

Nuclear Innovation Alliance Part 53 Comments

9 December 2021

NRC Commissioner Briefing on Part 53 Rule Development

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NIA focuses on NRC licensing modernization activities to enable advanced nuclear energy as a climate solution

- Nuclear Innovation Alliance (NIA) is a leading think-and-do tank focused on achieving the conditions for success for advanced reactors so they can be part of the climate solution.
- Deeply engaged with the advanced reactor community as well as the broader energy and climate community.
- NIA's core strengths:

Analysis

Advocacy

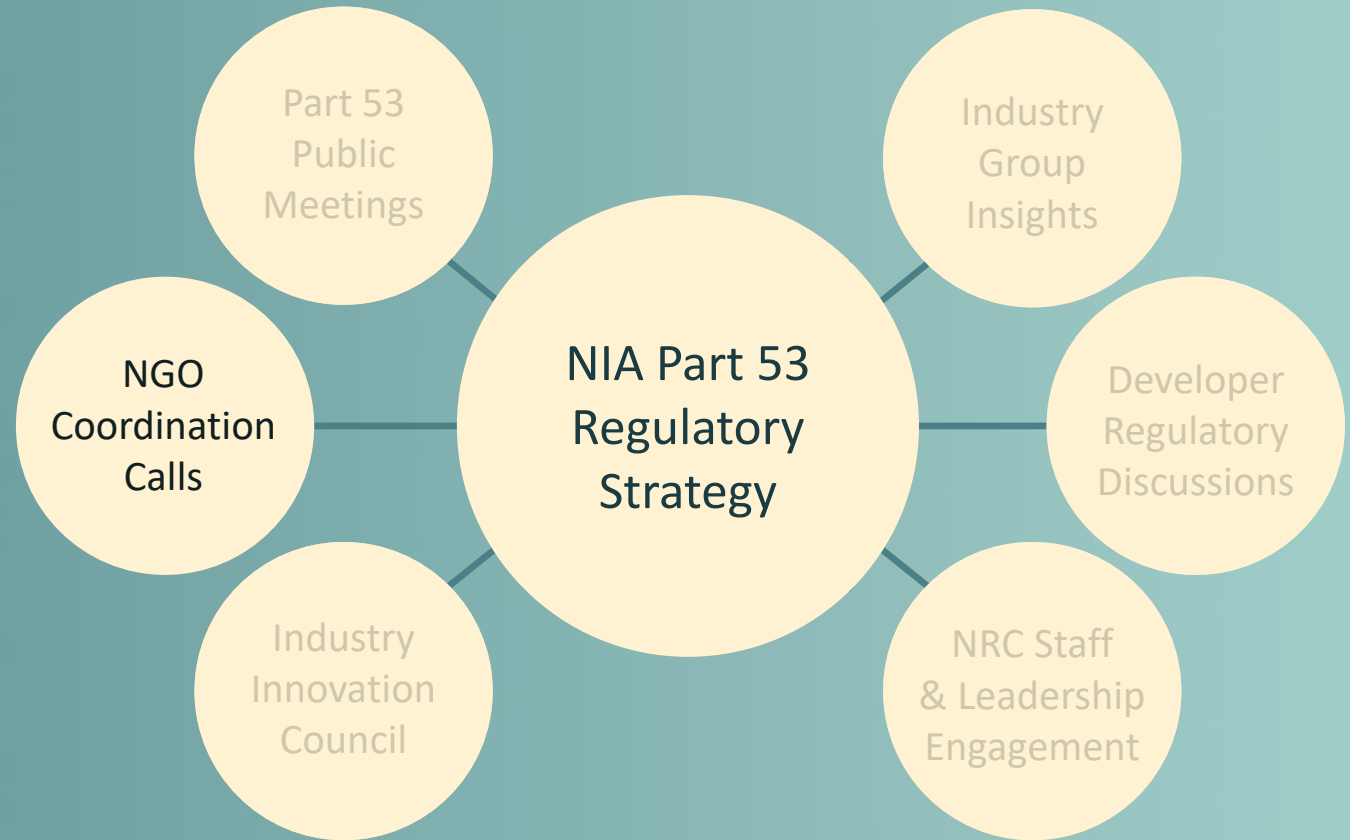
Stakeholder
collaboration

Independent,
non-partisan

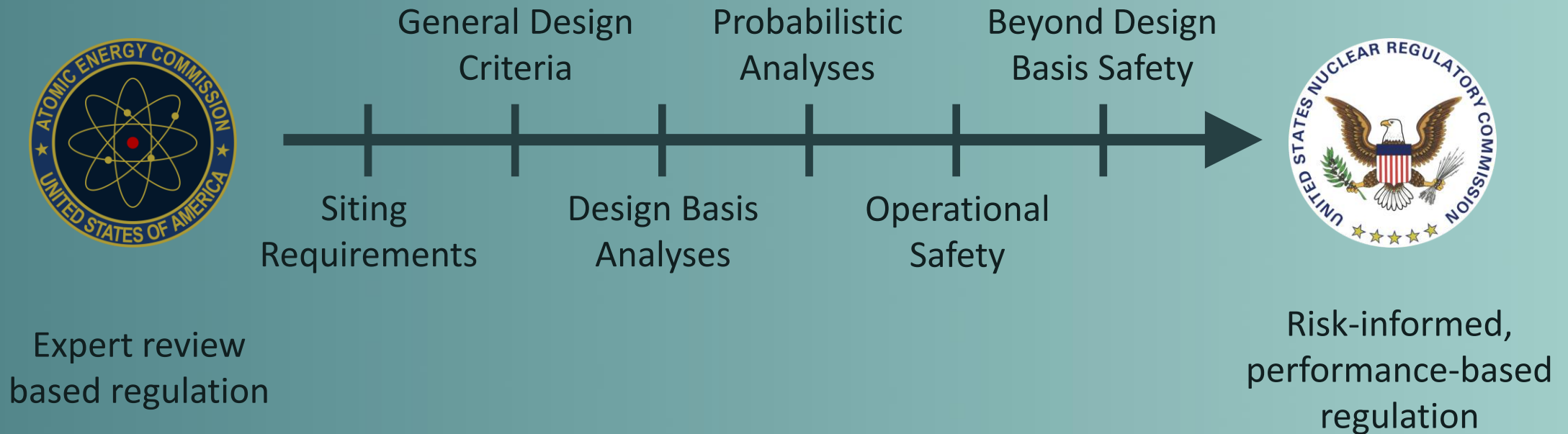
Strong track
record

Thought
leadership

NIA engages with other clean energy NGO stakeholders to inform comments and find common ground



Development of nuclear regulatory frameworks is an inherently iterative process



Part 53 should enable both evolutionary and innovative approaches to regulation



Westinghouse AP1000

1120 MWe
Water Cooled

Evolutionary Regulation

Regulatory paradigms

- Regulatory requirements
- Analysis methods
- Regulatory assumptions
- Reactor design criteria
- Probabilistic assessments
- Organizational programs
- Operational requirements
- Equipment qualification
- Reactor siting

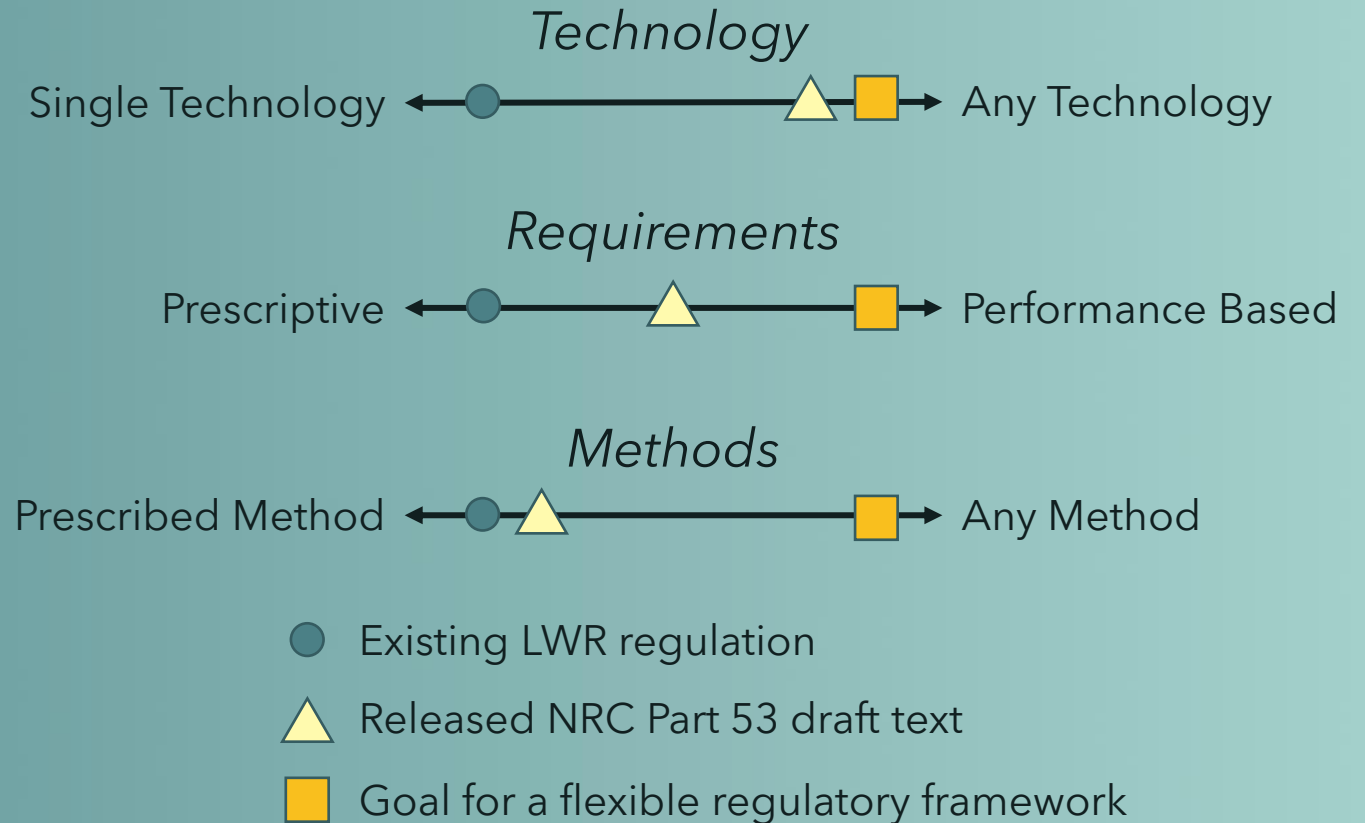
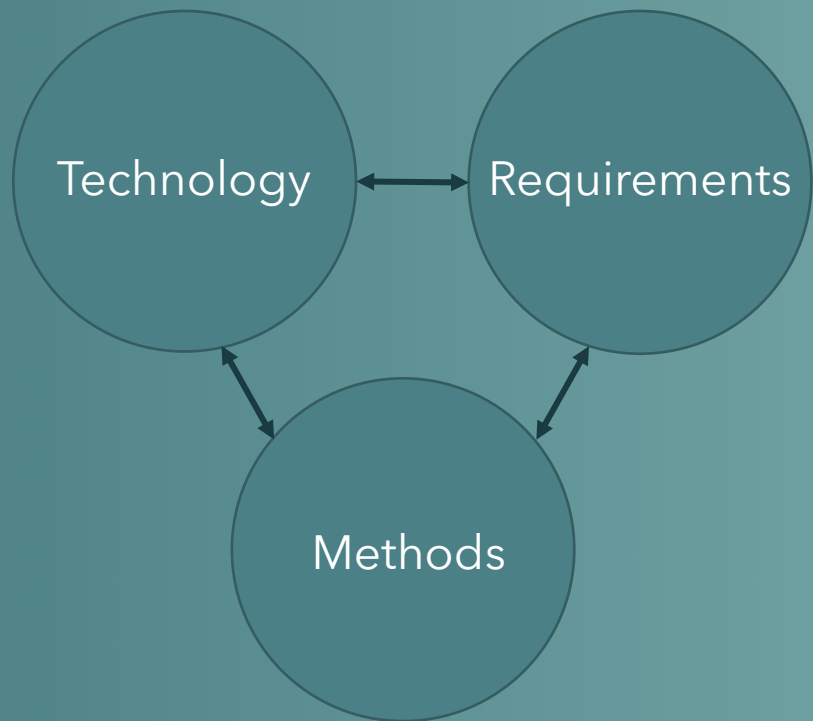


Oklo Aurora

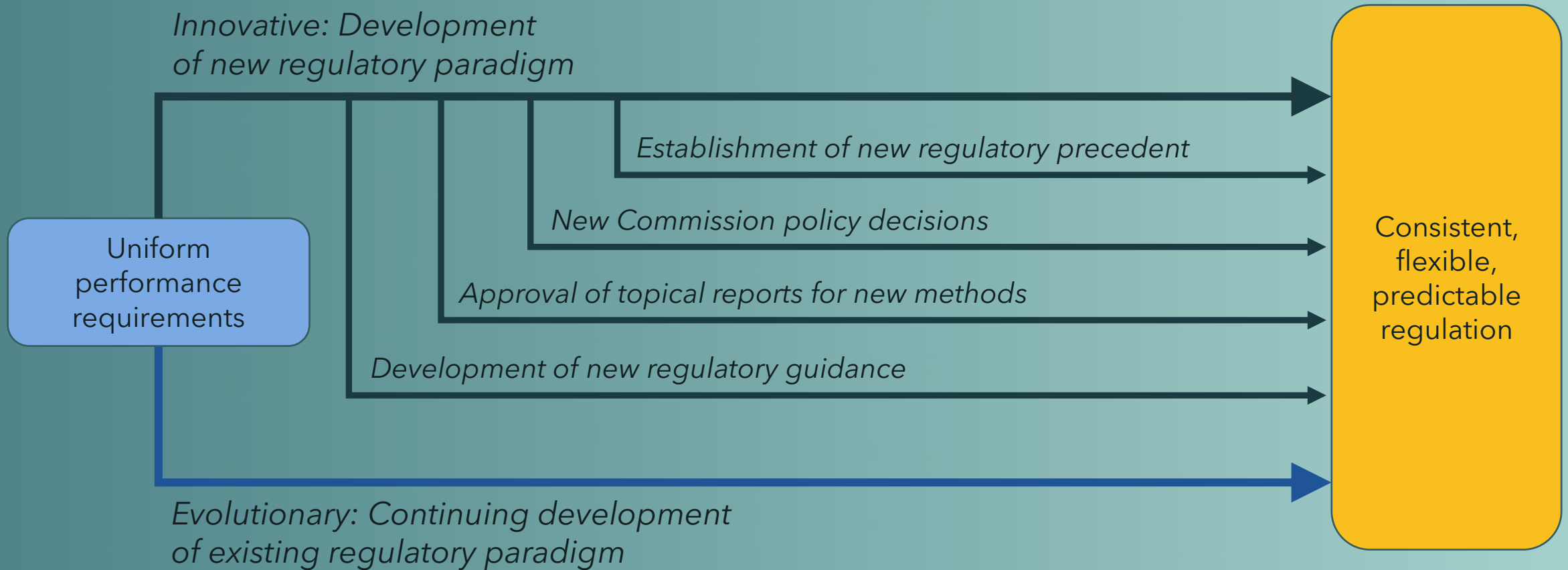
1 MWe
Heat Pipe Cooled

Innovative Regulation?

Part 53 regulations can balance certainty and flexibility across multiple characteristics



Part 53 could enable selection of framework pathways that meet facility or project goals



Part 53 framework can be reimagined to facilitate both evolutionary and innovation regulations

