

**POLICY ISSUE**  
**NOTATION VOTE**

**RESPONSE SHEET**

**TO:** Annette Vietti-Cook, Secretary  
**FROM:** Commissioner Baran  
**SUBJECT:** SECY-20-0032: RULEMAKING PLAN ON “RISK-  
INFORMED, TECHNOLOGY-INCLUSIVE  
REGULATORY FRAMEWORK FOR ADVANCED  
REACTORS (RIN-3150-AK31; NRC-2019-0062)”

Approved  Disapproved  Abstain  Not Participating

COMMENTS: Below  Attached  None

**Entered in “STARS”**

Yes

No

\_\_\_\_\_  
**SIGNATURE**

9/9/20

\_\_\_\_\_  
**DATE**

## **Commissioner Baran's Comments on SECY-20-0032, "Rulemaking Plan on Risk-Informed, Technology-Inclusive Regulatory Framework for Advanced Reactors"**

NRC's current power reactor regulations were written for light-water reactors, which make up the entire U.S. operating fleet. With a wide range of non-light-water reactor designs under development, NRC needs to establish a regulatory framework for these new technologies. Because of the significant variation in advanced reactor technologies, designs, and sizes, the agency is crafting a performance-based, technology-neutral framework that makes increased use of probabilistic risk assessment insights while retaining some deterministic elements. This approach to a new advanced reactor regulation is consistent with NEIMA, which requires that the rulemaking be completed by December 31, 2027.

The NRC staff's rulemaking plan provides a high-level description of what the rulemaking will entail and a proposed schedule. It is clear from the plan that this will be a challenging, complex rulemaking. The scope of the rule is potentially quite broad. There are many tough questions about the content of the regulation that will need to be resolved. It will not be a simple task to "address performance requirements, design features, and programmatic controls for a wide variety of advanced nuclear reactors," including microreactors and fusion reactors. And the staff envisions addressing not only licensing issues, but "other stages of the project life cycle following licensing, including construction, operation, and decommissioning." Aside from setting safety performance criteria, the staff is contemplating establishing tailored requirements related to radiation protection, environmental reviews, physical security, probabilistic risk assessments, operator licensing, siting, fees, license renewal, and even adjudicatory hearings.

Congress recognized that it will take time to conduct a rulemaking of this magnitude. NEIMA provided NRC about nine years to finish a rule focused on advanced reactor licensing and specifically directed the agency to provide a report evaluating "the ability of the Commission to complete a rulemaking establishing a technology-inclusive regulatory framework for licensing commercial advanced nuclear reactor technologies by December 31, 2027."<sup>1</sup> I support looking for opportunities to accelerate the rulemaking timeline, but the priority should be to produce a high-quality, thoroughly vetted regulation that will ensure that any new reactor technology licensed by NRC will be safe.

An Advanced Notice of Proposed Rulemaking is one tool for getting stakeholder perspectives on the scope and content of the rule early in the process. A series of public meetings and comment periods could also serve that purpose. I would empower the NRC staff experts working on the rule to decide whether an Advanced Notice of Proposed Rulemaking would be an effective way to engage stakeholders.

For these reasons, I approve the staff's rulemaking plan.

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<sup>1</sup> Public Law 115-439, Sec. 103(a)(4) and (e)(1).