

### Public Meeting on Proposed Rule

Regulatory Improvements for Production and Utilization Facilities Transitioning to Decommissioning

March 21, 2022

### Purpose

 Provide information to help stakeholders prepare comments on the "Regulatory Improvements for Production and Utilization Facilities Transitioning to Decommissioning" proposed rule and draft regulatory guidance



# Agenda

- Welcome and Logistics
- Opening Remarks
- Background and Status
- Overview of the Proposed Rule
- Tips for Preparing Comments
- Next Steps
- Public Feedback and Questions



# Logistics

- Meeting is being recorded and transcribed
- Keep line muted until you intend to speak
- Raise hand button in Teams (\*5 on phone)
- Unmute button in Teams (\*6 on phone)
- Chat feature is disabled
- Presentation slides shown on the Microsoft Teams screen and in ADAMS at <u>ML22059A016</u>
- Phone attendees should email <u>Dan.Doyle@nrc.gov</u> for attendance



### **Opening Remarks**

### Patricia K. Holahan, Ph.D.

#### **Special Assistant**

#### Division of Rulemaking, Environmental, and Financial Support



### Daniel Doyle

#### Senior Project Manager

#### Division of Rulemaking, Environmental, and Financial Support





## **Background and Status**

## Background and Status

- An increase in plant shutdowns led the NRC to initiate rulemaking in December 2015 to improve the transition to decommissioning.
- The NRC conducted extensive public outreach including soliciting comments on an advance notice of proposed rulemaking and a regulatory basis document.
- The proposed rule was published in the *Federal Register* on March 3, 2022 (<u>87 FR 12254</u>). The 75-day comment period ends May 17, 2022.



## Proposed Rule and Related Documents

#### • Proposed Rule

- Citation: 87 FR 12254 (March 3, 2022)
- Web version
- Printed version

### Supporting & Related Material

- Draft Regulatory Analysis (ML22019A132)
- Draft Environmental Assessment (ML22019A140)
- Draft Supporting Statements for Information Collections (ML18039A192)
- Unofficial Redline Rule Text (ML22032A001)



### Guidance Documents

- DG-1346 Rev. 1 (Proposed New RG 1.235) Emergency Planning for Decommissioning Nuclear Power Reactors (<u>ML21347A046</u>)
- DG-1347 Rev. 1 (Proposed RG 1.184 Rev. 2) Decommissioning of Nuclear Power Reactors (<u>ML21347A080</u>)
- DG-1348 Rev. 1 (Proposed RG 1.159 Rev. 3) Assuring the Availability of Funds for Decommissioning Production or Utilization Facilities (ML21347A081)
- DG-1349 Rev. 1 (Proposed RG 1.185 Rev. 2) Standard Format and Content for Post-Shutdown Decommissioning Activities Report (ML21347A138)





### Overview of the Proposed Rule

Graded Approach		Docketing of 10 CFR 50.82/ 10 CFR 52.110 Certifications LEVEL 1	Permanent Cessation of Operations + 10 Months (BWR) or 16 Months (PWR) LEVEL 2	All Fuel in Dry Cask Storage LEVEL 3	All Fuel Offsite LEVEL 4
	Emergency Preparedness	Post-Shutdown Emergency Plan (PSEP)	Permanently Defueled Emergency Plan (PDEP)	ISFSI Only Emergency Plan (IOEP)	Permanent or interim waste storage available
	Physical Security	Allows for certain physical security plan changes without prior NRC approval		Can transition from 10 CFR 73.55 to 10 CFR 73.51 requirements	
	Cyber Security		Removal of cyber security requirements		
	Onsite/Offsite Insurance		Reduction of onsite insurance to \$50 million Reduction of offsite insurance to \$100 million		



### Emergency Preparedness

#### • Summary:

Where is this discussed in the FRN?

Certified Fuel Handler and

Section IV.A (pages 12268–12283)

Which sections of the CFR would be amended?

- 10 CFR 50.47, 10 CFR 50.54, 10 CFR 50.200, App E to 10 CFR Part 50, 10 CFR 72.32, 10 CFR 72.44
- This proposed rule offers an alternative, graded approach to the licensee requirements for onsite and offsite radiological emergency preparedness at an operating nuclear power reactor. This approach would provide four levels of emergency planning standards that coincide with significant milestones in the reduction of the radiological risk during decommissioning.

#### Specific requests for comments:

- Emergency Planning
- Emergency Response Data Systems

### Additional information:

• Draft Guidance: DG-1346 Revision 1 (Proposed New Regulatory Guide RG 1.235) **Emergency Planning for Decommissioning Nuclear Power Reactors** 



### **Physical Security**

#### • Summary:

#### Where is this discussed in the FRN?

• Section IV.B (pages 12283–12285)

Which sections of the CFR would be amended?

- 10 CFR 50.54, 10 CFR 72.13, 10 CFR 72.212, 10 CFR 73.51, 10 CFR 73.55
- This proposed rule would allow certain changes to eliminate licensee requests for approvals via exemptions, amendments, and for certain adjustments to their physical security programs (the removal of the prevention of significant core damage, the use of certified fuel handlers, the removal of the control room as a vital area, the removal of security communications with the control room, revisions to the 10 CFR 50.54(p)(2) process, and the use of 10 CFR 73.51 for the Independent Spent Fuel Storage Installation physical security requirements).
- Specific requests for comments:
  - None
- Additional information:
  - None



## Cyber Security

Where is this discussed in the FRN?

Section IV.C (pages 12285–12286) Which sections of the CFR would be amended?

10 CFR 73.54, 10 CFR 73.55

#### • Summary:

• This proposed rule would provide that the cyber security requirements in § 73.54, "Protection of digital computer and communication systems and networks," would apply to a nuclear power reactor after the licensee's permanent cessation of operations, until all the fuel has been removed from the reactor vessel and there has been sufficient decay of the fuel in the spent fuel pool such that it would not reach ignition temperature within 10 hours under adiabatic heatup conditions.

#### Specific requests for comments:

- Cyber Security
- Additional information:
  - Backfit analysis is in Section IX.D of the FRN (pages 12313–12316).

Certified Fuel Handler and Drug and Alcohol Testing Elimination of the Shift Technical Advisor



### Drug and Alcohol Testing

Where is this discussed in the FRN?

Section IV.D (pages 12286–12287)

Which sections of the CFR would be amended?

Protecting People and the Environment

10 CFR 26.3, 10 CFR 26.825, 10 CFR 73.55

#### • Summary:

 This proposed rule would correct inconsistencies in the NRC's regulations for fitness-for-duty programs and clarify provisions regarding a nuclear power reactor licensee's insider mitigation program.

### Specific requests for comments:

None

### Additional information:

None

Certified Fuel Handler Definition and Elimination of the Shift Technical Advisor

Where is this discussed in the FRN?
Section IV.E (pages 12287–12288)
Which sections of the CFR would be amended?

• 10 CFR 50.2, 10 CFR 50.54

### • Summary:

• This proposed rule would retain the existing definition for "certified fuel handler" and add an alternative that would eliminate the need for nuclear power reactor licensees to seek the Commission's approval of a fuel handler training program. This proposed rule would also clarify that a Shift Technical Advisor is not required for decommissioning nuclear power reactors.

### • Specific requests for comments:

• None

### Additional information:

• None



### Decommissioning Funding Assurance

Where is this discussed in the FRN?

• Section IV.F (pages 12288–12289)

Which sections of the CFR would be amended?

 10 CFR 50.75, 10 CFR 50.82, 10 CFR 52.110, 10 CFR 72.30

#### • Summary:

- Modifies the biennial decommissioning trust fund reporting frequency for operating reactors (10 CFR 50.75) to be consistent with the 3-year reporting frequency for ISFSIs (§ 72.30(c)).
- ISFSI funding reports
  - allows licensees to combine reports required by § 50.82(a)(8)(v), § 50.82(a)(8)(vii), and § 72.30
  - removes the requirement for NRC approval of ISFSI reports filed under § 72.30(c).
- Clarifies that when a licensee identifies a shortfall in report required by § 50.75(f)(1), the licensee must obtain additional financial assurance to cover the shortfall and discuss that information in the next report.
- Makes administrative changes to ensure consistency with § 50.4, "Written communications," regarding the submission of notifications and to eliminate § 50.75(f)(2) because § 50.75(f)(1) fully encompasses paragraph (f)(2).

Offsite and Onsite Financial Protection Requirements and Indemnity Agreements Environmental Considerations



# Decommissioning Funding Assurance (continued)

### • Specific requests for comments:

- Financial Assurance
- Site-Specific Cost Analysis
- Decommissioning Trust Fund
- Timing of Decommissioning Fund Assurance Reporting
- Identical Requirements under § 50.82 and § 52.110

### Additional information:

 Draft Guidance: DG-1348 Revision 1 (Proposed Regulatory Guide RG 1.159 Rev. 3) Assuring the Availability of Funds for Decommissioning Production or Utilization Facilities

Offsite and Onsite Financial Protection Requirements and Indemnity Agreements Environmental Considerations



Offsite and Onsite Financial Protection Requirements and Indemnity Agreements

Where is this discussed in the FRN?

Section IV.G (pages 12289–12291)

Which sections of the CFR would be amended?

10 CFR 50.54, 10 CFR 140.11, 10 CFR 140.81

### • Summary:

 This proposed rule would allow certain nuclear power reactor licensees in decommissioning to reduce the onsite and offsite insurance amounts they are required to maintain without obtaining exemptions from the NRC's regulations.

### Specific requests for comments:

- Insurance
- Insurance for Specific License ISFSI

### Additional information:

• None



### **Environmental Considerations**

#### • Summary:

Where is this discussed in the FRN?

Section IV.H (pages 12291–12292)

Which sections of the CFR would be amended?

- 10 CFR 50.82, 10 CFR 51.53, 10 CFR 51.95, 10 CFR 52.110
- This proposed rule would clarify that licensees must evaluate in the Post Shutdown Decommissioning Activities Report (PSDAR) the environmental impacts of decommissioning and whether they are bounded by previous federally issued environmental review documents. The proposed rule would also clarify environmental reporting requirements.

### Specific requests for comments:

None

### Additional information:

• Draft Guidance: DG-1347 Rev 1 (Proposed Rev 2 RG 1.184) Decommissioning of Nuclear Power Reactors; DG-1349 Rev 1 (Proposed Rev 2 RG 1.185) Standard Format and Content for PSDAR. Decommissioning GEIS will be updated separately.

Decommissioning Funding Assurance

Offsite and Onsite Financial Protection Requirements and Indemnity Agreements

**Environmental Considerations** 

Low-Level Waste Transportation Record Retention Requirements



### Record Retention Requirements

Where is this discussed in the FRN?

• Section IV.I (pages 12292–12294)

Which sections of the CFR would be amended?

10 CFR 50.59, 10 CFR 50.71, 10 CFR 52.63,
 10 CFR 72.72

#### • Summary:

 This proposed rule would remove certain record retention requirements for structures, systems, and components that no longer remain in service during decommissioning and would remove requirements to keep multiple copies of certain spent fuel storage records.

### • Specific requests for comments:

- Recordkeeping Requirements for Facilities Licensed under 10 CFR Part 52
- Additional information:
  - None



### Low-Level Waste Transportation

Where is this discussed in the FRN?

• Section IV.J (pages 12294–12295)

Which sections of the CFR would be amended?

App G to 10 CFR Part 20

#### • Summary:

 This proposed rule would allow a 45-day window for notification of receipt of shipments of low-level radioactive waste. This increase from the current 20day notification window is based on operating experience that shows that 45 days is an appropriate amount of time to allow for notification of low-level waste shipments.

#### • Specific requests for comments:

• None

### Additional information:

• None

Low-Level Waste Transportation Spent Fuel Management Planning



### Spent Fuel Management Planning

Where is this discussed in the FRN?

• Section IV.K (pages 12295–12296)

Which sections of the CFR would be amended?

10 CFR 50.54(bb), 10 CFR 51.53, 10 CFR 51.95, 10 CFR 72.218

#### • Summary:

 This proposed rule would clarify requirements for documenting information on spent fuel management planning in the § 50.54(bb) irradiated fuel management plan and would clarify requirements for decommissioning and termination of a 10 CFR Part 72 general license in § 72.218, "Termination of licenses."

### • Specific requests for comments:

- Spent Fuel Management Planning
- Additional information:
  - Draft Guidance: DG-1347 Rev 1 (Proposed RG 1.184 Rev 2), DG-1349 Rev 1 (Proposed RG 1.185 Rev 2)

Foreign Ownership, Control, or Domination



**Backfit Rule** 

### Backfit Rule

Where is this discussed in the FRN? Section IV.L (pages 12296–12297) Which sections of the CFR would be amended? 10 CFR 50.109, 10 CFR 72.62

Protecting People and the Environment

#### • Summary:

 This proposed rule would clarify how the NRC applies § 50.109, "Backfitting," to nuclear power reactor licensees in decommissioning and would make conforming changes to § 72.62.

### Specific requests for comments:

Backfit Rule

### Additional information:

 The proposed rule would codify consideration of costs when justifying a backfitting action with the compliance exception.

# Foreign Ownership, Control, or Domination

#### Where is this discussed in the FRN?

• Section IV.M (pages 12297–12300)

Which sections of the CFR would be amended?

 10 CFR 50.1, 10 CFR 50.2, 10 CFR 50.38, 10 CFR 50.51, 10 CFR 50.82, 10 CFR 52.0, 10 CFR 52.109, 10 CFR 52.110

- Summary:
  - This proposed rule would specify the criteria for when a facility is no longer a production or utilization facility and that the foreign ownership, control, or domination prohibition found in § 50.38, "Ineligibility of certain applicants," no longer applies to a person seeking a license for such a facility.

### • Specific requests for comments:

- None
- Additional information:
  - None



Clarification of Scope of License Termination Plan Requirement

Where is this discussed in the FRN?

• Section IV.N (pages 12300–12301)

Which sections of the CFR would be amended?

10 CFR 50.82, 10 CFR 52.110

#### • Summary:

 This proposed rule would clarify that the requirement for a license termination plan in §§ 50.82(a)(9) and 52.110(i) applies only to nuclear power reactor licensees that have loaded fuel into the reactor.

#### • Specific requests for comments:

• None

### Additional information:

• None

### Removal of License Conditions and Withdrawal of Orders

Where is this discussed in the FRN?
Section IV.O (pages 12301–12301)
Which sections of the CFR would be amended?
10 CFR 50.155

### • Summary:

 This proposed rule would deem removed conditions imposed upon individual licensees and withdraw an NRC order. The conditions and order have been identified as having been made redundant by subsequent regulation resulting in their requirements being generically applicable.

### • Specific requests for comments:

- Removal of License Conditions and Withdrawal of Orders
- Additional information:
  - None



Changes for Consistent Treatment of Holders of Combined Licenses and Operating Licenses

### • Summary:

Where is this discussed in the FRN?

• Section IV.P (pages 12301–12302)

Which sections of the CFR would be amended?

- 10 CFR 50.36, 50.44, 50.46, 50.48, 50.49,
  50.54, 50.59, 50.60, 50.61, 50.62, 50.65,
  50.71, 50.75, App I to 10 CFR Part 50, 52.110
- The proposed rule would improve consistency in regulatory treatment for combined license (Part 52) and operating license (Part 50) holders by aligning regulatory applicabilities for combined license holders upon submittal of the § 52.110(a) certifications with regulatory applicabilities for operating license holders upon submittal of the § 50.82(a)(1) certifications.

### • Specific requests for comments:

• None

### Additional information:

• None



## Specific Requests for Comments

- 18 questions
- Section V in the FRN (pages 12302–12304)
- PSDAR Approval
- Timeframe for Decommissioning
- Emergency Planning
- Emergency Response Data Systems
- Cyber Security
- Insurance
- Financial Assurance
- Site-Specific Cost Analysis
- Decommissioning Trust Fund
- Timing of Decommissioning Funding Assurance Reporting

- Backfit Rule
- Exemptions
- Applicability
- Insurance for Specific License ISFSI
- Recordkeeping Requirements for Facilities Licensed under 10 CFR Part 52
- Identical Requirements under § 50.82 and § 52.110
- Removal of License Conditions and Withdrawal of Orders
- Spent Fuel Management Planning



# Regulatory Analysis

#### • Summary:

 This proposed rule is determined to be cost beneficial, with estimated net averted costs of approximately \$17.9M at a 7 percent net present value (NPV) and \$37.0M at a 3 percent NPV, for the recommended alternatives

#### • Specific decommissioning areas:

- The Emergency Preparedness alternative is estimated to result in net averted costs of approximately \$7.74M at a 7 percent NPV
- The Drugs and Alcohol Testing alternative is estimated to result in net averted costs of approximately \$7.03M at a 7 percent NPV
- The Decommissioning Funding Insurance alternative is estimated to result in net averted costs of approximately \$1.18M at a 7 percent NPV





### Tips for Preparing Comments

# Tip #1 – Review the Commenter's Checklist on Regulations.gov

- Available on the comment submission form on Regulations.gov
- Also available in printable format

Regulations.gov Your Voice in Federal Decision Making TIPS FOR SUBMITTING EFFECTIVE COMMENTS*
Overview
A comment can express simple support or dissent for a regulatory action. However, a constructive, information-rich comment that clearly communicates and supports its claims is more likely to have an impact on regulatory decision making.
These tips are meant to help the public submit comments that have an impact and help agency policy makers improve federal regulations.
Summary
<ul> <li>Read and understand the regulatory document you are commenting on</li> <li>Feel free to reach out to the agency with questions</li> <li>Be concise but support your claims</li> <li>Base your justification on sound reasoning, scientific evidence, and/or how you will be impacted</li> <li>Address trade-offs and opposing views in your comment</li> <li>There is no minimum or maximum length for an effective comment</li> <li>There comment process is not a vote – one well supported comment is often more influential than a thousand form letters</li> </ul>
Detailed Recommendations
<ol> <li>Comment periods close at 11:59 eastern time on the date comments are due - begin work well before the deadline.</li> </ol>
<ol> <li>Attempt to fully understand each issue; if you have questions or do not understand a part of the regulatory document, you may ask for help from the agency contact listed in the document.</li> <li>Note: Although the agency contact can answer your questions about the document's meaning, official</li> </ol>
comments must be submitted through the comment form.
<ol> <li>Clearly identify the issues within the regulatory action on which you are commenting. If you are commenting on a particular word, phrase or sentence, provide the page number, column, and paragraph citation from the federal register document.         <ul> <li>a. If you choose to comment on the comments of others, identify such comments using their comment ID's before you respond to them.</li> </ul> </li> </ol>
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# Tip #2 – Review the Unofficial Redline Rule Language

- This document shows how the proposed rule would modify the current regulations in redline/strikeout format.
- ADAMS Accession No. <u>ML22032A001</u>

(b) Each power reactor applicant for or holder of an operating license, and each applicant for a combined license under subpart C of 10 CFR part 52 for a production or utilization facility of the type and power level specified in paragraph (c) of this section shall submit a decommissioning report, as required by § 50.33(k).

(1) For an applicant for or holder of an operating license under this part-50, the report must contain a certification that financialreasonable assurance for decommissioningthat funds will be available to decommission will be (for a license applicant), or has been (for a license holder), provided in an amount which may be more, but not less, than the amount stated in the table in wh (c)(1) of this section adjusted using a rate at least equal to that stated (c)(2) of this soction. For an applicant for a combined license under subpart C of 10 CER part 52, the report must contain a certification that financial assurance for decommissioning will be provided no later than 30 days after the Commission publishes petice in the Federal Pegist under 8 52 103(a) in an amount which may be more, but not lose, than th tableof minimum amounts in paragraph (c)(1) of this section, adjusted using a rate at least equal to that stated in paragraph (c)(2) of this section. For an applicant for a combined license under subpart C of part 52 of this chapter, the report must contain a certification that reasonable assurance of funds to decommission will be provided no later than 30 days after the Commission publishes notice in the Federal Register under § 52 103(a) of this chapter in an amount which may be more, but not less, than the amount stated in the table of minimum amounts in paragraph (c)(1) of this section, adjusted using a rate at least equal to that stated in paragraph (c)(2) of this section.

(2) The amount to be provided must be adjusted annually using a rate at least equal to that stated in paragraph (c)(2) of this section.

(3) The amount must be covered by one or more of the methods described in paragraph (e) of this section-ac acceptable to the NRC.

(4) The amount stated in the applicant's or licensee's certification may be based on a <u>site-specific decommissioning</u> cost estimate for decommissioning the facility. <u>The site-specific</u> decommissioning cost estimate may be more, but not less, than the amount stated in the table of minimum amounts in paragraph (c)(1) of this section, adjusted using a rate at least equal to that stated in paragraph (c)(2) of this section.

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# Tip #3 – Find additional information on the NRC public website



#### https://go.usa.gov/xzksC

Questions? Contact Dan Doyle, <u>Dan.Doyle@nrc.gov</u>, 301-415-3748





### Next Steps

- Public comment period ends: May 17, 2022
- Final rule to the Commission: October 2023 (estimated)
- Final rule publication: May 2024 (estimated)





### Public Feedback and Questions

### How did we do?

• NRC Public Meeting Feedback Form (QR code):



• The public meeting <u>feedback form</u> is also available on the <u>meeting</u> <u>details</u> page.



### Acronyms

- ADAMS Agencywide Documents Access and Management System
- BWR boiling water reactor
- CFR Code of Federal Regulations
- COL combined license
- CSP cyber security plan
- DG draft regulatory guide
- FRN Federal Register notice
- GEIS generic environmental impact statement
- IOEP ISFSI-only emergency plan

ISFSI	independent spent fuel storage installation
NPV	net present value
NRC	Nuclear Regulatory Commission
PDEP	permanently defueled emergency plan
PSDAR	post-shutdown decommissioning activities report
PSEP	post-shutdown emergency plan
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PWR	pressurized water reactor
RG	regulatory guide
SRM	staff requirements memorandum

