# 10 Part 53

Perspective on Rule Development

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February 8, 2022







### The Breakthrough Institute

- Independent research center that identifies and promotes technological solutions to environmental and human development challenges.
- We represent Society and its collective interests.
- The Breakthrough Institute does not receive funding from industry.



## Comments on 10 CFR Part 53 Rulemaking

- Presents once in a generation opportunity for regulatory innovation that considers public interests
- Must meet the mandate of NEIMA to enable innovation and commercialization
- A performance-based rule is easier to be technologyinclusive
- Be disciplined and apply reasonable assurance of adequate protection, consistent with NRC's mandate
- Be risk-informed. Focus on detectable risks and impacts relative to other forms of energy



## Qualitative Safety Goals

#### Risk to Individuals

Individual members of the public should be provided a level of protection from the consequences of nuclear power plant operation such that individuals bear no significant additional risk to life and health.

#### Societal Risk

Societal risks to life and health from nuclear power plant operation should be comparable to or less than the risks of generating electricity by viable competing technologies and should not be a significant addition to other societal risks.



### **Efficient Rulemaking**

- How will the NRC use the 9-month extension?
- Major policy issues should be elevated to the Commission to avoid major changes in the proposed rule.
  - ACRS recommended this approach.
- Iterative process is less straightforward but allows for more stakeholder interaction
- Disposition feedback
  - Provides clarity to stakeholders regarding why the staff has made a particular choice in draft rule language
  - Questions by stakeholders are often "taken back for consideration."
     Similar questions posed by ACRS are answered immediately



### Quantitative Health Objectives in Part 53

- Example of major policy issue that has received extensive stakeholder feedback
- The purpose of including the QHOs in the rule has not been made clear (dispositioned)
- The Commission has affirmed that the Safety Goals should remain high-level guidance and should be used to provide guidance to the NRC staff on how new regulations should be considered
- The Quantitative Health Objectives should not be in the rule
  - QHOs are not a viable performance metric\*

<sup>\*</sup>Refer to Breakthrough Institute Comments and Whitepaper submitted 2/4/2022 for detailed discussion



## Closing Remarks

Society has a vested interest in a timely and effective Part 53 rulemáking

An overly burdensome rule will not fulfill the mandate of NEIMA and will be costly to society

The NRC should consider

How does the safety nexus support the appropriate level of safety relative to other sources of energy
How does the rule design support the staff's safety finding
How does the rule enable an efficient review

As a representative of Society, we seek a seat at the table during the rulemaking process. We will continue\* to provide engagement and technical feedback.

<sup>\*</sup>Prior comments ML21174A071, ML21207A223, Submission 2/4/2022 no ML assigned Breakthrough Institute 2022