Summary of Part 53 Stakeholder Workshop Series

Part 1

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Research

Solutions

Public Interest

No funding from industry
The Breakthrough Institute

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
Why is there a need for stakeholder consensus

Stakeholders

NRC staff

Part 53 Framework

Commission

Conceptual framework

Part 53 Framework

NRC staff

Commission

Stakeholders
Part 53 Stakeholder Workshop 1 - Goals

In Scope:
- Discuss conceptual frameworks
- Stakeholder alignment
- Stakeholder misalignment

Out of Scope:
- Proposed frameworks
- Challenges with Part 53
- Provisions in Part 53, except how they can be applied to a stakeholder-proposed framework

Stakeholders
Motivation
Alignment/Misalignment
Workshop: P2
Part 53 Stakeholder Workshop 1 - Summary

Conceptually aligned
- Comply with NEIMA, RITIPB, practicability, enabling efficiency and rapid innovation
- Define performance-based requirements, objective measures
- 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
Part 53 Stakeholder Workshop 2 - Goals

**In Scope**
- Assess conceptual skeleton framework based on alignment
- Endorse, Iterate, or Reject
- Reaching consensus

**Out of Scope**
- Proposed frameworks
- Challenges with Part 53
- Provisions in Part 53, except how they can be applied to a stakeholder-proposed framework
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