

Rulemaking on Increased Enrichment of Conventional and Accident Tolerant Fuel Designs for Light-Water Reactors

June 22, 2022

Opening Remarks

Bo Pham
Director
DORL

Agenda

Time	Topic	Speaker
1:00-1:05	Welcome and Logistics	NRC
1:05-1:10	Opening Remarks	NRC
1:10-1:20	NRC Presentation on Background and Status	NRC
1:20-2:00	Presentations from Stakeholders	All
2:00-2:10	Break	
2:10-2:55	Discussion and Public Feedback	All
2:55-3:00	Closing Remarks	All

Topic times are estimated based on the participation level and presentation length.

Welcome and Introductions

Welcome

- Bo Pham, NRR/DORL Division Director

Introductions

- Jackie Harvey, NRR/DORL Lead
- Daniel King, NRR/DORL Project Manager
- Charley Peabody, NRR/DSS Technical Lead
- Kevin Heller, NRR/DSS Technical Lead
- Stacy Joseph, NMSS Rulemaking Project Manager
- Jason Piotter, NMSS Technical Lead
- Dan Mussatti, NRC Facilitator

Meeting Logistics

- Meeting visuals and audio are through MS Teams.
- Participants are in listen-only mode until the discussion and public feedback period. During which, the facilitator will first allow in-person attendees to participate, then allow remote attendees to un-mute.
- This is a Comment Gathering Meeting.
 - The purpose of this meeting is for the NRC staff to meet directly with individuals to discuss regulatory and technical issues.
 - Attendees will have an opportunity to ask questions of the NRC staff or give feedback about the issues discussed after all presentations; however, the NRC is not actively soliciting comments towards regulatory decisions at this meeting.
- This meeting is being transcribed. The transcript will be available through the meeting summary.

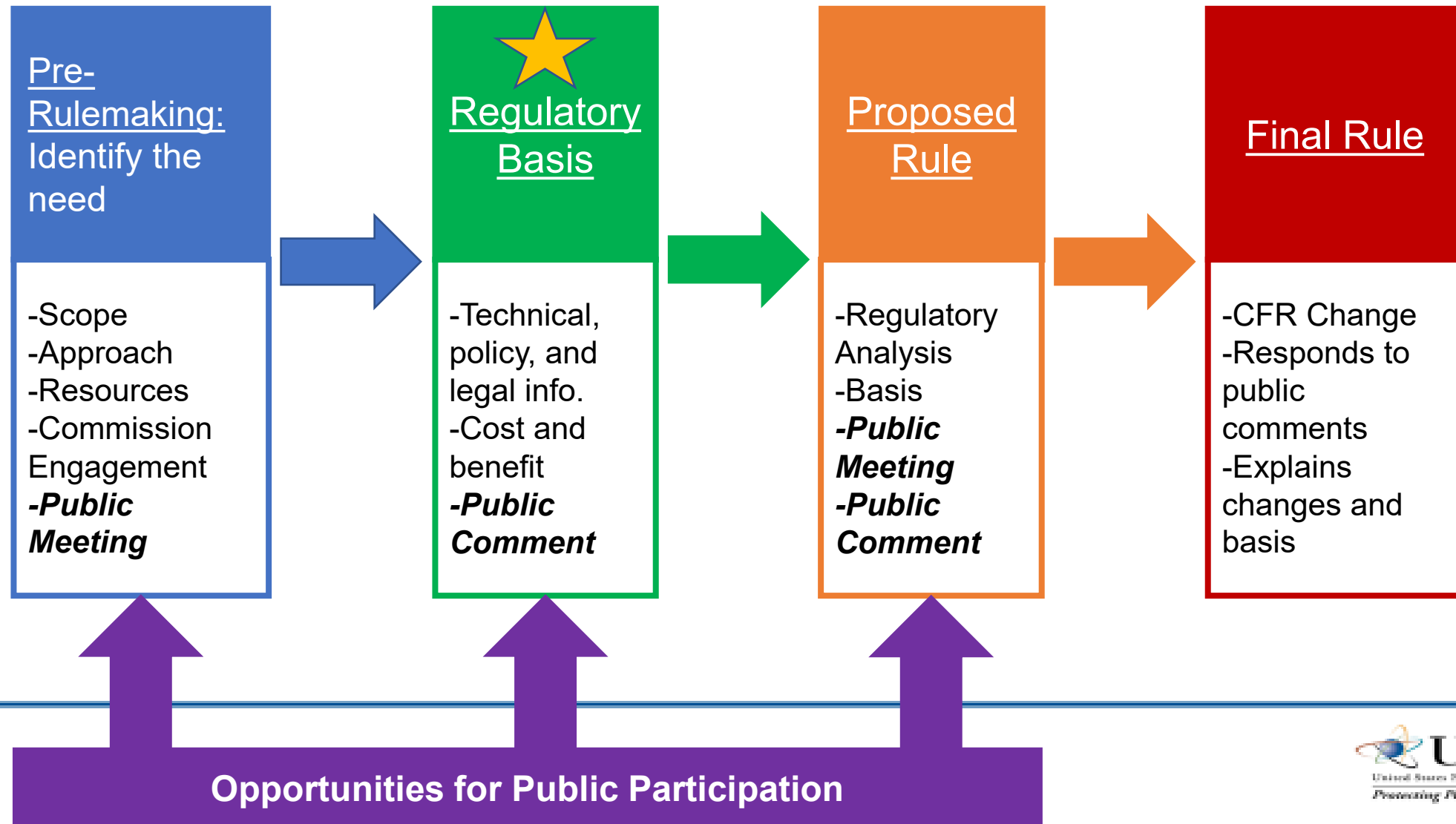


Meeting Purpose

- Engage with the public regarding regulatory issues for the development of rulemaking for use of uranium enriched to greater than 5.0 weight percent uranium-235.
 - NRC will consider the input received but will not prepare written responses.
 - No regulatory decisions will be made during this meeting.

Rulemaking Background and Status

Rulemaking Process



Status of Rulemaking Activity

- **The NRC staff is developing a regulatory basis document**
 - Discusses regulatory issues and alternatives to resolve them
 - Considers legal, policy, and technical issues
 - Considers costs and benefits of each alternative
 - Identifies the NRC staff's recommended alternative
- **Possible alternatives:**
 - Maintain status quo
 - Revise regulations
 - Revise guidance

Issue Identification

- **Regulatory Issue:**

- Current licensing framework allows for the use of > 5 weight percent uranium-235; however, technology developments may require numerous exemptions to utilize fuel enriched above 5 weight percent.

- **Proposed Solution:**

- Rulemaking would provide for a generically applicable standard informed by public input, providing consistent and transparent communication, rather than individual licensing requests as discussed in SECY-21-0109, Rulemaking Plan on Use of Increased Enrichment of Conventional and Accident Tolerant Fuel Designs for Light-Water Reactors.”

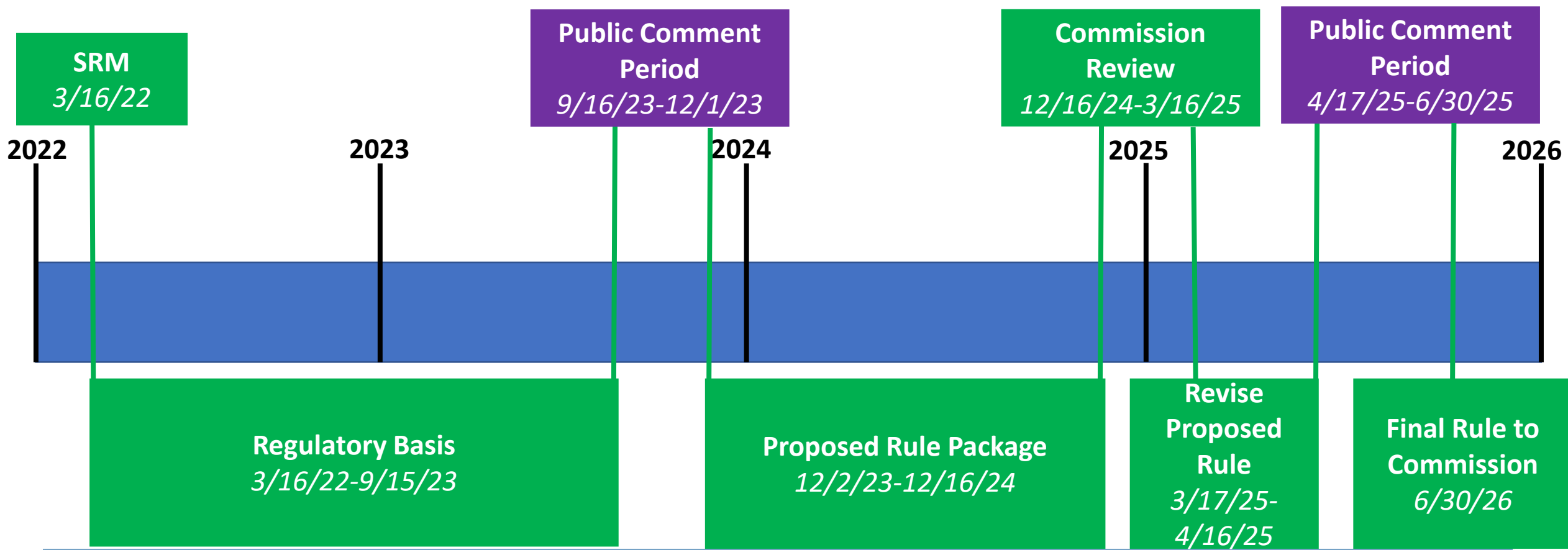
- **Commission Rulemaking Plan Approval:**

- Staff request to the Commission to pursue rulemaking and develop a regulatory basis was approved by the Commission via SRM-SECY-21-0109.

SRM-SECY-21-0109 Overview

- SRM-SECY-21-0109 issued on 3/16/22, in response to SECY-21-0109.
 - The Commission has approved the staff's proposal to initiate a rulemaking to amend requirements for the use of light water reactor fuel containing uranium enriched to greater than 5.0 weight percent uranium-235.
 - Provisions to the rule should only apply to High-Assay Low Enriched Uranium (HALEU).
 - Fuel Fragmentation, Relocation, and Dispersal (FFRD) should be appropriately addressed.
 - Staff should take a risk-informed approach.
 - Staff should work with stakeholders to develop necessary regulatory guidance.
 - Staff should re-examine the proposed schedule to determine if key milestones can be achieved sooner by leveraging ongoing regulatory innovation efforts.

Next Steps



Note: Dates listed are estimates only, and thus are subject to change.

Stakeholder Presentations



Break

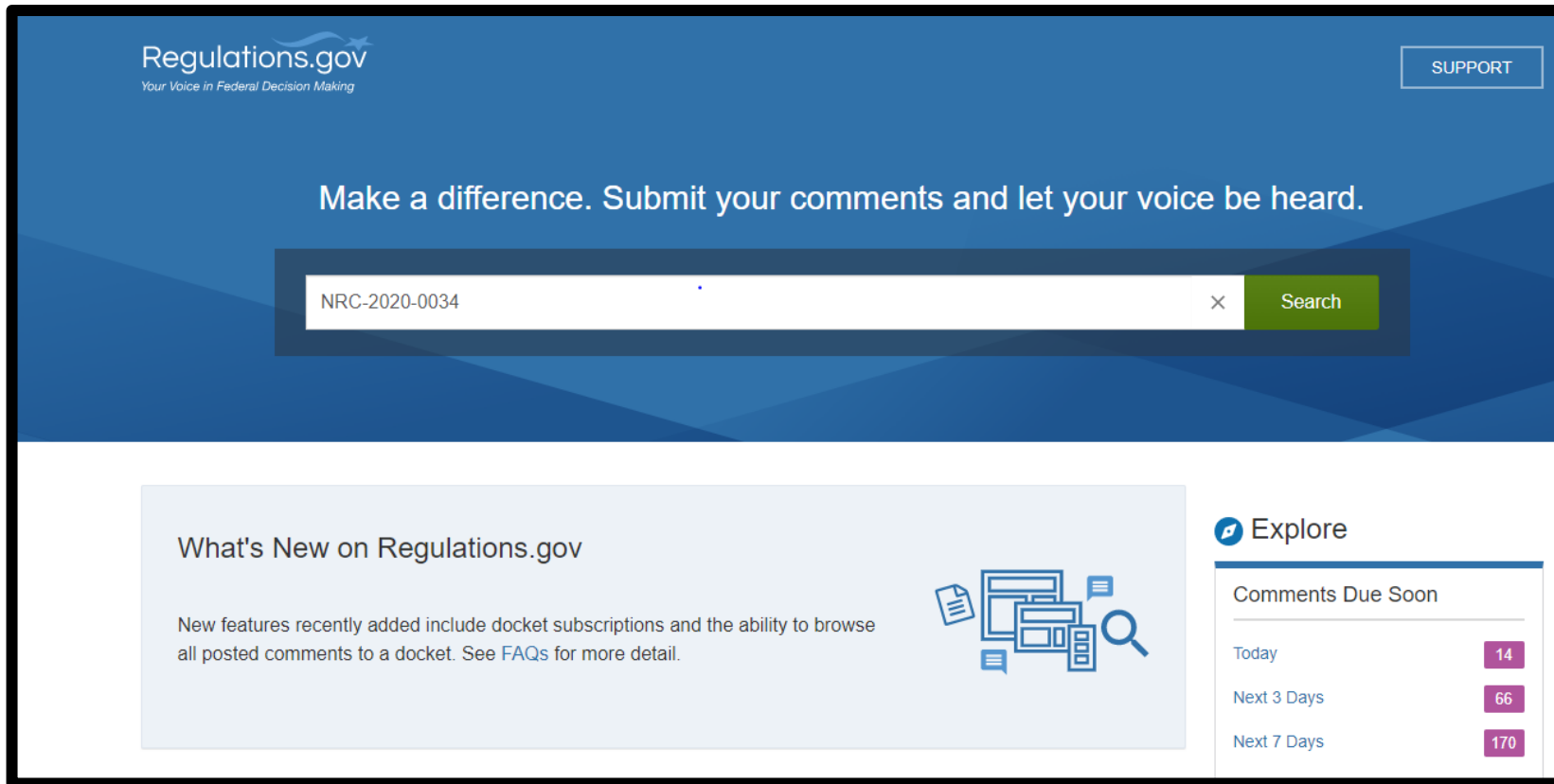
Discussion & Public Feedback

Discussion Topics

- The staff welcomes discussion on the following topics:
 - Title 10 of the *Code of Federal Regulations* and associated guidance documents that should be evaluated in this rulemaking;
 - Regulations that will likely require a licensee to request an exemption if they chose to pursue fuel enriched above 5.0 weight percent U-235;
 - Rulemaking schedule and impact on stakeholders.

Stay Updated on IE Rulemaking

- Go to <https://www.regulations.gov/> and search for docket ID **NRC-2020-0034**.



The screenshot shows the Regulations.gov website interface. At the top left is the logo "Regulations.gov" with the tagline "Your Voice in Federal Decision Making". At the top right is a "SUPPORT" button. Below the header is a blue banner with the text "Make a difference. Submit your comments and let your voice be heard." In the center of the banner is a search bar containing the text "NRC-2020-0034" and a green "Search" button. Below the banner, the page is divided into two columns. The left column is titled "What's New on Regulations.gov" and contains text about new features: "New features recently added include docket subscriptions and the ability to browse all posted comments to a docket. See FAQs for more detail." To the right of this text is an icon representing a document, a computer monitor, and a magnifying glass. The right column is titled "Explore" and contains a section "Comments Due Soon" with a table showing the number of comments due for different time periods.

Comments Due Soon	
Today	14
Next 3 Days	66
Next 7 Days	170

Adjourn

How did we do?

Link to NRC meeting feedback form:

<https://feedback.nrc.gov/pmfs/feedback/form?meetingcode=20220575>

References

Document Title	ADAMS Accession Number/ FR Citation
SECY-21-0109, “Rulemaking Plan on use of Increased Enrichment of Conventional and Accident Tolerant Fuel Designs in Light Water Reactors”	ML21232A237
SRM-SECY-21-0109, “Rulemaking Plan on use of Increased Enrichment of Conventional and Accident Tolerant Fuel Designs in Light Water Reactors”	ML22075A103
NRC Rulemaking Decision Guidance Tool	ML20266G457
NRC Rulemaking Approach Tool	ML20266G456
NRC Regulations Title 10, Code of Federal Regulations	Volume 1 (Parts 1-50) Volume 2 (Parts 51-199)