



International Conference on

small modular reactors

and their applications

21–25 October 2024, Vienna, Austria



Enabling Versatile Nuclear Deployments of the **eVinci™** Microreactor

Amanda Spalding

Fellow Engineer, Advanced Reactors Licensing

Westinghouse Electric Company

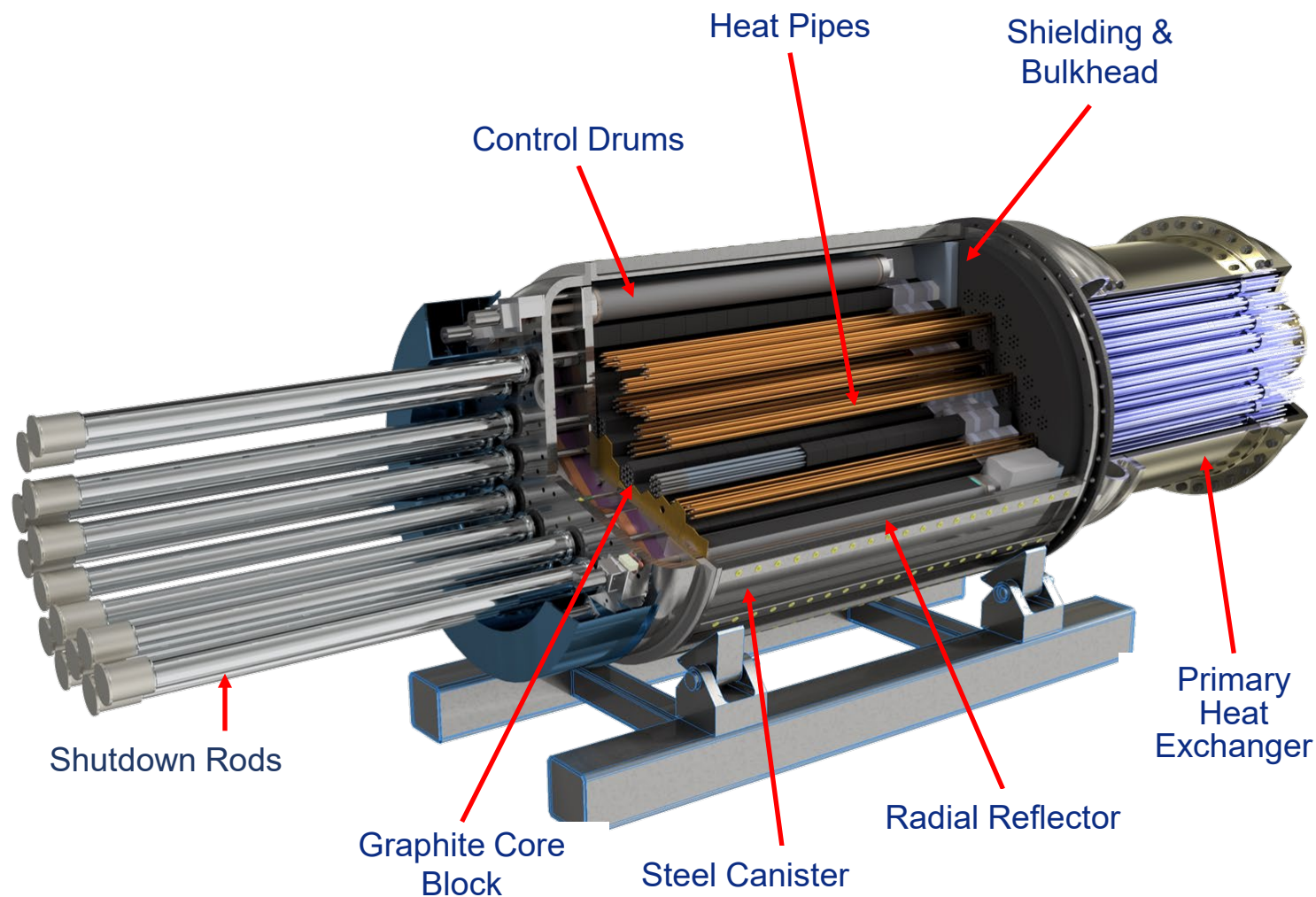


eVinci is a trademark or registered trademark of Westinghouse Electric Company LLC, its affiliates and/or its subsidiaries in the United States of America and may be registered in other countries throughout the world. All rights reserved. Unauthorized use is strictly prohibited. Other names may be trademarks of their respective owners

eVinci Microreactor Design



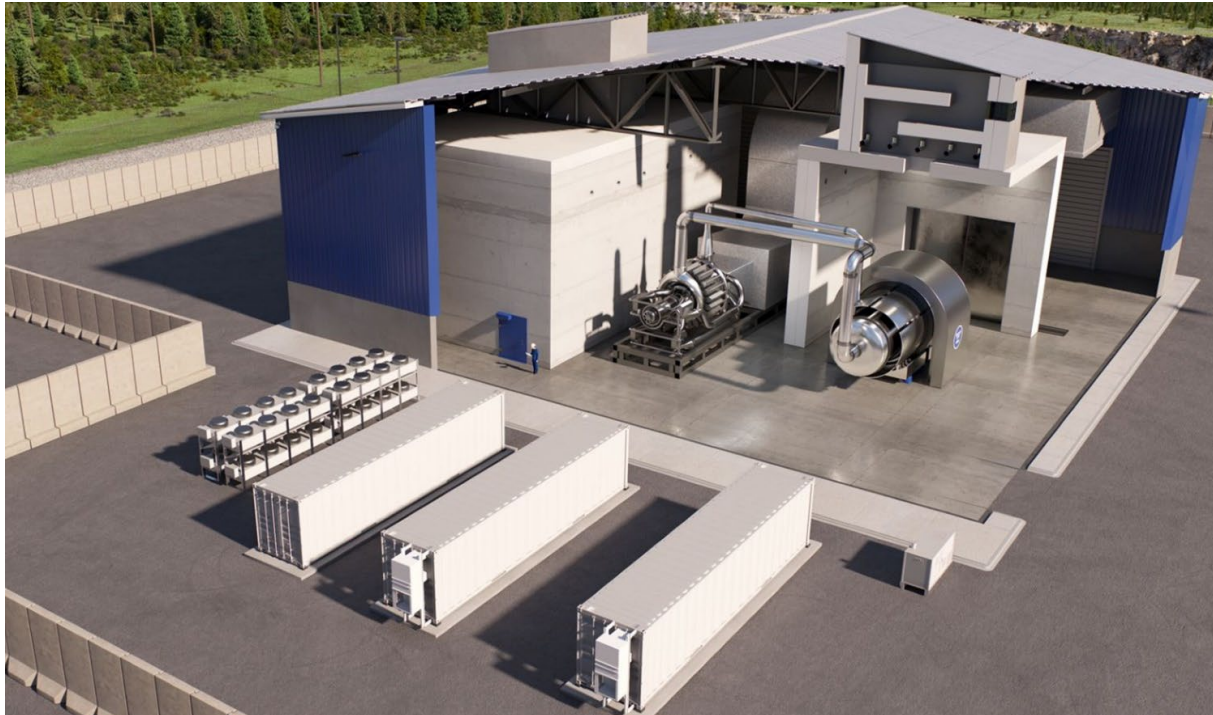
Parameter	eVinci Microreactor
Power	15 MWt
Fuel Cycle	8 years
Fuel (Enrichment)	Tri-structural Isotropic (TRISO) (19.75%)
Coolant	Heat Pipes
Reactor Pressure	~1 atm
Moderator	Graphite
Power Conversion	Open-Air Brayton
Efficiency	34%
Decay Heat Removal	Radial Conduction



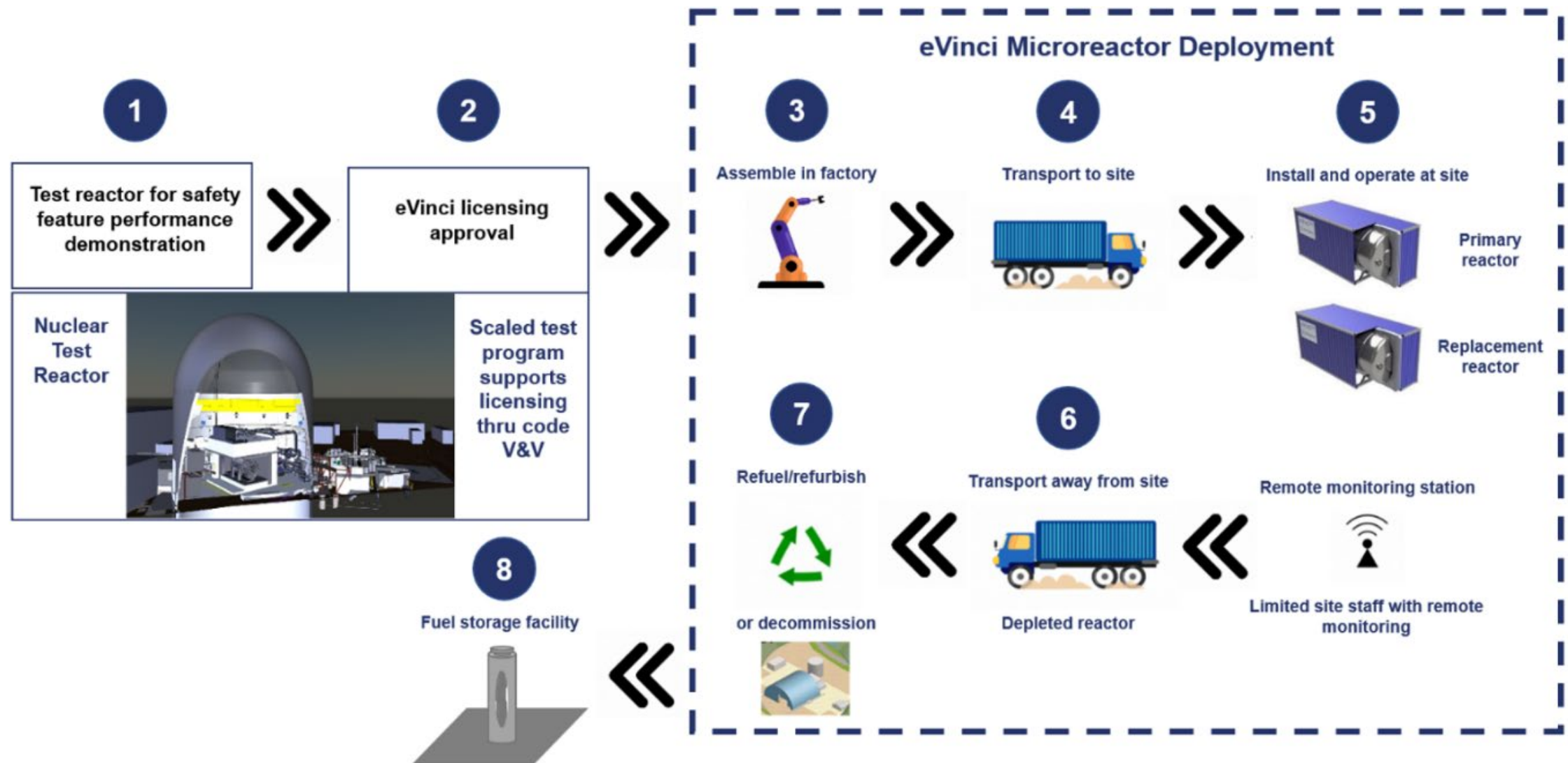
eVinci Microreactor Site Layout

Site and facility shown for single unit

- All buildings and systems: **above ground**
- Reactor site footprint: **< 3 acres**
- Building footprint: **<0.5 acres**



eVinci Microreactor Deployment Model



Transportation Considerations

- Reactor module will be transported in Westinghouse-designed Reactor Transportation Cask (RTC)
 - U.S. NRC Part 71 Certificate of Compliance (CoC) for Type B fissile package
- Ability to transport via road, rail and water
- Transport security plan informed by regulation
 - 10 CFR 73.26 (U.S.)
 - REGDOC-2.13.3 (Canada)
- Route planning for specific shipments will be coordinated with local authorities and meet any necessary regulatory requirements

