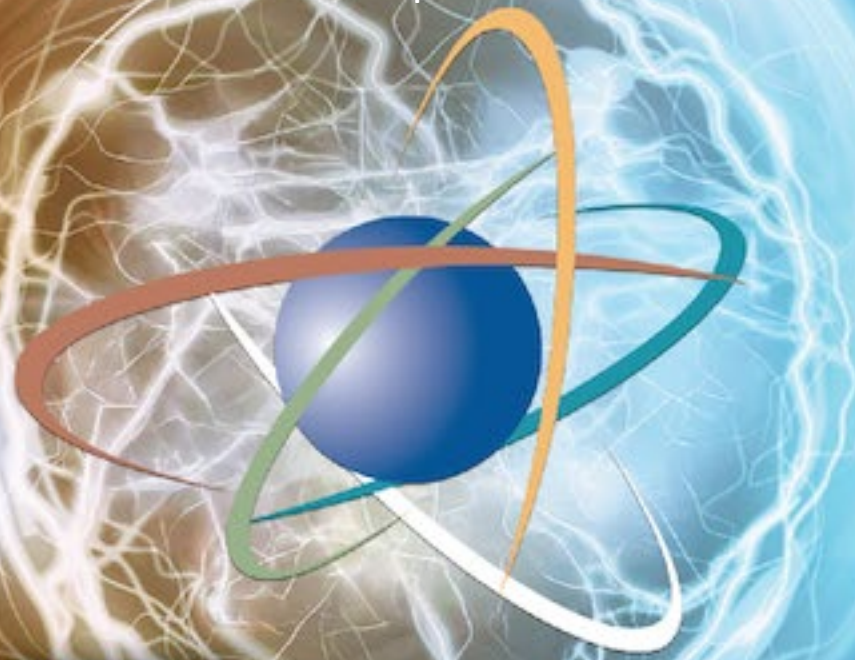
*This presentation does not represent the views of the NRC.

U.S. Nuclear Regulatory Commission
38th Annual Regulatory Information Conference

RIC2026

Regulation, Innovation and Collaboration for a Safer Tomorrow



March 10-12, 2026

Bethesda North Marriott Hotel
and Conference Center
Rockville, MD

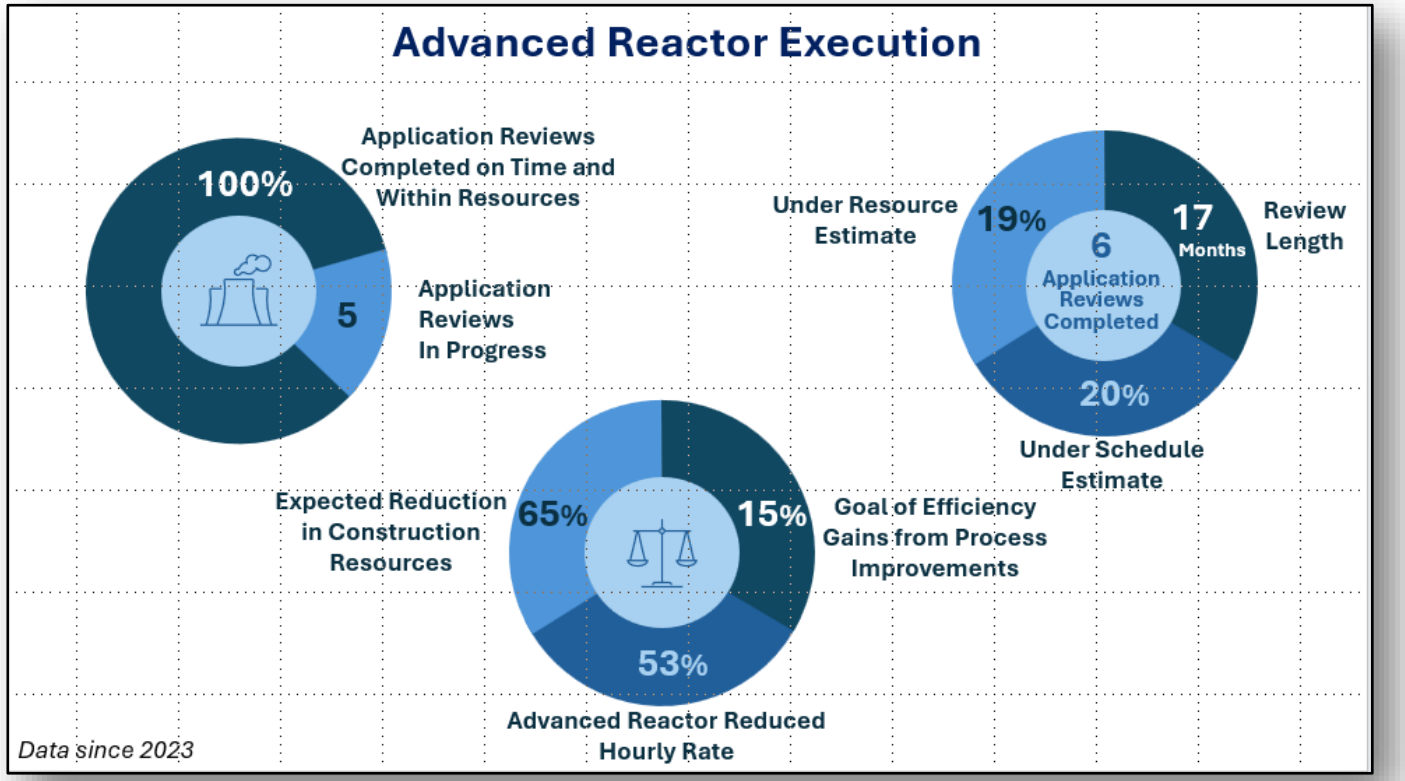
Advance Reactor Progress and Lessons Learned

#NRCRIC2026 NRC.gov

Executing the NRC Mission for Advanced Reactors

The NRC is delivering on its commitment to enable safe deployment of advanced reactors.

- Executive Order (EO) 14300 response
- ADVANCE Act
- NEIMA requirements



NEIMA Vision and Strategy

Regulatory Activities

Project Dashboards

Stakeholders Site

Disclaimer: *The content and views captured are those of the RIC participant and do not necessary represent the official view of the NRC.*

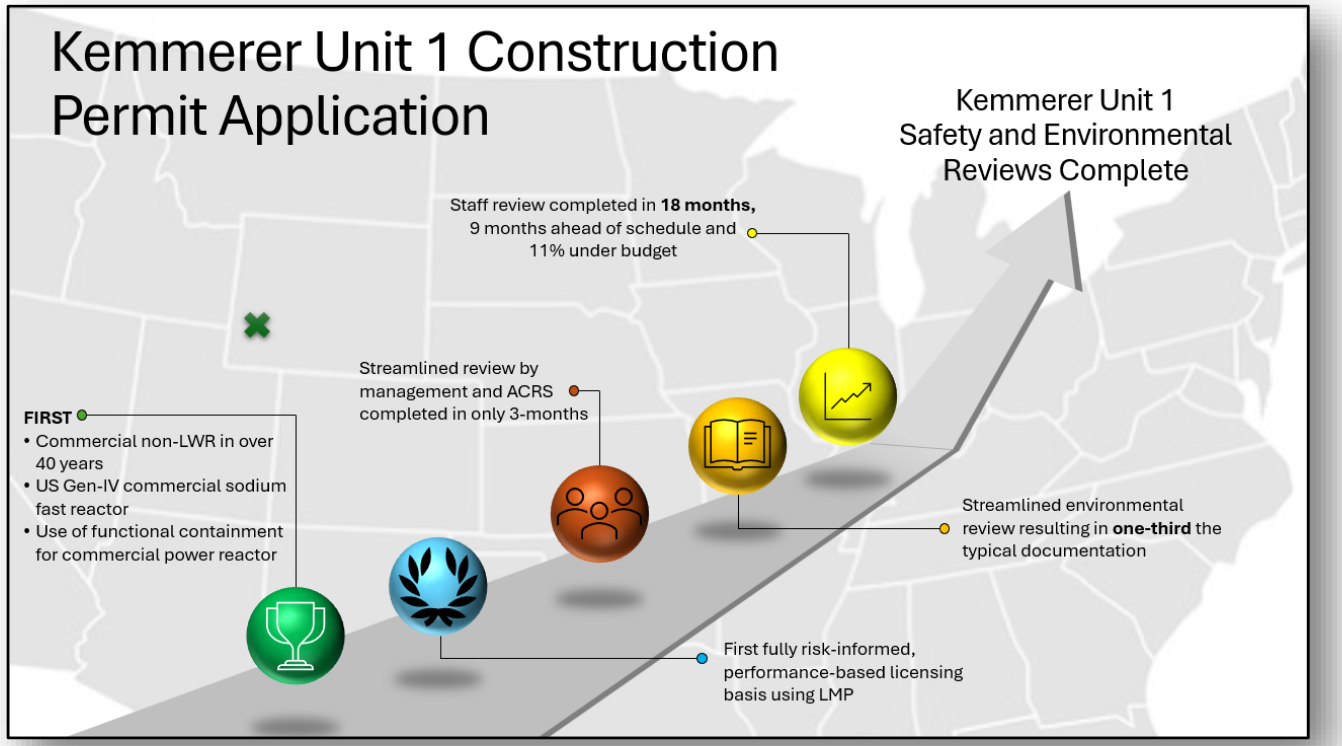
Advanced Reactors Major Accomplishments

- Standard design approval for NuScale
- Final safety evaluation and final environmental impact statement for TerraPower
- SECY-25-0052, “Nth-of-a Kind Microreactor [NOAK] Licensing and Deployment Considerations”
- Reduced hourly rate for advanced reactors
- Non-Power Production or Utilization Facility License Renewal rule
- ADVANCE Act activities
- The Sunset Rule as a direct final rule
- SECY-25-0074, “Expedited Construction of Certain Structures, Systems, and Components”

The NRC Is Integrating Lessons Learned Across Advanced Reactor Applications

- Leveraging audits, voluntary supplements, and requests for confirmation of information (RCI) over the use of requests for additional information (RAI).
- Emphasizing early engagement through extensive preapplication engagement.
- Using core teams to more effectively risk-inform reviews and focus on safety-significant issues.
- Proactively identifying novel topics to determine safety significance and identify an appropriate regulatory pathway to address them.

Kemmerer—LMP Implementation



Advanced Reactor Engagement: Licensing

Issued

Construction Permit

- Kairos Power
- TerraPower
- Abilene Christian University

Standard Design Approval

- NuScale Power for all humankind

In Progress

Construction Permit

- X-energy
- TVA

Combined License

- Fermi America

Early Site Permit

- Duke Energy

Limited Work Authorization

- Holtec International

Advanced Reactor Application Projects

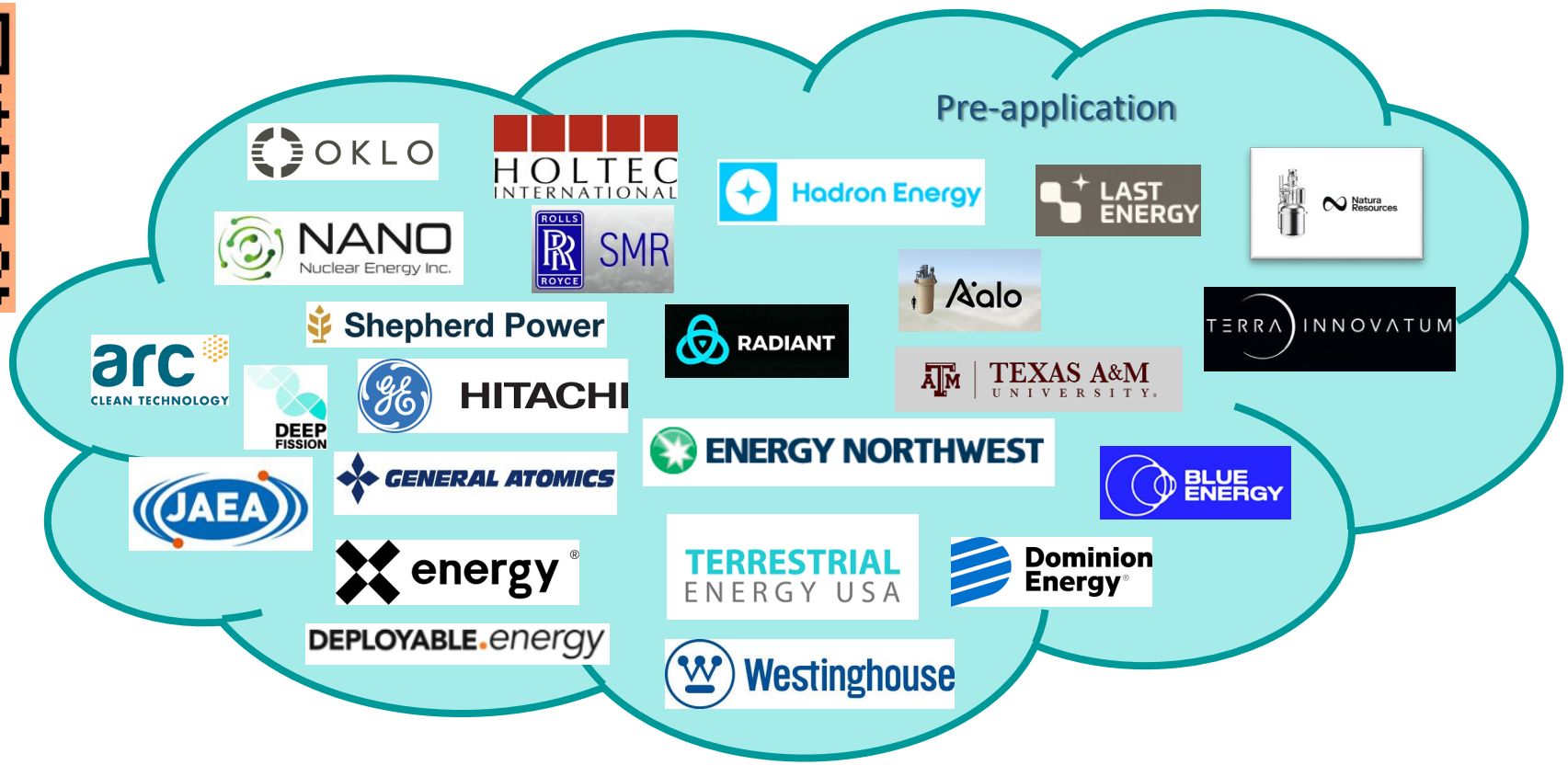
New Reactor Site

ADVANCED REACTOR READY

Advanced Reactor Engagement: Pre-application

Prospective Applicant Landing Page

Preapplication Activities



ADVANCED REACTOR READY

Developing Advanced Reactor Licensing Infrastructure

Microreactor Licensing and Deployment Considerations:

- The NRC staff issued a paper on Nth-of-a-Kind Microreactor Licensing and Deployment Considerations, SECY-25-0052, which describes a standardization strategy that may result in the NRC completing NOAK microreactor licensing actions in significantly less time than the 18-month deadline specified in EO 14300 (90 FR 22587).
- The NRC staff is developing a proposed rule to address licensing requirements for microreactors and other low-consequence reactors as required by section 5(e) of EO 14300. The strategy for this rule was described in public meetings over the summer. A summary of that discussion is included on the microreactors public website.

RIC Session W12

Wednesday, March 11 (3:45 p.m. – 5:15 p.m.)

"Enabling the Safe and Timely Deployment of Microreactors: Meeting Critical U.S. Needs Through Innovation and Regulatory Readiness"

NOAK Microreactors, SECY-25-0052

Microreactors Public Website

Public Meeting: Microreactors Licensing & Rulemaking Strategy (ML25223A181)

Developing Advanced Reactor Licensing Infrastructure (cont.)

Pathway to Leveraging U.S. Department of Energy (DOE) and U.S. Department of War (DOW) Authorizations:

- The NRC staff issued the memorandum, "Expectation for NRC Staff Involvement with Prospective NRC License Applicants Planning to Refer to DOE and DOW Authorization Processes", ML25322A208.
- The NRC and DOE signed "Addendum No. 9 to the Memorandum of Understanding between U.S.DOE and U.S.NRC on Nuclear Energy Innovation", ML25303A288.

RIC Session T1
Tuesday, March 10 (1:30 p.m. - 3:00 p.m.)
"*One Government, One Mission: Advancing Safe Deployment of Nuclear Energy*"

NRC Involvement with Applicants Planning to Reference DOE/DOW Authorizations

Addendum 9 to Memorandum of Understanding with DOE

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