Summary of Part 53 Stakeholder Workshop Series Part 1

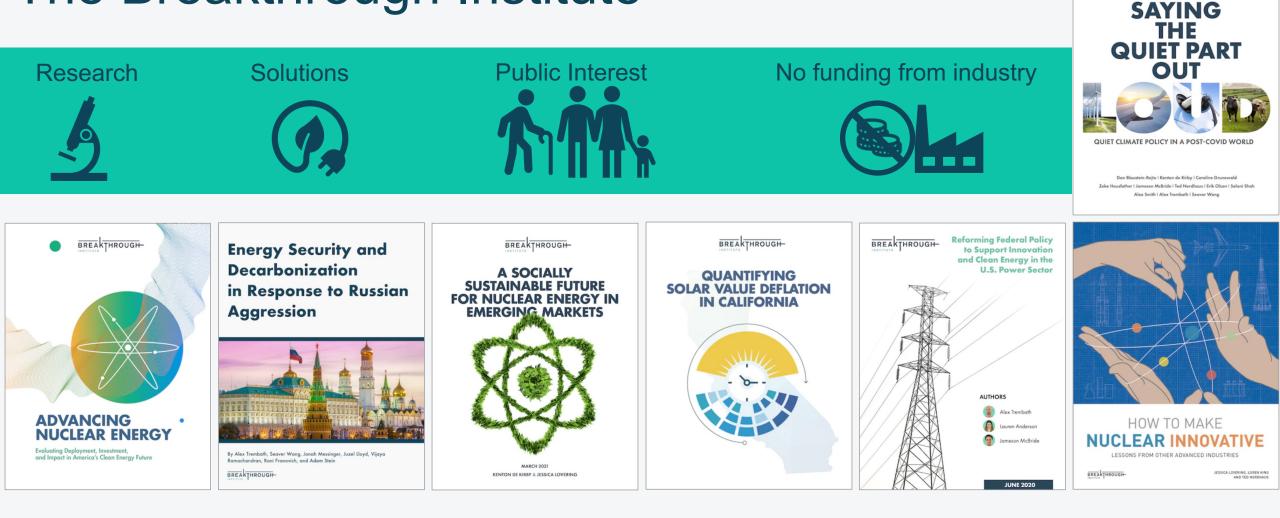
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April 28, 2023





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BREAKTHROUGH



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Workshop: Part 1 Identify and discuss alignment/misalignment Workshop: Part 2 Discuss conceptual framework draft Discuss misaligned topics

Revise conceptual framework

Share with Commission for consideration alongside proposed Part 53 staff draft

Strong Public Interest

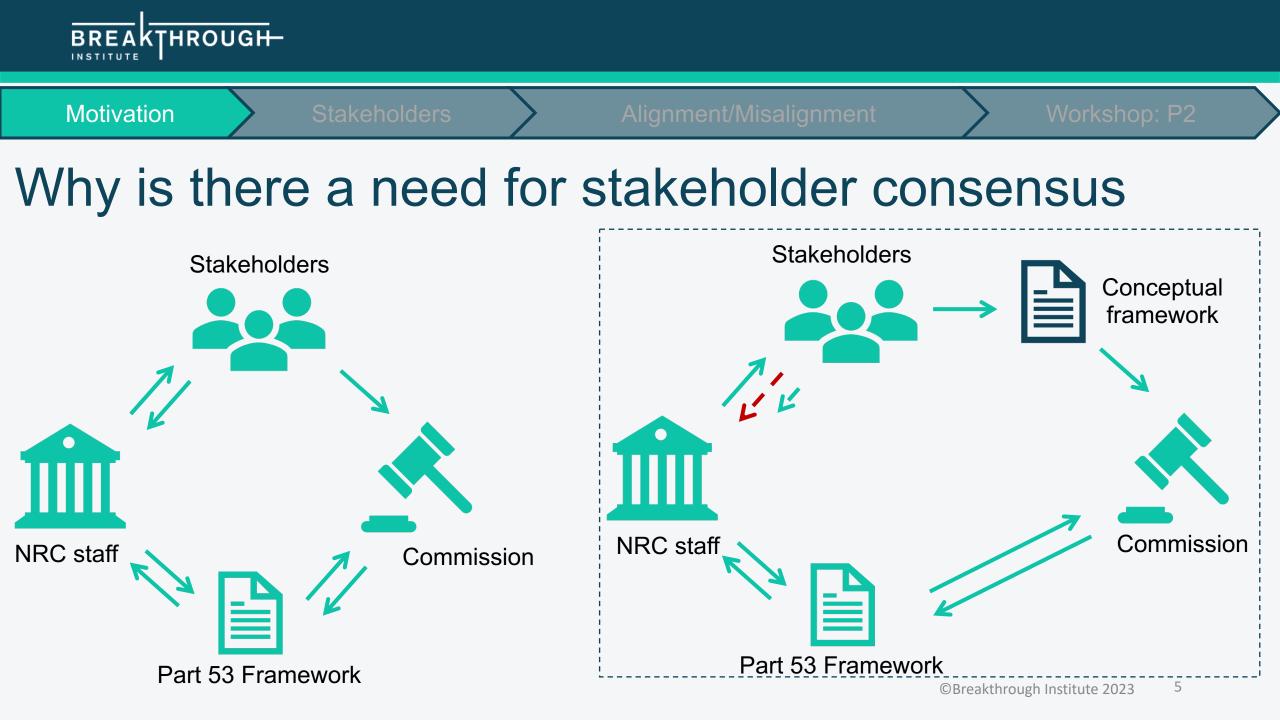
- Strong consensus that nuclear energy is needed
 - Meet climate goals
 - Reduce health and safety impacts from energy system
 - Just energy transition

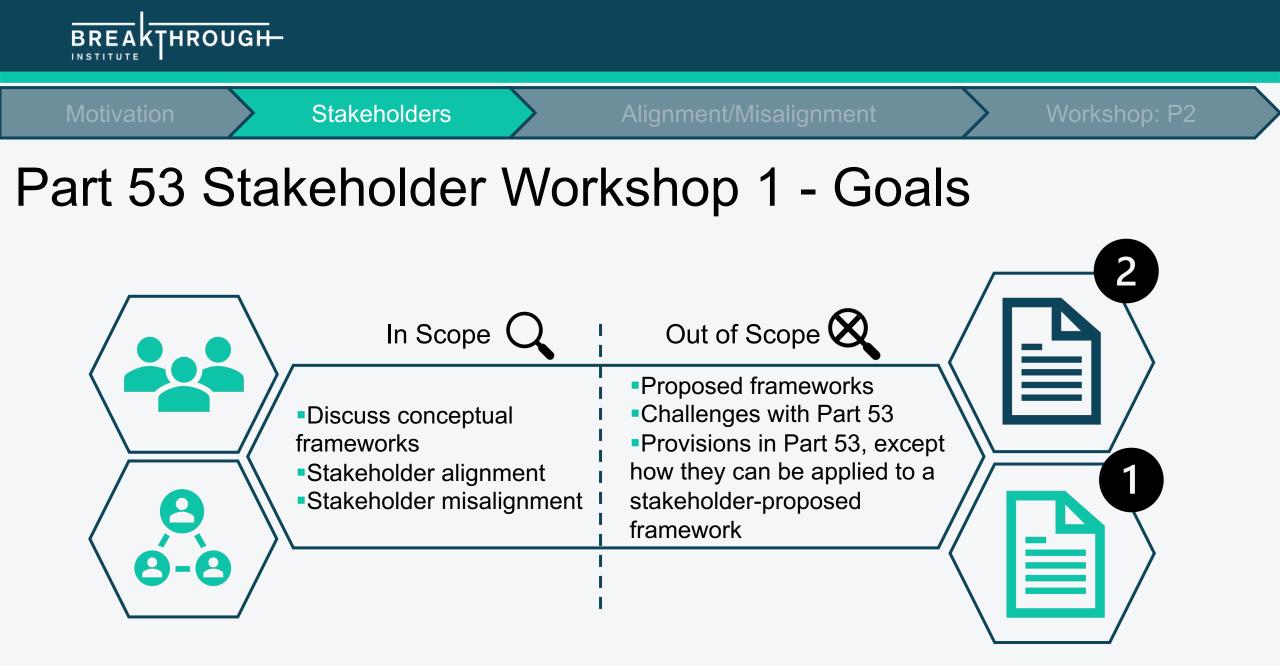
Improves safety, reliability, energy security, and enables environmental justice goals

Significant potential to transition fossil fuel power plants to advanced nuclear in nearly all states

Significant deployment is needed to reach energy capacity goals
 Approximately 50-150 GW (9-22% of capacity) by 2040
 HUNDREDS of reactors in coming decades

The NRC must be ready to effectively and efficiently license





Motivation

Alignment/Misalignment

Part 53 Stakeholder Workshop 1 - Summary

Conceptually aligned

 Comply with NEIMA, RITIPB, practicability, enabling efficiency and rapid innovation

Define performance-based requirements, objective measures
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- •Be clear on the meaning of risk-informed
- Develop a single set of rules and reqs (high-level criteria)
- •Leverage guidance to maximum extent possible
- Consider principles of good regulation in general
- •Define how operational requirements align with reqs in rule
- Communicate how and when risk analysis is performed
- Have decision-making structure for performance-based approach
- Have integrated approach to safety, security, emergency planning
 Exclude ALARA

•Limit/make optional prescriptive approach to design and analysis (move to guidance)

 Exclude requirements unnecessarily more stringent than those in P.50/52 Needs further consideration

Cumulative risk requirement

- Facility safety and other
- operational programs
- Defense-in-depth
- Operator licenses including

changing classes

- AERI (how it is defined or applied)
- Manufacturing licenses
- Quality Assurance
- Length of Part 53

KTHROUGH-Workshop: P2 Part 53 Stakeholder Workshop 2 - Goals Out of Scope **Q** In Scope Ē Proposed frameworks Assess conceptual skeleton Challenges with Part 53 framework based on Provisions in Part 53, except alignment how they can be applied to a Endorse, Iterate, or Reject stakeholder-proposed Reaching consensus framework



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