

# **Perspectives on Modernizing NRC's Processes to Enhance Efficiency and Effectiveness of Advanced Reactor Regulation**

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**THIRD WAY**

# ADVANCE Act mandates regulatory and licensing enhancements for new and emerging technologies

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- Establishing a licensing structure to support efficient, timely, and predictable regulatory reviews, with specific efforts focused on licensing at brownfield and retired fossil-fuel electric generating sites and on siting at existing nuclear plant sites (secs. 505, 206 & 207);
- Developing a regulatory framework for microreactors (sec. 208);
- Identifying unique issues related to use of advanced reactors for non-electric applications (sec. 203);
- Evaluating advanced manufacturing techniques to build nuclear reactors better, faster, cheaper, and smarter (sec. 401);
- Qualifying and licensing of advanced nuclear fuel concepts (sec. 404);
- Assessing the licensing framework for mass-manufactured fusion devices (sec. 205);
- Streamlining the environmental review process (sec. 506).

# NRC has risen to the challenge before

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- Part 52 was originally developed in the 1980s to improve licensing process and enhance standardization.
- Effort was focused in the 1990s on preparing for reactor license renewals.
- The Reactor Oversight Process was adopted in 2000 to provide a more focused risk-informed assessment of licensee performance.
- Outcomes under the Licensing Modernization Project provided guidance on non-light water reactors.

# Where to focus – the “Regulatory Craft”

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- Leverage what’s been done and what’s known from past experience.
- Remember the agency has broad discretion under its statutory mandates to meet its objectives.
- Adapt to the evolution of technologies and their projected applications.
- Allow innovation.
- Make processes more timely and efficient.

# Where to focus – the “Regulatory Craft” (2)

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- . Keep all levels of the agency aware of progress.
- . Ensure timely resolution of disputes and conflicts by raising to appropriate management levels.
- . Ensure collaborative work among technical, legal and other staff – avoid siloes!
- . Keep stakeholders informed and provide for their contribution.
- . Focus on the objectives without being entangled by “process-itis”.