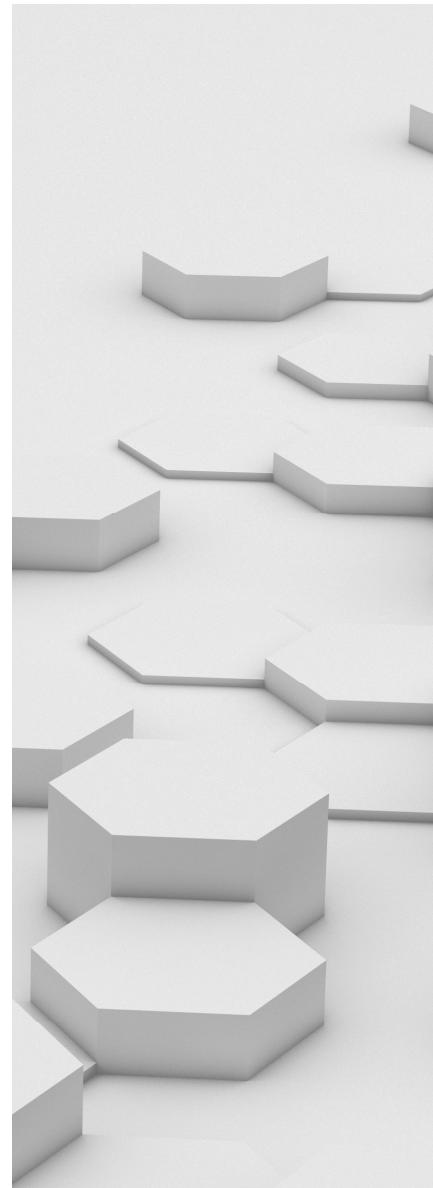
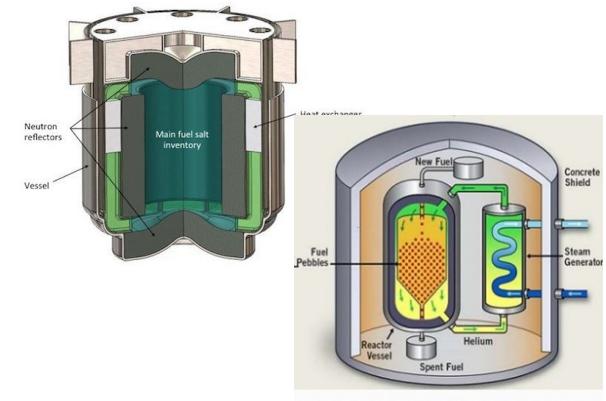


Perspectives on Risk-Informed Licensing of Advanced Reactors

Robert Taylor, Deputy Office Director
for New Reactors,
Office of Nuclear Reactor Regulation,
U.S. Nuclear Regulatory Commission



Ready to review new and advanced reactors



10 CFR Part 50

Large majority of operating power reactor and NPUF* fleet

Construction permit + operating license

*NPUF: nonpower production or utilization facility

10 CFR Part 52

Vogtle 3&4 AP1000, NuScale

Early site permit, COL, design certification, manufacturing license

10 CFR Part 53

New licensing framework under development

Published by June 2025

Building on previous accomplishments and applying lessons learned



Improving regulations and processes for safety-focused, timely, and efficient licensing



Aligning 10 CFR Parts 50 and 52



Create consistent set of technical standards regardless of the licensing process



Incorporate lessons learned from the recent new power reactor licensing reviews



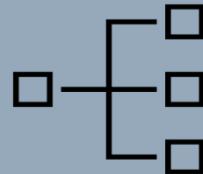
Clarify applicability criteria to enhance predictability in licensing non-light-water-reactor designs

Novel rulemaking approach to achieve clarity and reliability while enabling flexibility

SUBPART A - GENERAL

FRAMEWORK A

Probabilistic risk assessment-led approach



FRAMEWORK B

Technology-inclusive traditional framework



- Equivalent top-level safety criteria and similar design endpoints
- Flexible and predictable licensing approaches
- Many shared common requirements to leverage innovative approaches
- Achieves an equivalent level of safety to that of 10 CFR Parts 50 and 52

SUBPART X - ENFORCEMENT