



**Public Meeting to Discuss the
Regulatory Basis for
Streamlining Non-Power Reactor
License Renewal**

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June 20, 2012



Opening Remarks



Agenda

- | | |
|-------------------|---|
| 1:00 PM - 1:05 PM | Opening Remarks |
| 1:05 PM - 2:30 PM | Analysis findings and options for NPR license renewal |
| 2:30 PM - 2:45 PM | BREAK |
| 2:45 PM - 3:45 PM | Stakeholder discussion |
| 3:45 PM - 4:00 PM | Invitation for public discussion |
| 4:00 PM - 4:15 PM | Schedule and next steps |
| 4:15 PM - 4:30 PM | Conclusion |



Analysis Findings and Options for NPR License Renewal



Regulatory Basis - Background

- Starting in 2001, a backlog and delay in reviewing NPR license renewal applications developed
- To create a long-term solution for license renewal, the Commission directed the staff to “accelerate the rulemaking to establish a more efficient, effective and focused regulatory framework” (August 26, 2009, Staff Requirements Memorandum)
- In response, the NRC staff has prepared a draft regulatory basis for streamlining the non-power reactor license renewal process



Regulatory Basis - Methodology

- Reviewed existing regulatory requirements
- Analyzed segregation of regulations
- Benchmarked license renewal methodologies used by other agencies
- Consulted with stakeholders



Regulatory Basis – Summary

- The draft regulatory basis analyzes 10 options:
 - 5 options directly address license renewal
 - 5 *other* options
- We are seeking public input on:
 - Whether an adequate technical basis exists to proceed with rulemaking
 - Additional factors the staff should consider



Analysis Findings: Regulatory Constraints

1. Reliance on initial licensing regulations for license renewal
2. Lack of periodic updates to SARs
3. “Timely renewal” provision in 10 CFR 2.109
4. Problems in existing rule language



Analysis Findings:

Opportunity for Segregation

1. Segregate new license renewal regulations into a separate Part or Subpart of 10 CFR
2. Also segregate existing NPR licensing regulations into a separate Part, Subpart, or Section of 10 CFR.



Analysis Findings: Benchmarking

- Approaches identified and considered
 - Periodic update to SAR
 - Used by the Army Reactor Program (DOD) and DOE
 - Periodic Safety Reviews
 - Described in IAEA guidance
 - Probabilistic Risk Assessment
 - Used by DOE, case-by-case basis



Options for License Renewal

1. No action
2. No rulemaking
3. Rulemaking adopting streamlined license renewal
4. Eliminate license terms, add PSRs
5. Eliminate license terms, add enhanced inspections



Options for License Renewal (cont.)

Options	Regulatory Constraints		
	Constraint 1: Initial licensing regulations for license renewal	Constraint 2: Lack of periodic updates to SAR	Constraint 3: “Timely renewal” provision in 10 CFR 2.109
#1: No action			
#2: No rulemaking	✓	✓	
#3: Rulemaking adopting streamlined license renewal	✓	✓	✓
#4: Eliminate license terms, add PSRs	✓	✓	✓
#5: Eliminate license terms, add enhanced inspections	✓	✓	✓



Options for License Renewal (cont.)

- Option 3: Rulemaking to streamline license renewal
 - Revise the timely renewal requirement
 - Extend ISG concepts to the *preparation* of applications
 - Require periodic updates to SARs
 - Revise NUREG-1537



Options for License Renewal (cont.)

- Option 4: Rulemaking to eliminate license terms and add PSRs
 - Eliminate license terms
 - Require periodic updates to the SAR
 - Implement periodic licensee-led reviews of safety



Options for License Renewal (cont.)

- Option 5: Rulemaking to eliminate license renewal and add enhanced reviews
 - Eliminate license terms
 - Require periodic updates to the SAR
 - Implement periodic enhanced NRC reviews



Stakeholder Discussion and Comments

- Comments on the regulatory basis for a license renewal rulemaking
 - Does an adequate technical basis exist to proceed with rulemaking?
 - Which of these options, if any, do you prefer?
 - Are there additional factors the staff should consider?
 - Other options
 - Costs
 - Benefits
 - Other comments or questions?



Other Options

6. Revise Section 50.59
7. Revise definitions and terminology
8. Document technical basis for testing facility
9. Develop dose criteria for research reactors
10. Segregate licensing regulations



Other Options (cont.)

	Regulatory Constraints				
Options	Constraint 4: Problems in Existing Rule Language				
	Applicability of Section 50.59	Definitions and terminology	Rule applicability	Dose standards for research reactors	Organization & presentation of requirements
#6: Revise Section 50.59	✓				
#7: Revise definitions and terminology		✓			
#8: Technical basis for testing facility			✓		
#9: Dose criteria for research reactors				✓	
#10: Segregate NPR licensing regulations					✓



Other Options (cont.)

- Option 6: Revise 50.59
 - Wording in Section 50.59(b) is not applicable to facilities that return their fuel to DOE after permanent shutdown, due to amended language in license.
- Option 7: Revise definitions and terminology
 - Definitions and terminology need clarification (e.g., in Sections 50.2, 50.22, and 170.3)
- Option 8: Technical basis for testing facility
 - Document the technical basis for the 10MW(t) threshold



Other Options (cont.)

- Option 9: Develop accident dose criteria for non-power reactors
 - Criteria in Part 20 are currently used
- Option 10: Segregate licensing regulations
 - Enhance clarity of licensing process by segregating requirements applicable to NPRs in a separate Part or Subpart



Stakeholder Discussion and Comments



REGULATORY BASIS COMMENTS

NON-POWER REACTOR (NPR) LICENSE RENEWAL RULEMAKING

- **DOCKET ID = NRC-2011-0087**
- **RIN = 3150-A196**



Stakeholder Discussion and Comments

- Comments on the regulatory basis for a license renewal rulemaking
 - Does an adequate technical basis exist to proceed with rulemaking?
 - Which of these options, if any, do you prefer?
 - Are there additional factors the staff should consider?
 - Other options
 - Costs
 - Benefits
 - Other comments or questions?



Stakeholder Discussion and Comments

- Comments on the other options
 - Revise Section 50.59
 - Revise definitions and terminology
 - Document technical basis for testing facility
 - Develop dose criteria for research reactors
 - Segregate licensing regulations



Invitation for Public Discussion



Schedule and Next Steps



Schedule and Next Steps

- Analyze public comments on regulatory basis:
 - ~ June-July 2012
- Revise regulatory basis, as necessary:
 - ~ July-August 2012
- Submit final regulatory basis to the Commission:
 - ~ End of August 2012



Conclusion