DESIGNS

6

R&D PROGRAMS

DECADES

SPACE-NUCLEAR

Space-reactor test hardware

CRITICALITY TO 28 H FULL POWER

3500°F

CERAMIC FURNACES
(TARGET)

<1e-5 Torr

UHV / TVAC
CHAMBERS

2018

REACTOR TAKEN TO FULL
POWER

5+

GOV REFERENCE
DESIGNS

Get in touch

CAPABILITY BRIEFING · TEAMING

EMAIL

info@epithermalpower.com

WEB · HQ

www.epithermalpower.com
Los Alamos, NM