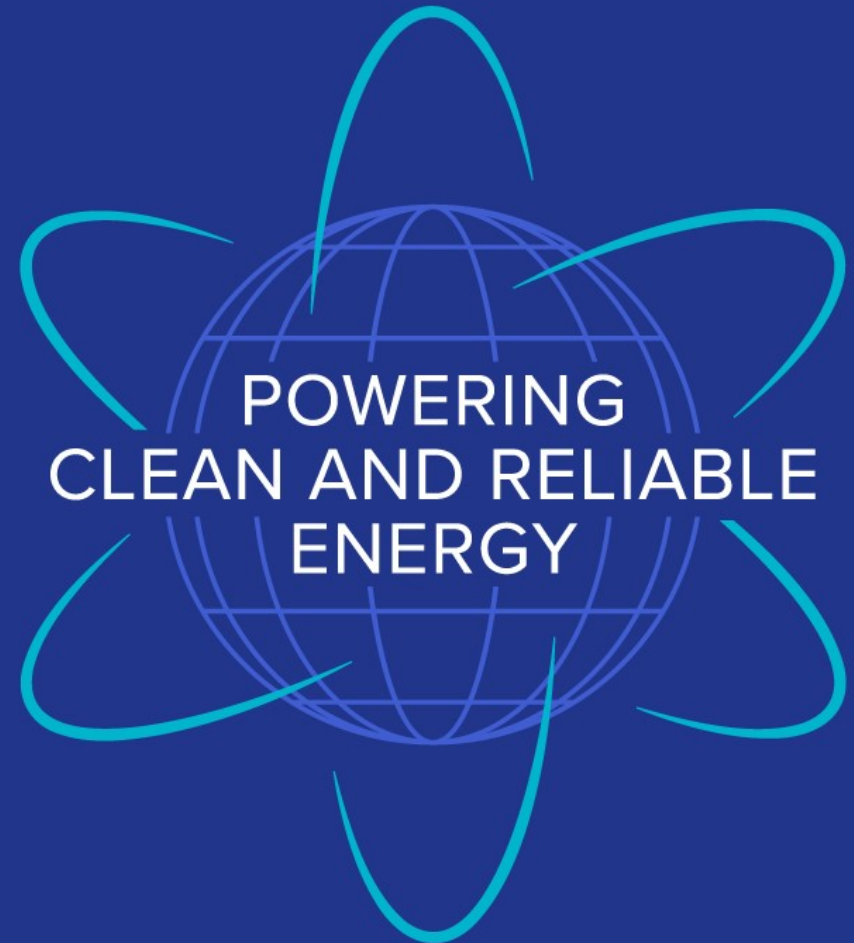


Enabling Rapid High-Volume Deployable Reactors

U.S. NRC
Regulatory Information
Conference

Marc Nichol
Executive Direct, New Nuclear

March 11, 2026



Improved Safety and Economics Compatibility



READILY AVAILABLE EQUIPMENT

- Off-the-shelf Equipment
- Proven Performance

FACTORY-BUILT

- 60-80% of Equipment
- U.S. Supply Chain Growth

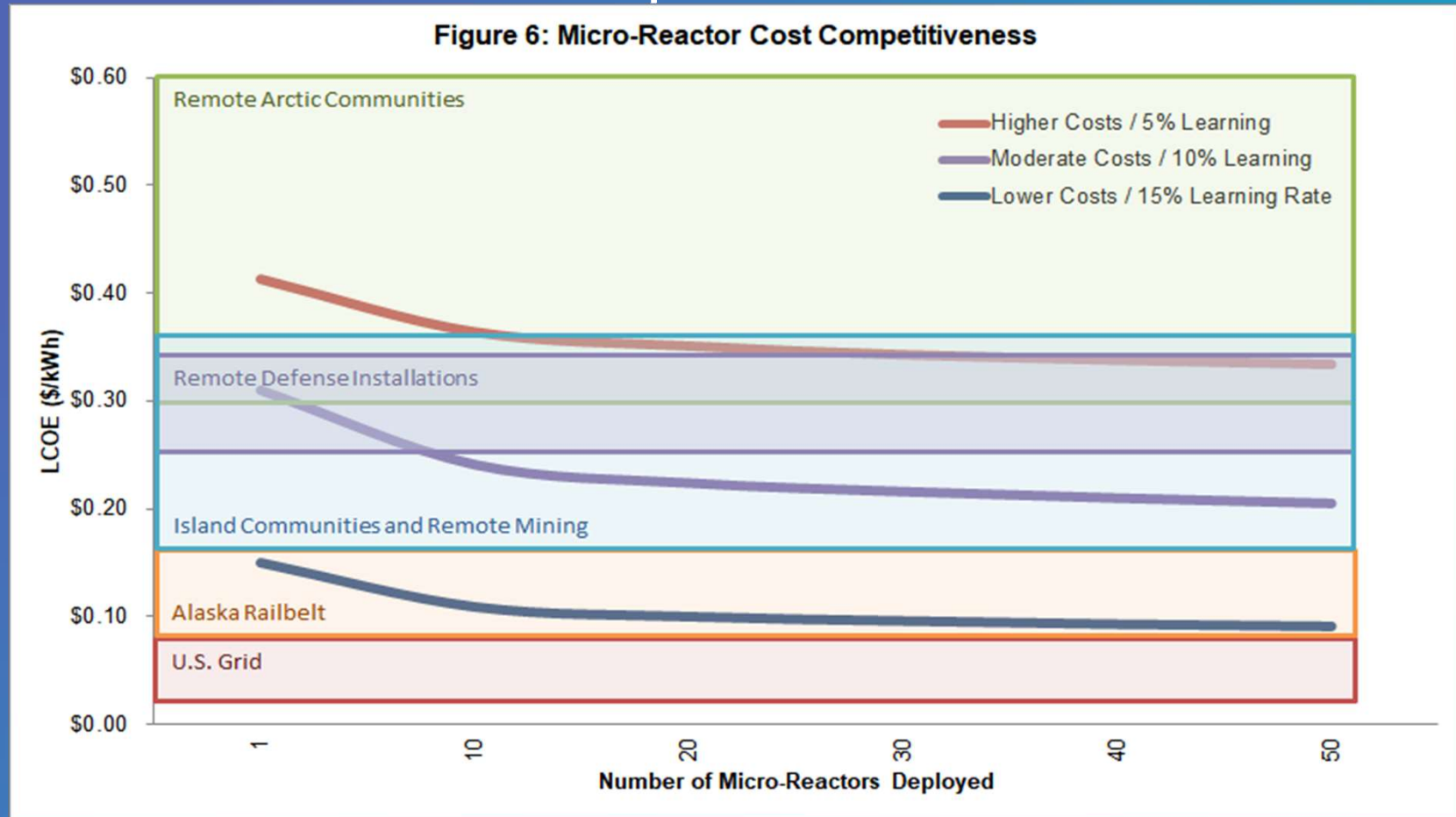
FASTER CONSTRUCTION

- Smaller Structures
- Assembly vs. Construction
- Modern Construction Methods

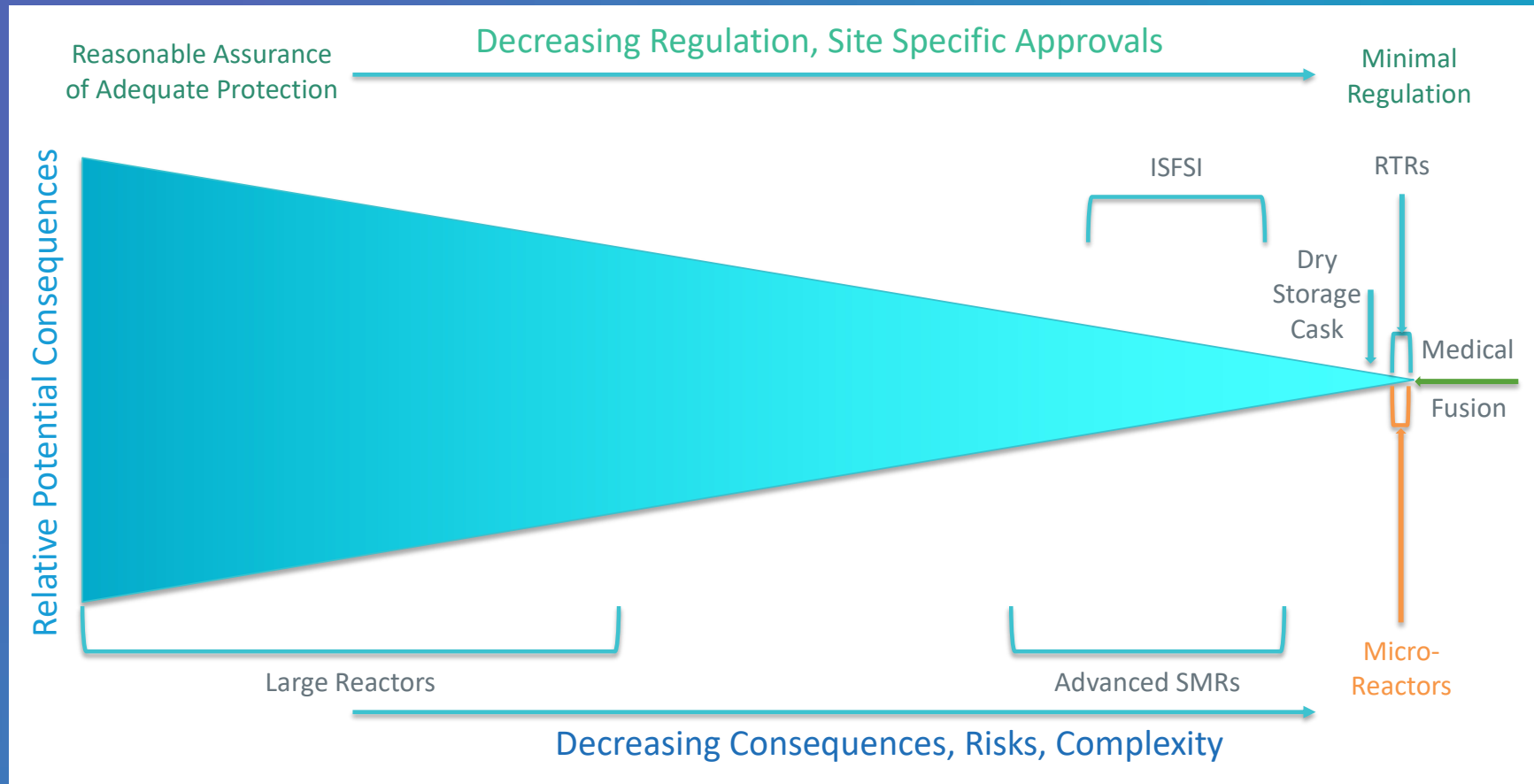
IMPROVED PERFORMANCE

- Higher Thermal Efficiency
- Design and Construction Best Practices
- Operational Excellence

Micro-Reactor Cost Competitiveness



Relative Comparison of Potential Consequences

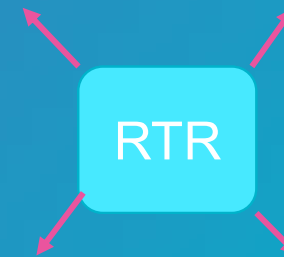


A Different Imperative Yields Different Results



Earlier Efforts

Apply and Adapt Non-Power Approaches



RHDRA Proposal

Rapid High-Volume Deployable Reactors

Regulatory Changes Enabling Safety and Efficiency

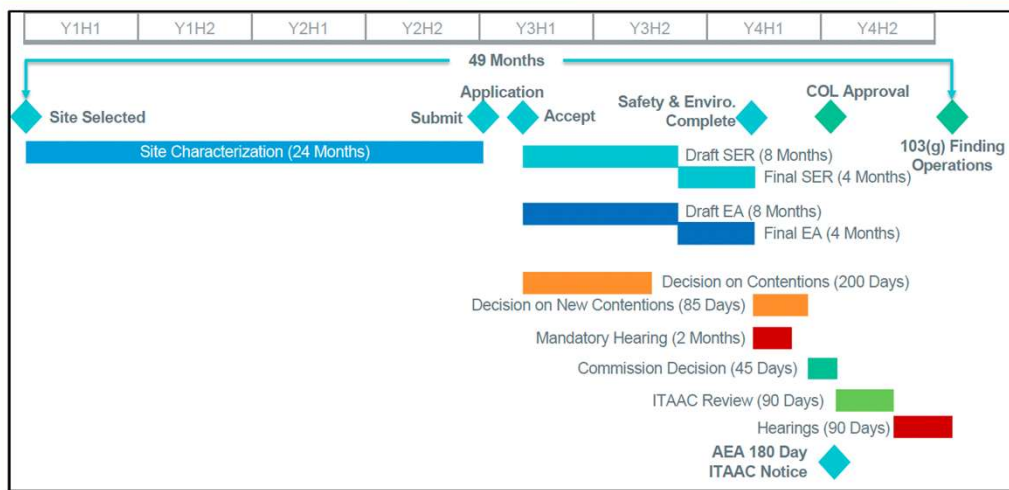


Figure 4-1: NRC Current Licensing Timeline (Expectations for NOAK RHDRA)

Current: ~4 Years

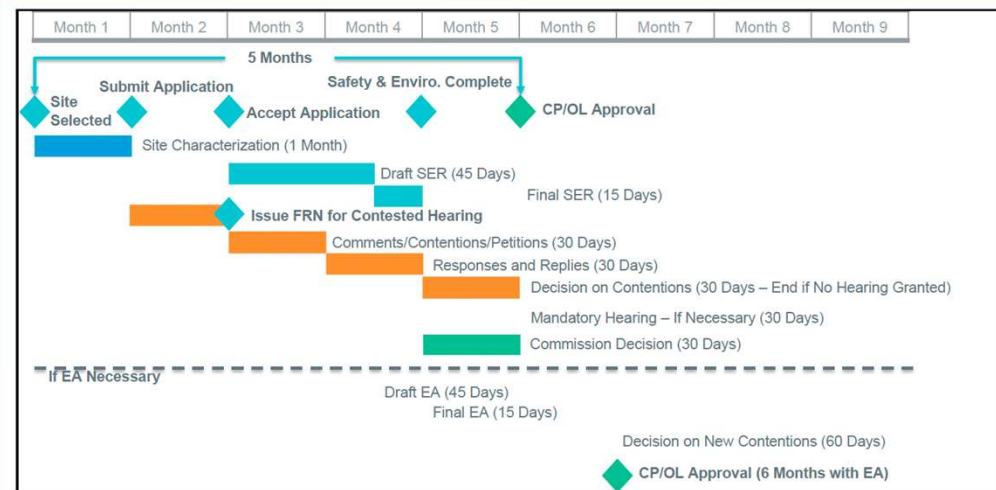


Figure 4-2: NRC Licensing Timeline (Expectations for ReLic Process)

RHDRA Potential: ~6 Months

Applicability to Reactor Types

Examples from RHDRA Topics (not exhaustive)

Performance Criteria	Topics (selected examples)	Reactor Type
Based on criteria not related to public health impacts	<ul style="list-style-type: none"> USGS Data; NOAA Data Design Approval Scope Eliminate Mandatory Hearing 	All
Graded Approaches	<ul style="list-style-type: none"> Environmental (Cat Ex) Operations Staffing Physical Security (Staffing) 	All Advanced Reactors (Lower consequences enable greater use of approach)
Site Boundary EPZ	<ul style="list-style-type: none"> Population Siting (all at SB) Physical Security (no DBT) Commercial QA and C&S 	Some Advanced Reactors
Site Boundary EPZ Plus Additional Protection	<ul style="list-style-type: none"> General License No Part 100 	Not Utilization Facility

25 of 35 topics could be applied to any new reactor

NEI Development of Details for Topics

Guidance Submitted or Planned

- Design Approvals Scope and Authorizations (Appendix 2)
- Aircraft Impact Assessments (Appendix 9)
- Meteorology (Appendix 10)
- Geologic and Geotechnical (Appendix 11)
- Fire Brigade (Appendix 13)
- Remote Operations (Appendix 17)
- Emergency Preparedness (Appendix 20)
- NRC Inspection and Oversight (Appendix 23)
- Quality Assurance (Appendix 32)
- Population Siting (Appendix 34)