



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

**Duane Hardesty, NRR/DPR/PRLB**

**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.)

	Regulatory Constraints		
Options	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