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Status Update on SECY Option Paper for Enhanced Security of Special Nuclear Material

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Purpose of Presentation

- Focus on approach used to develop the Options SECY Paper
- Address why the NRC is developing an Options SECY Paper
- Review the drivers of this work
- Stakeholder interactions

Background

- August 2018 – SRM-COMKLS-18-0003, “Fiscal Year 2020 Budget to the Commission” – Direction to staff to complete expedited, limited-scope rulemaking to codify post-9/11 security Orders

- In response to SRM-COMKLS-18-0003, the staff submitted SECY-19-0095 in October 2019
  - Staff recommended to discontinue rulemaking

- Commission responded in August 2021 with SRM-SECY-19-0095 – “Provide a notation paper with a full range of options for the scope of the rule on Enhanced Security of Special Nuclear Material and the potential regulatory, resource, and timing impacts of the options, per SRM.”

Objectives for Developing Options

- Consider risk insights, operational oversight and inspection activities, and international guidance
- Improve consistency and clarity
- Where possible, enhance openness and transparency by moving security measures from non-public communications (e.g., security orders or license conditions) to publicly available regulations
- As appropriate use a risk-informed and performance-based structure

Approach Used to Develop Options

- Stakeholder Engagement
  - Two public meetings in 2022
  - Briefing and breakout session at TRTR Annual Meeting in 2022
  - Three public meetings, and one closed meeting with cleared stakeholders in 2023

- Developed a full range of options to present to the Commission
  - Identified high-level topics and numerous options for each topic
  - Considered the current assessment of the threat to special nuclear material (SNM) possessed or anticipated to be possessed by licensees
  - Considered discussions from public meetings

- Used a risk-informed approach when considering options
  - Material attractiveness

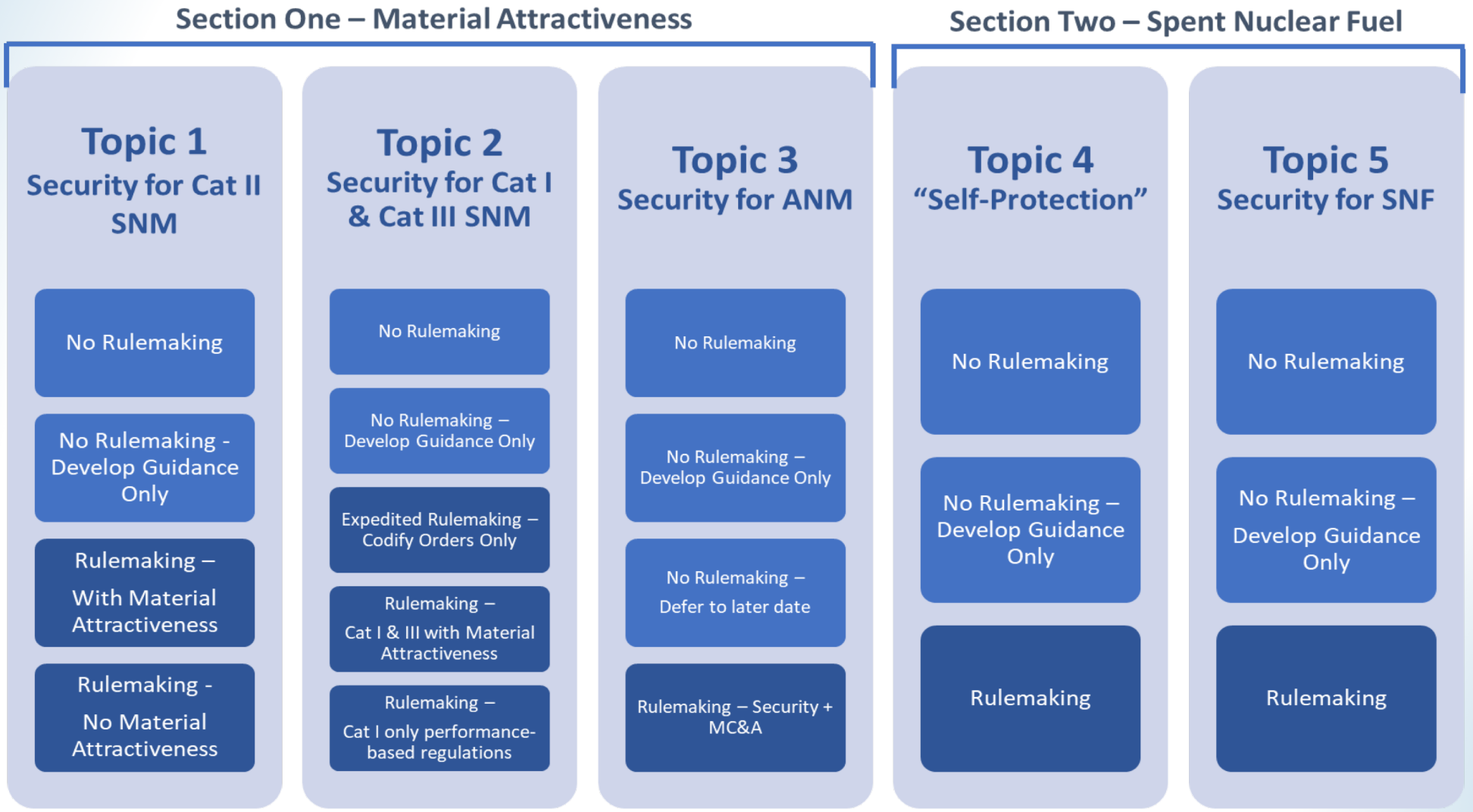
Material Attractiveness

- Risk-informed concept
  - The purer the material the more attractive it is to adversaries
  - Weight percent, not enrichment percent
- Dilution Factor
  - The weight of uranium-235, uranium-233 and plutonium divided by the total weight of the SNM material and non-SNM materials which are not mechanically separable from the SNM) for solids
- Three Levels
  - Non-dilute
  - Moderately dilute
  - Highly dilute

Staff Considerations

- Would a revised regulation enhance applicants' and licensees' ability to implement a risk-informed, performance-based approach to the security of SNM?
- Would a revised regulation increase regulatory predictability and consistency for material possessed by current licensees and potentially by applicants?
- Do the options take into account the most recent internationally-accepted security guidance?

Summary of Topics and Options



Summary

- All options, definitions, and security measures are pre-decisional and are subject to change
- Further opportunity for stakeholder review and input would occur **if** the Commission directs staff to move forward with rulemaking

Questions