




Kairos Power

ECA Forum: Hosting New Nuclear Development
Oak Ridge Case Study
Herms Site Selection

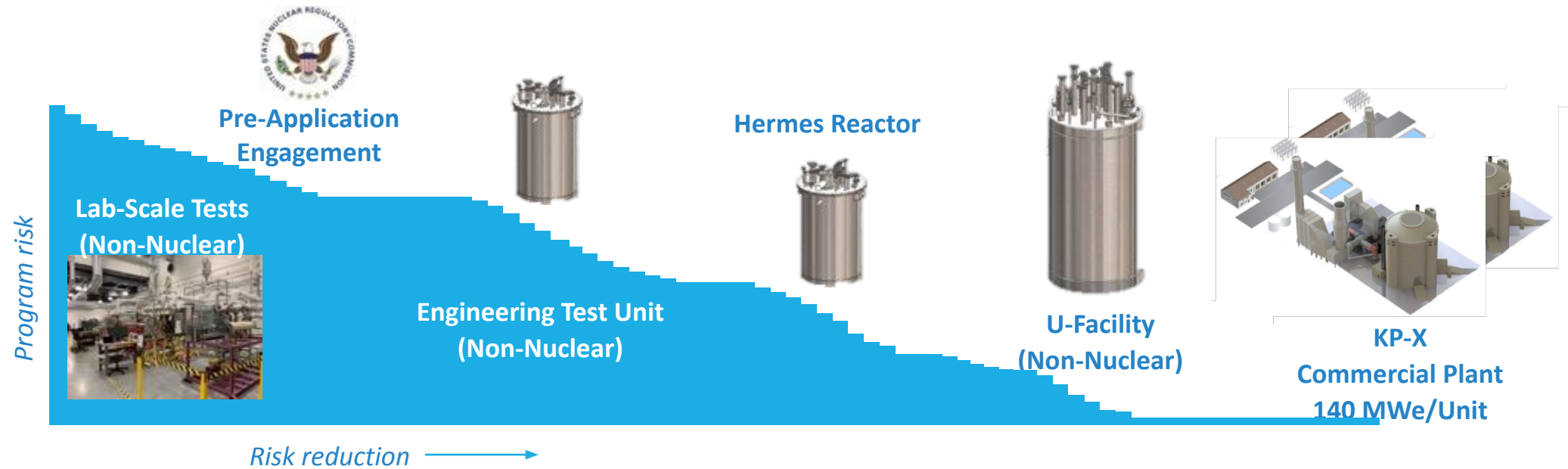


Kairos Power's mission is to enable the world's transition to clean energy, with the ultimate goal of dramatically improving people's quality of life while protecting the environment.

Former K-33/-31 Site Location of Hermes



Risk Reduction



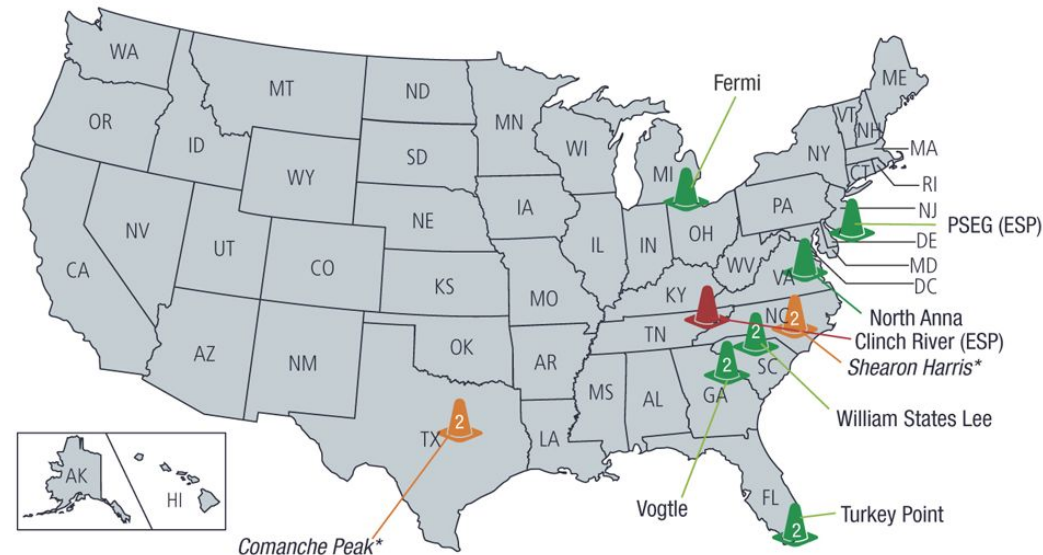
Kairos Power is significantly retiring risk to commercial deployment:

- Technical and Cost risk via iterative development and Hermes reactor
- Regulatory risk via comprehensive pre-application engagement
- Commercial risk via full-scale U-Facility



NRC's NEPA Site Selection Process

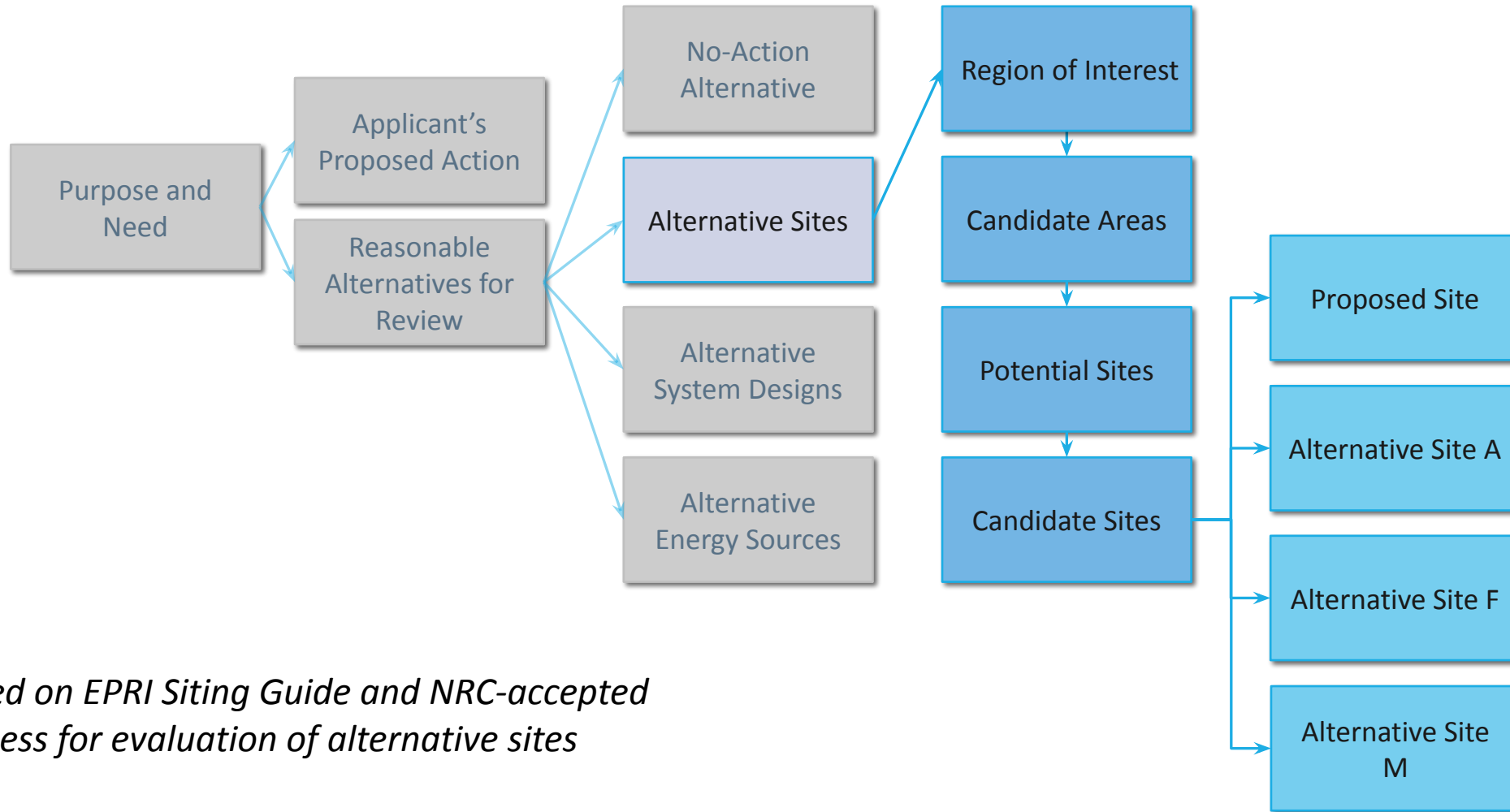
Locations of New Nuclear Power Reactor Applications



- = A proposed new reactor at or near an existing nuclear plant
- = A proposed reactor at a site that has not previously produced nuclear power
- = Approved reactor

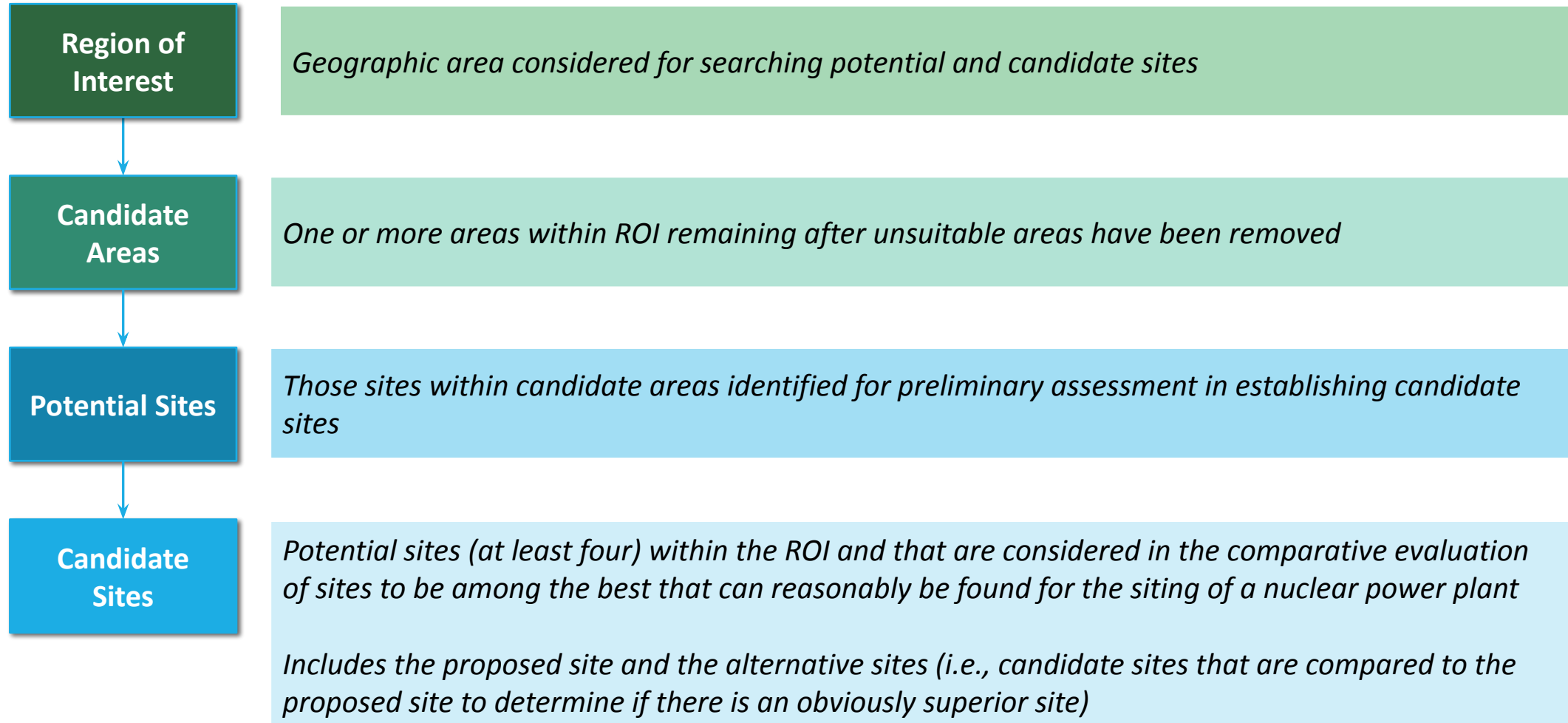
U.S. NRC
 United States Nuclear Regulatory Commission
Protecting People and the Environment
 As of August 2019

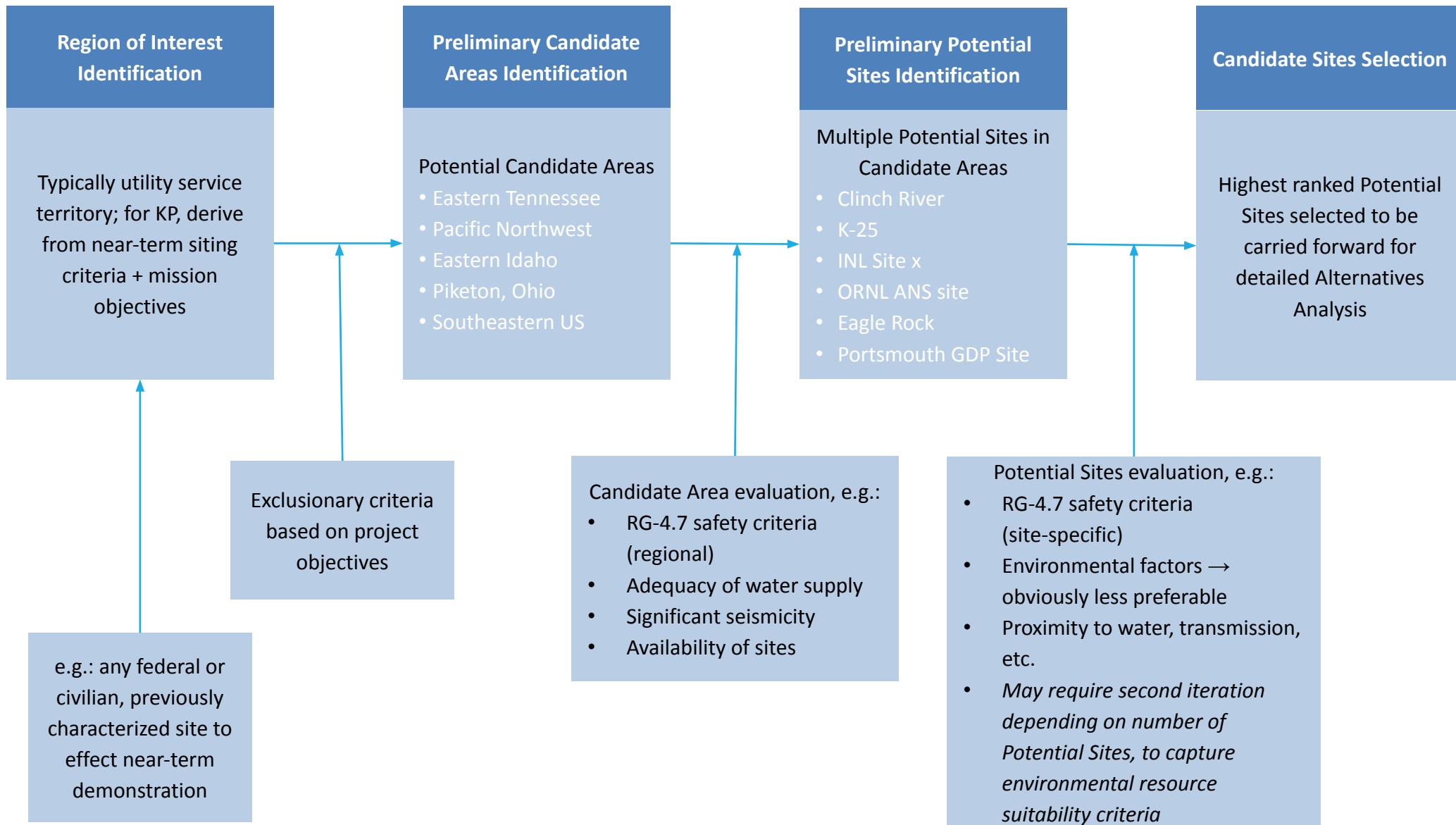
Site Selection Process (NEPA – Environmental Decisions)



Based on EPRI Siting Guide and NRC-accepted process for evaluation of alternative sites

Site Selection – Down-Select Process





Hermes-Specific Considerations/Objectives/Criteria

- Kairos-owned, no service territory – unbounded Region of Interest
- Non-power reactor – simplified site selection process (e.g., “one or more” alternate sites)

Kairos Power Objectives

Nexus to future Kairos Power commercial reactor market or future expansion
Access to construction resources (e.g., concrete, labor, etc.)
Can be acquired (timely) or owner agreement to build
Local development infrastructure (road, rail, power, potable water)
Strong local community support (or lack of opposition)
Water availability (operations phase)
Minimize conflict with other major projects
Location supports (or does not preclude) nuclear utility support
Minimize reliance on site “landlord”
Avoidance of significant environmental impact (e.g., wetlands)
Site-specific existing test/research nexus

What Makes Oak Ridge the Best Choice for Hermes

- Ability to acquire timely
- Existing infrastructure (road, rail, power, potable water) and access to construction resources
- Strong local community support
- Location supports nuclear utility support
- Avoidance of significant environmental impact (e.g., wetlands)

