

# Fuel Facility Stakeholders Meeting

May 3, 2023

Public Meeting With Nuclear Energy Institute  
and Members from the Nuclear Fuel Facility Industry

**Jonathan Rowley, Project Manager**

Division of Fuel Management

Office of Nuclear Material Safety and Safeguards

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# Meeting Category and Public Participation

This is an Observation Meeting. This is a meeting in which attendees will have an opportunity to observe the NRC performing its regulatory function or discussing regulatory issues. Attendees will have an opportunity to ask questions of the NRC staff or make comments about the issues discussed following the business portion of the meeting; however, the NRC is not actively soliciting comments towards regulatory decisions at this meeting.

# Agenda – May 3, 2023

Topic	Time	Speakers
Introduction (Purpose, Rules for Meeting)	8:30 AM	Jonathan Rowley, Project Manager Division of Fuel Management (DFM)
Opening Remarks	8:35 AM	Shana Helton, Director Division of Fuel Management Office of Nuclear Material Safety and Safeguards (NMSS) U.S. Nuclear Regulatory Commission  Janet Schlueter, Senior Advisor Nuclear Energy Institute (NEI)
Status of Action Items from October 2022 Meeting	8:40 AM	Jonathan Rowley, Project Manager, DFM
Integrated Schedule and Supplement Updates	8:45 AM	Jonathan Rowley, Project Manager, DFM
Fiscal Year 2023 Fee Rule/Fiscal Year 2024 Congressional Budget Justification	9:30 AM	Samantha Lav, Branch Chief, DFM
Public Question and Answer	10:15 AM	Public
Break	10:20 AM	
Fuel Facility Business Line Budget Breakdown	10:30 PM	Matthew Bartlett, Project Manager, DFM

## Agenda – May 3, 2023 (cont.)

Topic	Time	Speakers
Construction Inspection Program Update for Part 70 Facilities/Smarter Inspection Program Self-Assessment	11:00 AM	Benjamin Karmioli, Fuel Cycle Operations Engineer, DFM
Public Question and Answer	11:45 AM	Public
Lunch Break	11:50 AM	
Status of Controlled Unclassified Information Program	1:00 PM	Jonathan Feibus, Director, Governance and Enterprise Management Services
Status of Smarter Licensing Program	1:30 PM	Matthew Bartlett, Project Manager, DFM Janet Schlueter, Senior Advisor, NEI
Public Question and Answer	2:30 PM	Public
Break	2:35 PM	
Clarification on RIL-2022-08	2:45 PM	John Grasso, Reliability and Risk Analyst, RES
Options for Rulemaking on Security for Special Nuclear Material	3:15 PM	Marshall Kohen, Technical Advisor, NSIR
Public Q & A	3:45 PM	Public
Recap of Action Items for the Day	3:50 PM	Jonathan Rowley, DFM Janet Schlueter, NEI
Closing Remarks and Adjourn	3:55 PM	Shana Helton, DFM Janet Schlueter, NEI

# Opening Remarks

**Shana Helton, Director**

Division of Fuel Management

Office of Nuclear Material Safety and Safeguards

**Janet Schlueter, Senior Director**

Fuel and Radiation Safety

Nuclear Energy Institute

# Action Items from October 2022 Fuel Facility Stakeholders Public Meeting

**Jonathan Rowley**

Project Manager

Division of Fuel Management

Office of Nuclear Material Safety and Safeguards

# Action Items – October 2022 Stakeholders Meeting

<p><b>Action Item 1</b></p> <p>The NRC and NEI/Industry shall exchange any meeting presentation materials at least one week prior to the scheduled meeting date.</p> <p><u>NRC Staff Resolution</u> DFM developed new guidance for planning and conducting the bi-annual fuel facility stakeholders meeting. The guidance will ensure that information will be available to the public at least 7 days prior to the meetings. (Ongoing Periodic Action)</p>	<p><b>Action Item 2</b></p> <p>The NRC staff will maintain a current integrated schedule of regulatory activities chart on the NRC public website for the fuel facility stakeholders meeting.</p> <p><u>NRC Staff Resolution</u> The integrated schedule is updated at least twice a year prior to each stakeholders meeting and as needed when new items are added. (Ongoing Periodic Action)</p>	<p><b>Action Item 3</b></p> <p>The NRC will consider linking the publicly available Division Instructions on the public webpage.</p> <p><u>NRC Staff Resolution</u> The four publicly available Division Instructions were linked on the Fuel Cycle Facility Regulations Guidance, Communications, and Fuel Facility Stakeholders Meetings webpage. (Closed)</p>
<p><b>Action Item 4</b></p> <p>The industry has a continued interest in having discussion on NRC fee billing.</p> <p><u>NRC Staff Resolution</u> Fee billing is on the agenda for the May 3, 2023 meeting. (Closed)</p>	<p><b>Action Item 5</b></p> <p>Industry and NRC to consider leveraging the capabilities of the BOX file sharing platform to enhance licensing review related communications.</p> <p><u>NRC Staff Resolution</u> Industry and NRC evaluating extent of the use of BOX. (Ongoing)</p>	<p><b>Action Item 6</b></p> <p>Consideration was to be given to including Integrated Low-Level Waste Disposal Rulemaking and Enhanced Weapons Rulemaking on the agenda for the Spring 2023 meeting.</p> <p><u>NRC Staff Resolution</u> Separate, individual meetings are being arranged to discuss those rulemakings. Not included on the agenda for the Spring 2023 stakeholders meeting. (Closed)</p>
<p><b>Action Item 7</b></p> <p>Interest was expressed in future public discussions on fuel facility license renewal process.</p> <p><u>NRC Staff Resolution</u> NRC staff continues to evaluate the need for additional public meetings on this topic. (Ongoing)</p>	<p><b>Action Item 8</b></p> <p>Interest was expressed in having a presentation on Web-Based Licensing during a future stakeholders meeting.</p> <p><u>NRC Staff Resolution</u> NRC staff continues to evaluate the request. (Ongoing)</p>	<p><b>Action Item 9</b></p> <p>Industry expressed interest in future public discussions regarding NUREG-2212 prior to its issuance.</p> <p><u>NRC Staff Resolution</u> A public meeting on NUREG-2212 was held on January 18, 2023 (ML23018A017). (Closed)</p>

# Integrated Schedule Chart and Supplement Updates

**Jonathan Rowley, Project Manager**

Division of Fuel Management

Office of Nuclear Material Safety and Safeguards





# Updates to Integrated Schedule Chart and Supplement

- Updated information
  - Fuel Facility Stakeholders Meeting
    - <https://www.nrc.gov/materials/fuel-cycle-fac/regs-guides-comm.html#cumeffects>
  - Integrated Schedule (Chart)
    - ADAMS Accession Number ML23114A140
  - Integrated Schedule Supplement
    - ADAMS Accession Number ML23114A141
  - Summary of changes to previously listed activities (October 2022 – May 2023)
    - ADAMS Accession Number ML23114A142

# Fiscal Year 2023 Fee Rule and Fiscal Year 2024 Congressional Budget Justification

**Samantha Lav, Chief**  
Fuel Facility Licensing Branch  
Division of Fuel Management  
Office of Nuclear Material Safety and Safeguards

# FY 2023 Budget and Fees Timeline\*



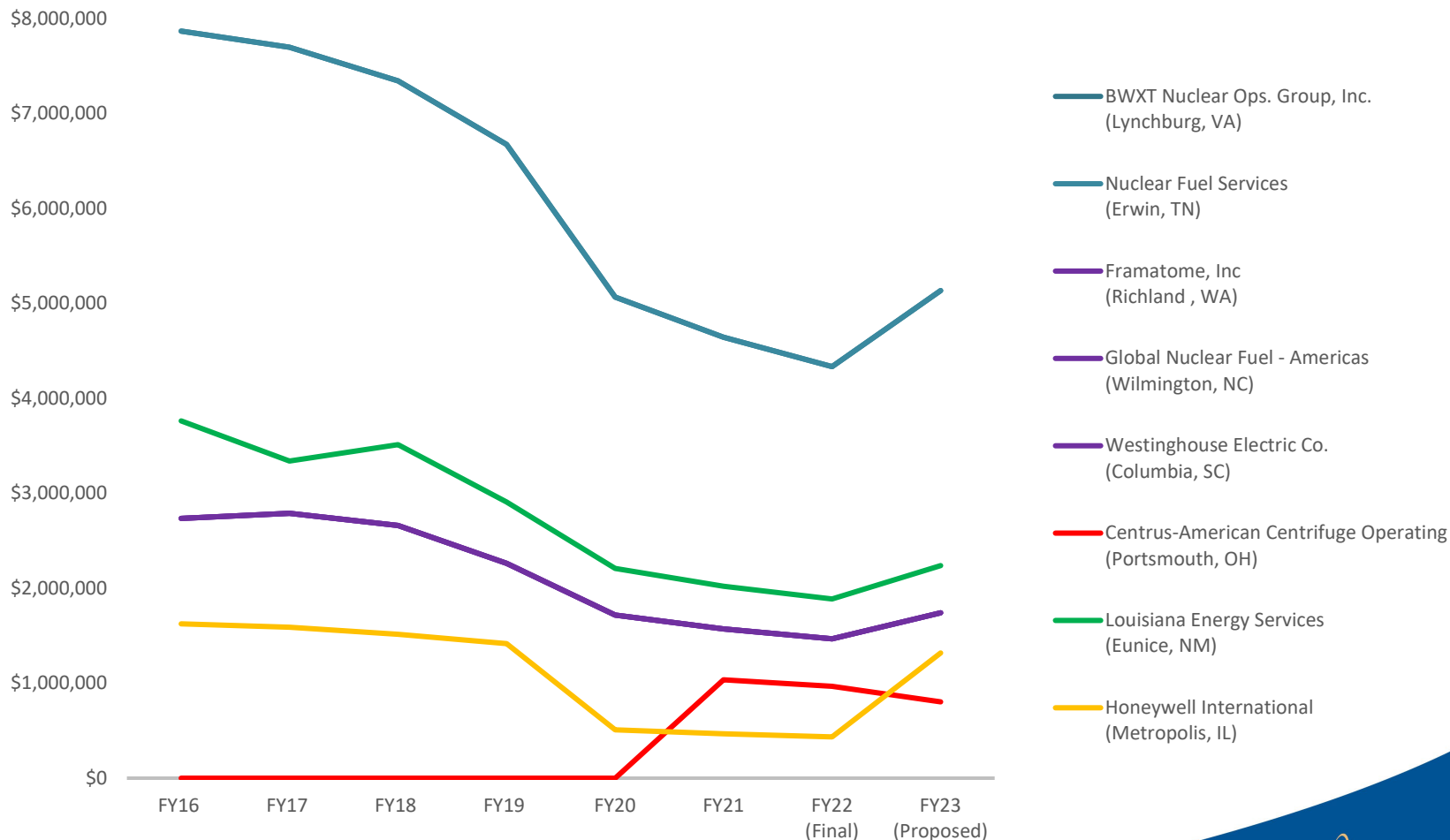
\*The dates in the timeline are illustrative and based on generic timelines.

# FY23 Fee Rule

- FY2023 proposed fee rule published March 2023
- Public comment period closed April 3, 2023
- Seven written comment submissions received
- Staff will consider comments in the formulation of the FY23 final fee rule to be published this summer

# Annual Fees

## FUEL FACILITY ANNUAL FEE (10 CFR PART 171)



In FY2021, NEIMA went into effect and required the NRC to recover approximately 100% of the budget from fees

# FY23 Budget Drives Fees

- Approximately 19% increase in the fuel facility budget
  - Licensing actions for enrichment and manufacturing of HALEU, advanced reactor fuel, and ATF
  - Functioning as the authorizing official for classified systems
  - Restart activities for Centrus and Honeywell
  - Increased MC&A inspections at Category II facilities
  - The cyber security rulemaking
  - Increases in salaries and benefits
- NRC is required by NEIMA to recover approximately 100% of the budget
- If licensing and oversight activities are delayed, that portion of the budget will be recovered through annual fees
- NRC's ability to budget accurately is highly dependent on the schedule information provided to us

# FY24 CBJ Budget

## Fuel Facilities by Product Line (Dollars in Millions)

Product Line	FY 2022 Enacted		FY 2022 Actuals		FY 2023 Enacted		FY 2024 Request		Changes from FY 2023	
	\$M	FTE	\$M	FTE	\$M	FTE	\$M	FTE	\$M	FTE
Event Response	0.4	2.0	0.3	1.2	0.5	2.0	0.5	2.0	0.0	0.0
Generic Homeland Security	2.5	3.0	2.6	2.3	2.5	3.0	2.7	3.0	0.1	0.0
International Activities	1.6	7.0	1.2	5.4	1.7	7.5	1.8	7.5	0.1	0.0
Licensing	4.9	19.5	5.4	21.5	6.3	22.8	9.3	27.9	3.0	5.1
Mission Support and Supervisors	2.9	14.0	3.4	15.4	3.0	14.0	3.5	15.0	0.5	1.0
Oversight	5.6	24.5	5.5	25.3	5.9	25.0	6.4	27.0	0.6	2.0
Rulemaking	0.0	0.0	0.5	2.2	0.2	1.0	0.5	2.0	0.3	1.0
Training	0.4	1.0	0.3	0.6	0.4	1.0	0.5	1.0	0.0	0.0
Travel	0.7	0.0	0.6	0.0	0.7	0.0	0.6	0.0	(0.2)	0.0
<b>Subtotal</b>	<b>\$19.0</b>	<b>71.0</b>	<b>\$20.0</b>	<b>73.9</b>	<b>\$21.3</b>	<b>76.3</b>	<b>\$25.7</b>	<b>85.4</b>	<b>\$4.5</b>	<b>9.1</b>
Carryover	0.0	0.0	-0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Total</b>	<b>\$19.0</b>	<b>71.0</b>	<b>\$19.7</b>	<b>73.9</b>	<b>\$21.3</b>	<b>76.3</b>	<b>\$25.7</b>	<b>85.4</b>	<b>\$4.5</b>	<b>9.1</b>

Notes:

- \$M includes FTE costs as well as contract support and travel. Numbers may not add due to rounding.
- Enacted reflects the appropriated budget, including authorized carryover (Congressionally mandated).
- Actuals reflect total obligations, including obligations from both authorized and discretionary (agency allocated) carryover.
- For the enacted and the request years, the carryover row shows the amount funded by authorized carryover.
- For the actuals year, the carryover row shows the amount funded using both authorized and discretionary carryover, except carryover that was used to fund FTE costs.



# FY24 Major Activities

- Conduct licensing, oversight, and regulatory activities for nine major fuel facilities and 10 greater-than-critical-mass SNM licensees (\$15.2M, 52.7 FTE).
- Review one new fuel facility license application (TRISO-X) and one new medical isotope facility (Niowave) (\$0.5M, 2.2 FTE).
- Maintain the Nuclear Materials Management and Safeguards System for SNM (\$2.0M, 1.0 FTE).
- Sustain U.S. non-proliferation activities by fulfilling national obligations, implementing international safeguards, and licensing the import and export of nuclear materials and equipment (\$0.2M, 1.0 FTE).
- Support agency-provided training in radiation sciences, security, and other training related to regulatory support. (\$0.2M).
- Maintain a highly qualified workforce through recruitment and staffing of entry-level positions to support the agency's SWP (\$0.2M, 1.0 FTE).
- Support the NRC's work with international counterparts

# FY24 CBJ Budget Increases

- Salaries and benefits (+\$3.3M);
- Licensing actions related TRISO-X and Niowave (+\$2.7M, +4.1 FTE);
- Licensing actions related to enrichment and manufacturing of HALEU, advanced reactor fuel, and ATF (+\$0.2M, +1.0 FTE);
- Programmatic oversight and inspection in support of Category II fuel facilities and the anticipated new medical isotope production facility (+\$0.6M, +2.0 FTE); and
- Potential rulemaking for enhanced security of special nuclear material and guidance development for the security for fuel facilities (+\$0.2M, +1.0 FTE).

# Public Participation

At this time, the public is afforded an opportunity to ask questions and/or provide comments on the first three presentations.

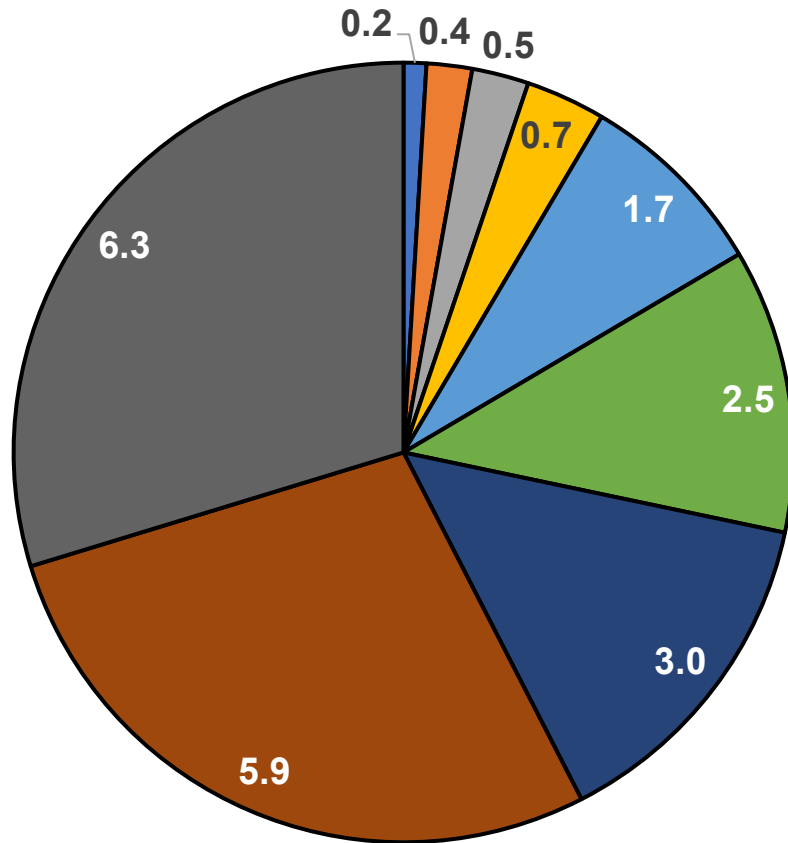
# Current and Future Activities Recovered Through Annual Fees

**Matthew Bartlett, Senior Project Manager**  
Fuel Facility Licensing Branch  
Division of Fuel Management  
Office of Nuclear Material Safety and Safeguards

# Fiscal Year (FY) 2023 Congressional Budget Justification

Product Line	Total Budget ML22089A188		Part 170	Part 171	Excluded Activities
	\$M	FTE			
PL-1 Event Response	\$0.5	2.0		✓	
PL-2 Generic Homeland Security	\$2.5	3.0			✓
PL-3 International Activities	\$1.7	7.5			✓
PL-4 Licensing	\$6.3	22.8	✓	✓	✓ (Universities)
PL-5 Oversight	\$5.9	25	✓	✓	
PL-7 Rulemaking	\$0.2	1		✓	
PL-M Mission Support and Supervision	\$3.0	14.0		✓	
PL-N Training	\$0.4	1.0		✓	
Travel	\$0.7	0		✓	
<b>TOTAL</b>	<b>\$21.2</b>	<b>76.3</b>			

# FY2023 Congressional Budget Justification



- PL-7 Rulemaking\*
- PL-N Training\*
- PL-1 Event Response\*
- Travel\*
- PL-3 International Activities\*
- PL-2 Generic Homeland Security\*
- PL-M Mission Support and Supervision\*
- PL-5 Oversight\*
- PL-4 Licensing\*

\*based on full-time equivalent, contract and training support (\$Millions) from the FY2023 Congressional Budget Justification (NUREG-1100 Volume 38 (ML22089A188))

# Product Line 1 - – Example Activities for FY 2023

Product Line	Total Budget ML22089A188		Part 170	Part 171	Excluded Activities
	\$ (M)	FTE			
PL-1 Event Response	\$0.5 (M)	2.0 (FTE)		✓	

## This product line includes:

- Incident Response Exercises for Fuel Facilities
- Event Response Support for Fuel Cycle

\*M=Million

# Product Line 4 – Example Activities for Fiscal Year 2023

Product Line	Total Budget ML22089A188		Part 170	Part 171	Excluded Activities
PL-4 Licensing	\$6.3 (M*)	22.8 (FTE)	✓	✓	✓ (Universities)

## Part 171 examples in this product line include:

- Advisory Committee on Reactor Safeguards for fuel cycle
- Annual budget development, fee rule, contract oversight
- Guidance development (Greater than Critical Mass, Division Instructions, Qualification Plans, NUREG-1748 revisions, etc.)
- Hearings (Atomic Safety And Licensing Board Panel Reviews)
- Knowledge management (seminars, training, lessons learned)
- Licensing assistants
- Material control and accounting program infrastructure
- Metrics and Congressional reporting
- Security policy and infrastructure (e.g., HALEU gap analysis)
- Generic (web-based licensing, infrastructure, policy outreach, review, and stakeholders meetings)

\*M=Million



# Product Line 5 – Example Activities for Fiscal Year 2023

Product Line	Total Budget ML22089A188		Part 170	Part 171	Excluded Activities
PL-5 Oversight	\$5.9 (M*)	25 (FTE)	✓	✓	

## Part 171 examples in this product line include:

- Allegations and investigations
- Construction inspection program development
- Enforcement guidance/policy development for fuel cycle
- Guidance development (very low safety significance issue resolution, inspection procedures, mentoring, etc.)
- Headquarters MC&A and inspection oversight programs
- Meetings on general topics (i.e., not specific to a facility)
- Technical assistant

\*M=Million

# Product Line 7 – Example Activities for Fiscal Year 2023

Product Line	Total Budget ML22089A188		Part 170	Part 171	Excluded Activities
	\$ (M)	FTE			
PL-7 Rulemaking	\$0.2 (M*)	1 (FTE)		✓	

## Part 171 examples in this product line include:

- Cyber security for fuel facilities rulemaking
- Enhanced weapons rulemaking
- Development of options to address enhanced security of SNM

\*M=Million

## Product Line M – Example Activities for Fiscal Year 2023

Product Line	Total Budget ML22089A188		Part 170	Part 171	Excluded Activities
	\$ (M)	FTE			
PL-M Mission Support and Supervision	\$3.0 (M*)	14.0 (FTE)		✓	

### Part 171 examples in this product line include:

- Administrative assistants
- General staff meetings
- Supervisory support (branch chiefs and other managers)
- Generic (time and labor, non-supervisory actors, etc.)

\*M=Million

# Product Line N – Example Activities for Fiscal Year 2023

Product Line	Total Budget ML22089A188		Part 170	Part 171	Excluded Activities
PL-N Training	\$0.4 (M*)	1.0 (FTE)		✓	

## Part 171 examples in this product line include:

- Nuclear Regulator Apprenticeship Network Training Program
- Staff training, qualification and development

\*M=Million

# Future Fuel Facility Part 171 Work

## FY 2023-2024

- Commission meetings and drop-in meetings
- Guidance Updates and Assessment
  - Advanced Reactors
  - Accident Tolerant Fuel
  - NUREG-1748 - Environmental Review
  - NUREG-2212 - New Applications For Greater Than Critical Mass
  - Authorizing Official and Classified Networks
  - Construction Inspection Program Development
- Operating Experience Review
- Staff Qualification, Training, and Development
- Rulemaking Activities
  - Potential rulemaking for enhanced security of special nuclear material and guidance development for the security for fuel facilities
  - Cyber Security

# Current and Future Activities Recovered Through Annual Fees

## QUESTIONS/COMMENTS

# Construction Inspection Program Update for 10 CFR Part 70 Facilities and Smarter Inspection Program Self- Assessment

**Benjamin Karmioli, Fuel Cycle Operations Engineer**

Inspection and Oversight Branch

Division of Fuel Management

Office of Nuclear Material Safety and Safeguards

# Construction Inspection Program

## IMC 2694 and associated IPs

- Updates include but are not limited to:
  - Lessons learned from recent construction oversight projects
  - Technology neutral guidance relying on prioritization of IROFS
  - Guidance for creating site specific master inspection plans
  - Guidance for oversight of applicants constructing 'at-risk'



# Construction Inspection Program

Construction is defined in 10 C.F.R. 70.4, and states, in part:

- Construction means:
  - the installation of foundations, or
  - in-place assembly, erection, fabrication, or testing for any structure, system, or component of a facility or activity subject to the regulations in this part that are related to radiological safety or security.

# Construction Inspection Program

## Construction “at-risk”:

- When a licensee or applicant commences construction prior to the Director of NMSS (or his/her designee) making a 10 C.F.R. § 70.23(a)(7) determination, construction is at its own risk (i.e., “at-risk”).
- These risks include NRC’s denial of the application, the need for design changes in response to the NRC’s Requests for Additional Information, construction rework, additional inspections, and project delays.

# Construction Inspection Program

- Next Steps and Schedule
  - Issue letters to applicants and licensees that will be commencing construction
  - Workshop on Construction:
    - A workshop dedicated to discussing the structure of the IMC and how construction inspections will be completed
    - Staff expects the workshop to take place this summer
  - IMC 2694 and associated IP updates completed by the end of the summer

# Smarter Inspection Program Assessment

- The self-assessment of the changes made by the SIP initiative will be completed in 2024
  - The assessment will evaluate the effectiveness of the changes implemented by the smarter inspection program
  - Waiting until 2024 allows staff to gather and assess three full years of data
    - Most inspection procedures will have been performed at most sites

# Questions/Feedback



# Public Participation

At this time, the public is afforded an opportunity to ask questions and/or provide comments on the following topics:

- Fuel Facility Business Line Budget Breakdown
- Construction Inspection Program Update for Part 70 Facilities

# NRC Controlled Unclassified Information (CUI) Program Implementation Status

**Jon Feibus, Director**

Governance and Enterprise Management Services Division

Office of the Chief Information Officer

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# Key Messages

- ❑ Effective April 2023, the NRC's plans to transition to a CUI program on November 1, 2023, have been delayed.
  - ❑ The NRC is awaiting the outcome of the CUI Interagency Policy Committee (IPC) prior to identifying a new CUI transition date.
    - ❑ For additional information, refer to NARA [CUI Notice 2022-01](#).
  - ❑ This delay will support the NRC's overall readiness to transition to CUI, while working towards minimizing the burden on NRC employees and external stakeholders, where practicable.
  - ❑ Once a new transition date is established, the NRC will communicate the new date to all stakeholders well in advance.
- ❑ ***All NRC employees and contractors will continue to follow the existing agency policy for Sensitive Unclassified Non-Safeguards Information (SUNSI), which remains in effect until CUI is implemented.***
- ❑ The NRC is committed to minimizing the impact of its transition to CUI for NRC internal and external stakeholders, to the extent practicable.



# Current Status

- On December 8, 2023, the NRC issued Regulatory Issue Summary (RIS) [2022-03](#), “NRC Plans to Establish Controlled Unclassified Information-Sharing Agreements with Non-Executive Branch Entities,” and to inform all NRC external stakeholders of its plans to transition to CUI and of plans to establish formal CUI information-sharing agreements with non-executive branch entities.
- On January 10, 2023, the NRC held a CUI closed meeting with licensees and other external stakeholders to demonstrate and discuss the “view only” option described in RIS 2022-03.
  - In light of the NRC’s decision to delay its transition to CUI, all licensee comments and questions are being held pending the outcome of the CUI-IPC efforts.
- On February 3, 2023, the NRC published the information collection request for the NRC’s CUI information-sharing agreement in the *Federal Register* for public comment.
  - On April 4, 2023, NEI formally submitted industry comments on the information collection request.
  - In light of the NRC’s decision to delay its transition to CUI, the information collection request is currently on hold.

# Fuel Cycle Licensee Challenges

- On January 10, 2023, during the NRC’s CUI closed meeting, several fuel cycle facility licensees provided the following feedback (*shown below in bold italics*) to the NRC:
  - ***Due to limited resources, we cannot meet NIST SP 800-171 requirements.***
    - This is why the NRC demonstrated the “view only” alternative during the closed meeting so that licensees would understand any limitations associated with this approach.
  - ***We do not plan to sign the information-sharing agreement once provided by the NRC.***
    - The NRC cannot compel licensees to sign an agreement. However, without a signed agreement in place, the NRC will need to default to sharing CUI via view only (or hard copy) when CUI that requires dissemination is not owned by the licensee.
  - ***View only is insufficient to meet our needs to retain records to meet certain regulatory requirements.***
    - Following the closed meeting, NEI submitted a number of follow-up questions to the NRC for additional clarification.
    - The industry questions, including the NEI use cases discussed on January 10, 2023, are currently being evaluated by the NRC.
    - The NRC expects to provide an update to NEI in mid-April 2023 regarding an estimated timeline to respond to the NEI uses cases and follow-up questions.
- The NRC is sharing and discussing these challenges with the CUI-IPC.

# Conclusion

1

Await the outcome of the CUI-IPC to assess any future plans that would reduce burden on the NRC staff and external stakeholders.

2

Maintain communications regarding the NRC's plans to transition to CUI and following the transition to CUI.

3

Hold the information-sharing agreement to consider the outcome of the CUI-IPC.

4

Hold the industry questions and comments provided on January 10, 2023, pending the outcome of the CUI-IPC.

# For Additional Information

- NRC CUI Program Contact
  - Jon Feibus, NRC CUI Senior Agency Official
  - Tanya Mensah, NRC CUI Program Manager
  - Email: [CUI@nrc.gov](mailto:CUI@nrc.gov)
- NARA CUI Website (<https://www.archives.gov/cui>)
  - CUI Registry
  - Policy & Guidance
  - Training (NARA CUI videos)
  - CUI Blog
  - CUI Program Update To Stakeholders Meeting
- NRC CUI Public Website: <https://www.nrc.gov/reading-rm/cui.html>
  - CUI FAQs now available

# Smarter Licensing Program Overview

**Matthew Bartlett, Sr. Project Manager**  
Fuel Facility Licensing Branch  
Division of Fuel Management  
Office of Nuclear Material Safety and  
Safeguards

# Smarter Licensing Program

## Background:

1. The smarter fuel cycle licensing program started in 2019, see Charter - April 26, 2019 (ADAMS Accession No. [ML19115A016](#))
2. A number of recommendations were identified and grouped as Near-Term, Mid-Term and Long-Term, see Recommendations - April 30, 2020 ([ML20099F354](#))
3. Staff's implementation of the recommendations were documented in the October 19, 2022, Smarter Licensing One Pager ([ML23013A286](#))

# Smarter Licensing Program

## Accomplishments

1. The Near- and Mid-Term recommendations have been incorporated into the following NRC Division Instructions (DI):
  - LIC-FM-1 Licensing Overview ([ML22130A659](#)),
  - LIC-FM-2 Acceptance Review Process ([ML22161B042](#)),
  - LIC-FM-3 Requests for Additional Information ([ML22208A272](#)), and
  - LIC-FM-4 Safety Evaluation Reports ([ML22273A029](#)).
2. The NRC provided staff training on the DIs.
3. Redacted versions of the DIs are publicly available.

# Examples Smarter Licensing Improvements

- **NT-1, 1 & 2: Acceptance letter incorporate hour estimates and dates**  
NRC staff incorporate hour estimates and estimated completion dates in the acceptance letter. These dates become the established schedule tracked by the metrics.
- **NT-2, 4 & 7(b): NRC staff hold pre-application meetings with the applicant**  
The NRC staff visit the site, discuss application plans, talk about guidance, etc. in advance of the application
- **NT-4, 9 & 11: NRC staff hold technical calls to inform the review**  
The NRC staff hold technical calls on an as needed basis to better understand the application and to discuss draft RAIs
- **NT-4, 13(a): Transitions are supported by overlapping reviewers**  
When possible, the technical reviewers are assigned with a back-up reviewer or a person to shadow the reviewer prior to transition.
- **MT-15, 1: The NRC staff utilize an interdisciplinary review team**  
The NRC staff seek to involve the entire review team, including non-technical staff in bi-weekly meetings, technical calls, and public meetings.



# Smarter Licensing Program

## Status of Long-Term Recommendations:

- **LT-1, 13(b): Formalized guidance on management turnover**  
**Completed** December 20, 2021 (ML21334A377 non-public)
- **LT-2, 14: Capture and use lessons learned on major licensing actions**  
**Completed** May 12, 2022, LIC-FM-1, section 2.24 ([ML22130A659](#))
- **LT-2, 23: Update NUREG-1520**  
**On hold**, pending existing work priorities
- **LT-3, 20: Develop a draft standard review plan greater than critical mass licensees/applicants (DRAFT - NUREG-2212),**  
**In Progress** Comment period ended March 31, 2023 ([ML22335A087](#)), project issuance by end of 2023
- **LT-4, 25: Create a roadmap for each type of license and major activity**  
**Completed** June 20, 2021, Desk Guides – (ML21201A294 non-public)
- **LT-4, 25: Develop a central repository of licensing basis documents**  
**Completed** 2022, [FFLB SharePoint Repository](#) – non-public
- **LT-5, 26: Institutionalize post-review lessons learned**  
An ongoing effort to maintain guidance up to date

# Smarter Licensing Program

## QUESTIONS/COMMENTS

# Public Participation

At this time, the public is afforded an opportunity to ask questions and/or provide comments on the following topics:

- CUI
- Status of Smarter Licensing Program

# Clarification on RIL 2022-08

## Human Reliability Analysis of See-and-Flee Actions using Integrated Human Event Analysis System for Event and Condition Assessment

**John Grasso & James Chang**

Division of Risk Analysis

Office of Nuclear Regulatory Research

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# What is a RIL?

- RILs are not intended to be used in place of guidance documents, such as Regulatory Guides or Standard Review Plans.
- In general, RILs should be issued to provide the user offices:
  - ~~research results regarding a significant research program or project~~
  - ~~information to support a regulatory decision~~
  - ~~results of generic regulatory or technical analyses~~
  - ~~results of research about, or resolution of a problem of interest to the nuclear industry at large~~
  - **team report on a specific topic**
  - ~~proceedings of a conference or workshop~~



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# Background of RIL 2022-08



- IDHEAS-ECA = the Integrated Human Event Analysis System for Event and Condition Assessment
  - Human Reliability Analysis (HRA) Methodology
  - Documented in NUREG-2256
- “See-and-Flee” = Human Action Administrative Item Relied on for Safety (IROFS)
  - To meet performance requirements of 10 CFR 70.61
- NUREG-1513 and NUREG-1520 = Current Integrated Safety Analysis (ISA) guidance
  - Little instruction on assessing reliability of human IROFS

# Why was this RIL produced?

- To demonstrate IDHEAS-ECA to NMSS staff:
  - Identify where the methodology may be useful
  - Provide feedback to improve IDHEAS-ECA
- To demonstrate IDHEAS-ECA abilities and level of effort
- To evaluate and assess the reliability of see-and-flee actions



# How will this RIL be used?



- As an informative document for NMSS ISA reviewers:
  - IDHEAS-ECA concepts, terms, and how to use
  - Different scope than NUREG-2256
- As a demonstration to NMSS staff:
  - IDHEAS-ECA uses a sound technical basis to assess the reliability of see-and-flee actions not in the current review guidance.
  - IDHEAS-ECA could assess the reliability of administrative IROFS to support decision-making.



# RIL 2022-08 and Industry

- RIL 2022-08 is not regulatory guidance, just information
- IDHEAS-ECA is an NRC-developed HRA methodology
- RIL 2022-008 explores a potential use for IDHEAS-ECA outside of NPP operation
- NMSS reviewers may choose to use IDHEAS-ECA to support HRA of human action IROFS for ISAs
- Industry does not have to use RIL 2022-08



# Questions?



# NRC Staff's Consideration of Options for a Potential Rulemaking on Security for Special Nuclear Material (SNM)

**Marshall Kohen, Technical Advisor**  
Office of Nuclear Security and Incident Response

# Background

- January 2015 – Final regulatory basis on Enhanced Security for SNM ([ML14321A007](#))
- April/June 2016 – Direction to suspend rulemaking activities
- August 2018 – Direction to staff to complete expedited, limited-scope rulemaking
- October 2019 – SECY-19-0095, “Discontinuation of Rulemaking – Enhanced Security of Special Nuclear Material” ([ML19157A084](#))
- August 2021 – SRM-SECY-19-0095 – Provide a notation vote paper with options on enhanced security of SNM and the potential regulatory, resource, and timing impacts of the options ([ML21217A065](#))

# What are the proposed issues to be considered in the Commission paper?

- A. Security for Category II quantities of SNM
- B. Consideration of 1 gray/hr at 1 meter external radiation level threshold exemption
- C. Security for spent nuclear fuel (use and storage / transportation)
- D. Security for alternate nuclear material (ANM)
- E. Security for Categories I and III quantities of SNM

# Schedule

- 1/30/23 – Public meeting on Category II SNM (Issue A)
- 2/28/23 – Public meeting on Category I and III SNM and ANM (Issues D & E)
- 4/11/23 – Public meeting on spent fuel, including 1 gray/hr at 1 meter external radiation level threshold exemption (Issues B & C)
- 10/2/23 – Commission paper due

# Current NRC SNM Categorization

	Category I	Category II	Category III
Plutonium and U-233	$\geq 2$ kg	$< 2$ kg and $> 500$ g	$\leq 500$ g and $> 15$ g
U-235 $\geq 20\%$ enriched	$\geq 5$ kg	$< 5$ kg and $> 1$ kg	$\leq 1$ kg and $> 15$ g
U-235 $< 20\%$ and $\geq 10\%$ enriched		$\geq 10$ kg	$< 10$ kg and $> 1$ kg
U-235 $< 10\%$ enriched			$\geq 10$ kg

\*From 10 CFR Part 110, Appendix M. Also see 10 CFR § 73.2, Definitions.

# What is meant by Attractiveness?

- “Dilution Factor” – measure of attractiveness
  - The mass of the fissile material divided by the total mass of the fissile material and non-fissile materials (that are not mechanically separable from the fissile material, for solids)
    - Non-dilute
    - Moderately dilute
    - Highly dilute
- Risk-informed concept
  - The less dilute the material, the more attractive it is to adversaries



# What are the options the staff is considering for physical protection of Category II quantities of SNM (Issue A)?

NO  
RULEMAKING  
FOR CATEGORY  
II SNM

*Option 1*

RULEMAKING  
Take into  
consideration  
material  
attractiveness

*Option 2*

RULEMAKING  
No  
consideration of  
material  
attractiveness

*Option 3*

## What are the options the staff is considering for the external radiation level threshold (Issue B)?

NO RULEMAKING TO  
REVISE THE EXTERNAL  
RADIATION LEVEL  
THRESHOLD

*Option 1*

RULEMAKING  
Revise the external  
radiation level  
threshold in 10 CFR  
73.6(b) and conforming  
requirements

*Option 2*

## What are the options the staff is considering for physical protection of SNF (Issue C)?

NO RULEMAKING  
FOR SNF

Continue case-by-  
case approach

*Option 1*

NO RULEMAKING  
FOR SNF

Develop guidance  
to assist licensees  
in calculating  
external radiation  
level

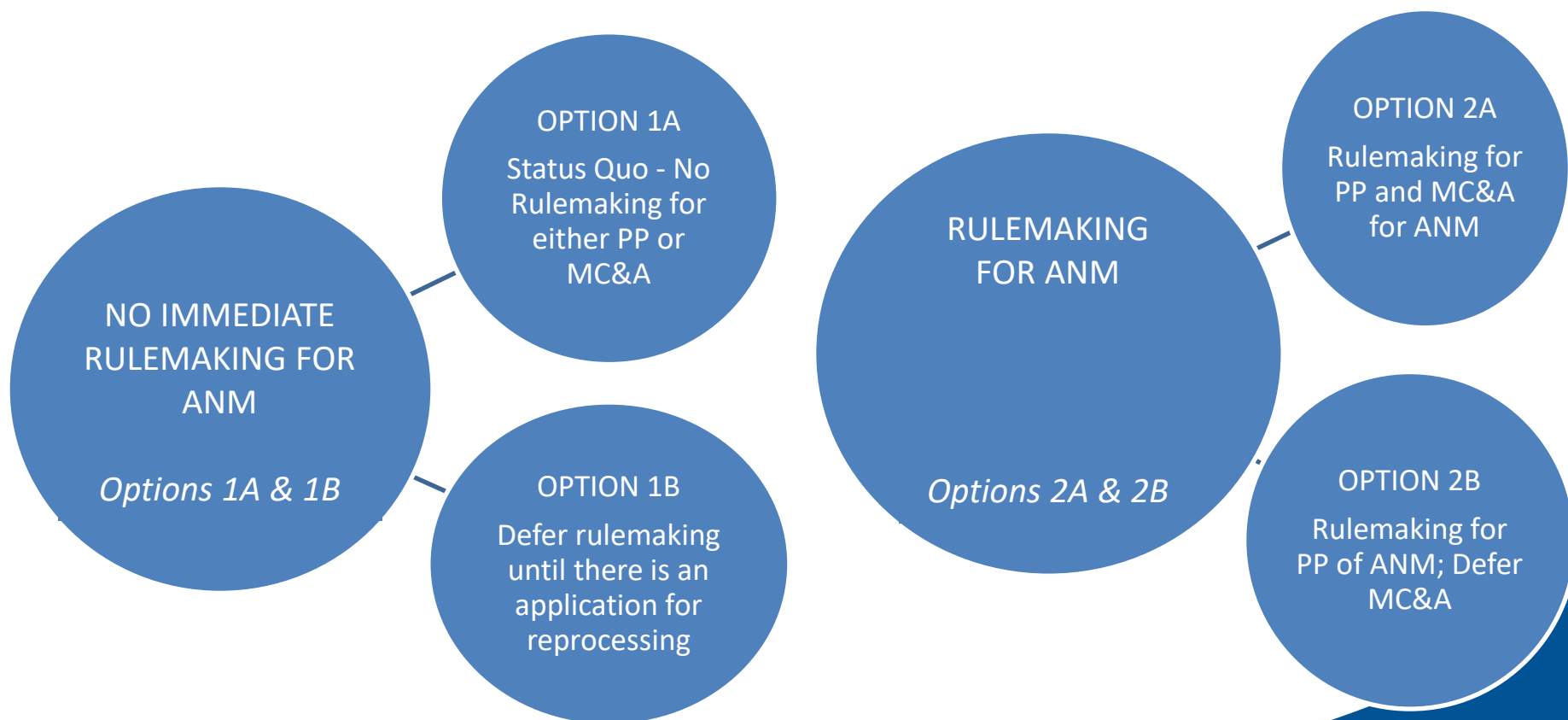
*Option 2*

RULEMAKING

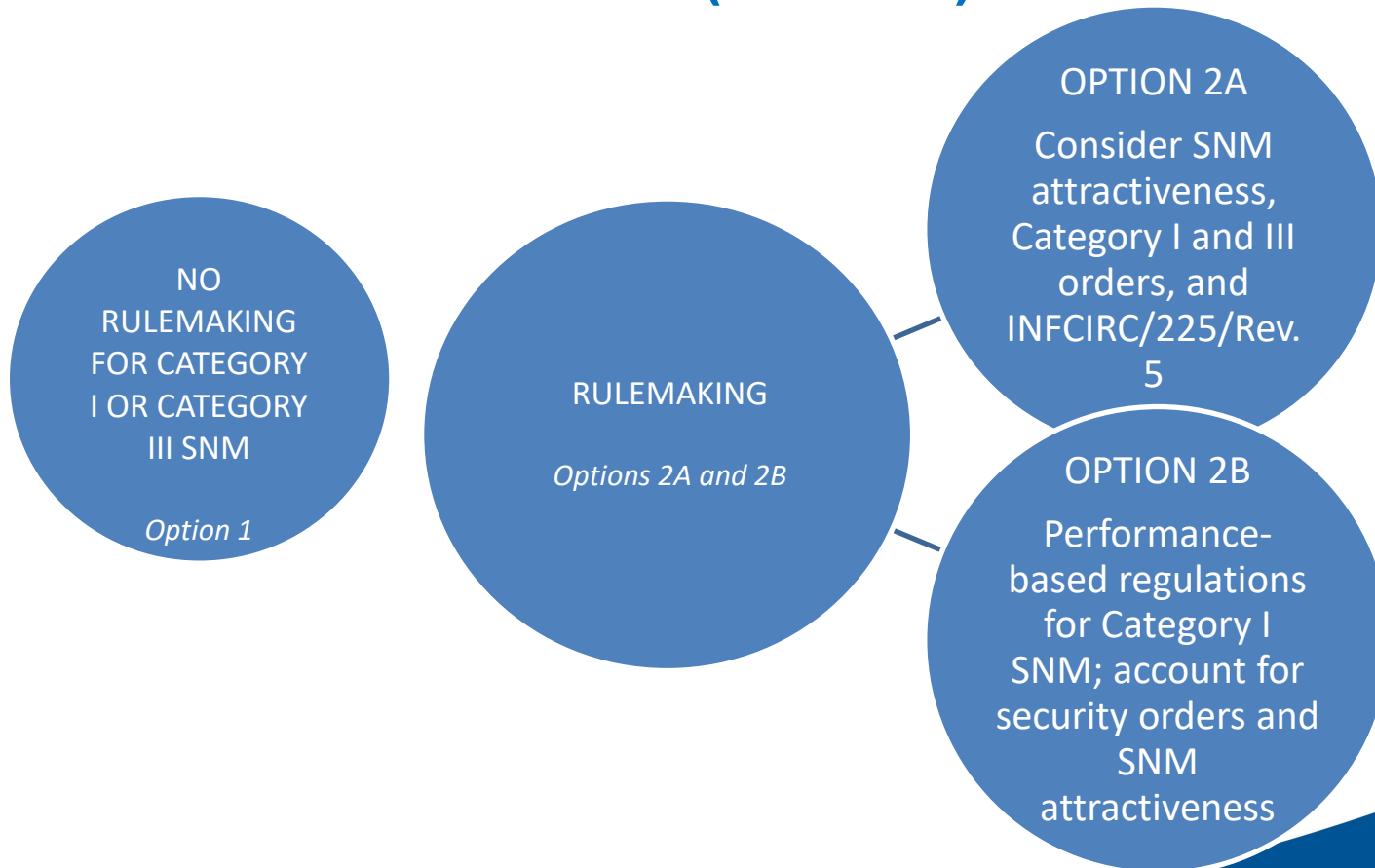
Revise facility &  
transport security  
requirements for  
SNF storage casks  
& transportation  
packages

*Option 3*

# What are the options the staff is considering for physical protection and MC&A for ANM (Issue D)?



# What are the options the staff is considering for physical protection of Category I and Category III SNM (Issue E)?



# Summary

- All options, definitions and physical protection measures are pre-decisional and are subject to change
- Further opportunity for stakeholder review and input if Commission directs rulemaking

# Public Participation

At this time, the public is afforded an opportunity to ask questions and/or provide comments on the following topics:

- Clarification on RIL-2022-08
- Options for Rulemaking on Security for SNM

# Recap of Action Items

**Jonathan Rowley, Project Manager**

Division of Fuel Management

Office of Nuclear Material Safety and Safeguards



# Closing Remarks

**Shana Helton, Director**

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