

# Certificate of Compliance Expiration Term

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# Outline of Presentation

- OIG report and recommendation
- Staff response
- Process for development of expiration term
- General Discussion
- Next steps/schedule
- Contacts
- Questions

# OIG Audit

- **OIG report**
  - “Audit of NRC’s Oversight for Issuing Certificates of Compliance for Radioactive Material Packages (OIG-17-A-21),” dated August 16, 2017
  - **Objective of audit**
    - Determine if NRC’s processes for issuing certificates of compliance and reviewing 10 CFR Part 72.48 changes provide adequate protection for public health, safety, and the environment

# OIG Recommendations

1. Conduct an analysis to develop the regulatory and technical bases for the part 71 certificates of compliance term
2. Document and communicate to stakeholders NRC's analysis results identifying the bases for an appropriate term for Part 71 certificates of compliance
3. Establish sufficient internal controls by updating NRC guidance related to Part 72.48 review procedures
4. Establish sufficient internal controls by developing and implementing training for part 72.48 review process

# OIG Recommendation 1

- Recommendation 1
  - Conduct an analysis to develop the regulatory and technical bases for the Part 71 Certificates of Compliance expiration term
- Purpose of this meeting is to discuss Recommendation 1

# Staff Response

- The staff, in consultation with the U.S. Department of Transportation, will conduct a technical and regulatory analysis to develop a basis for the duration of NRC-issued certificates of compliance for radioactive material packages
  - Staff will consider risk insights from existing studies performed on transportation risk of spent fuel and solicit stakeholder input, including input from international counterparts

# Staff Response

(continued)

- Will develop technical and regulatory bases to establish an appropriate term for certificates of compliance for transportation packages
- Document the results
- Communicate results to stakeholders
  - Post on the NRC public web site
  - Communicate to stakeholders, such as the DSFM regulatory conference (REG CON)

# Staff Response

(continued)

- Existing Studies and Risk Estimates
  - NUREG-0170, “Final Environmental Statement on the Transportation of Radioactive Material by Air and Other Modes,” September 1977
  - Vol. 1: ML022590265
  - Vol. 2: ML022590511



# Staff Response

(continued)

- Fischer, L.E., et al., “Shipping Container Response to Severe Highway and Railway Accident Conditions,” NUREG/CR-4829 (UCID-20733), Lawrence Livermore National Laboratory, Livermore, CA, February 1987

# Staff Response

(continued)

- NUREG/CR-6672, “Reexamination of Spent Fuel Shipment Risk Estimates – Main Report,” March 2000
- NUREG-2125, “Spent Fuel Transportation Risk Assessment,” January 2014

# Process for Development of Appropriate Expiration Term

- Consulted with DOT
- Consult with stakeholders
  - This public meeting
- Use information from risk studies to inform staff recommendations
- Develop a technical and regulatory bases for an appropriate expiration term

# General Discussion

- What factors should NRC consider as it evaluates a regulatory and technical bases for expiration term?
  - Stability of regulatory environment
  - Institutional Stability
  - Technological Stability
  - Other?

# General Discussion

- How should we factor in risk?
  - How does human factors/error relate to the expiration term?
  - Are there other risk contributors that correlate to the expiration term?

# General Discussion

- What are the impacts if there were a change in the certificate expiration term?
  - Domestic
  - International
    - Impact on international transportation
    - IAEA requirements

# Items for Discussion

## General Discussion

- What are the implementation challenges if the NRC were to change the expiration term?
  - Costs
  - Revisions to internal processes

# Next Steps/Schedule

- Evaluate comments from this meeting and internal evaluations
  - We welcome comments related to this public meeting
  - Please provide comments no later than May 25, 2018



# Next Steps/Schedule

(continued)

- Develop a regulatory and technical bases for the expiration term for certificates of compliance
  - Based on discussions in this meeting
  - Our interactions with DOT
  - Review of existing studies and risk estimates
- Response due to OIG September 2018

# Contacts

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# Questions

# Acronyms

- DOT – Department of Transportation
- DSFM – Division of Spent Fuel Management
- IAEA – International Atomic Energy Agency
- NRC – Nuclear Regulatory Commission
- OIG – Office of the Inspector General