

**Public Meeting to Obtain Stakeholder Feedback on Program Enhancements
in the Licensing and Inspection Programs for Spent Fuel Storage and
Transportation Under 10 CFR Parts 71 & 72**

**July 27, 2011
Two White Flint North Auditorium
Rockville, MD**

INFORMATION PACKET

COMMENTS OR SUGGESTIONS: (Continued)

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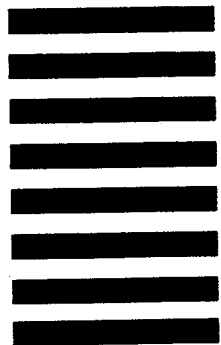
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WASHINGTON DC 20555-0001**





Category

NRC PUBLIC MEETING FEEDBACK

Meeting Date: 07/27/2011

Meeting Title: Meeting on Enhancements in the Licensing and Inspection Programs for SNF Storage and Transportation

In order to better serve the public, we need to hear from the meeting participants. Please take a few minutes to fill out this feedback form and return it to NRC.

1. How did you hear about this meeting?

- NRC Web Page
- NRC Mailing List
- Newspaper
- Radio/TV
- Other _____

	<u>Yes</u>	<u>No</u> <small>(Please explain below)</small>	<u>Somewhat</u>
2. Were you able to find supporting information prior to the meeting?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Did the meeting achieve its stated purpose?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Has this meeting helped you with your understanding of the topic?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Were the meeting starting time, duration, and location reasonably convenient?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Were you given sufficient opportunity to ask questions or express your views?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Are you satisfied overall with the NRC staff who participated in the meeting?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

COMMENTS OR SUGGESTIONS:

Thank you for answering these questions.

Continue Comments on the reverse. ↪

OPTIONAL

Name _____ Organization _____

Telephone No. _____ E-Mail _____

Check here if you would like a member of NRC staff to contact you.

Please fold on the dotted lines with Business Reply side out, tape the bottom, and mail back to the NRC.

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Final Agenda

7:30 a.m. – 8:00 a.m.	Check-in (Security)
8:00 a.m. – 8:05 a.m.	Ground Rules, Facility Information, Security, Agenda (Facilitators)
8:05 a.m. – 8:20 a.m.	Welcoming Remarks (Dan Dorman, Deputy Director, NMSS)
8:20 a.m. – 9:00 a.m.	Licensing and Inspection Program Overview (Michael Waters, Branch Chief & Kristina Banovac, Project Manager, SFST)
9:00 a.m. – 9:45 a.m.	Stakeholder Feedback
9:45 a.m. – 10:00 a.m.	Break
10:00 a.m. – 10:20 a.m.	Potential Enhancements in the Licensing Program – Compatibility and Integration of 10 CFR Parts 71 and 72 Requirements for Dual Purpose Casks (Michele Sampson, Senior Project Manager, SFST)
10:20 a.m. – 11:00 a.m.	Stakeholder Feedback
11:00 a.m. – 11:20 a.m.	Potential Enhancements in the Licensing Program – Streamlining the Process for 10 CFR Part 72 Cask Certification (Kristina Banovac, Project Manager, SFST)
11:20 a.m. – 12:00 p.m.	Stakeholder Feedback
12:00 p.m. – 1:15 p.m.	Lunch
1:15 p.m. – 2:00 p.m.	Potential Enhancements in the Inspection Program for 10 CFR Parts 71 and 72 (Thomas Matula, Senior Project Manager, HLWRS)
2:00 p.m. – 2:45 p.m.	Stakeholder Feedback
2:45 p.m. – 3:00 p.m.	Break
3:00 p.m. – 3:20 p.m.	Establishing a Positive Safety Culture for 10 CFR Parts 71 and 72 (Kevin Witt, Project Manager, SFST)
3:20 p.m. – 3:45 p.m.	Stakeholder Feedback
3:45 p.m. – 4:15 p.m.	Summary Discussions
4:15 p.m. – 4:30 p.m.	Closing Remarks (Aby Mohseni, Acting Director, HLWRS)
4:30 p.m.	Adjourn

ISSUE 1: COMPATIBILITY AND INTEGRATION OF STORAGE AND TRANSPORTATION REGULATORY REQUIREMENTS FOR SPENT NUCLEAR FUEL

BACKGROUND:

Regulations for packaging and transport of spent nuclear fuel are contained in 10 CFR Part 71, while licensing requirements for spent nuclear fuel storage are in 10 CFR Part 72. One link between these two parts is 10 CFR 72.236(m), which provides that "in the design of spent fuel storage casks, considerations should be given to compatibility with removal of the stored spent fuel from a reactor site, transportation, and ultimate disposition." Current transportation regulations are compatible with the International Atomic Energy Agency TS-R-1, "Regulations for the Safe Transport of Radioactive Material."

ISSUE DESCRIPTION:

Part 72 allows storage systems to provide an interim solution until waste is dispositioned for final disposal. While many designs in the current generation of cask technologies are intended for use in both storage and transport, the vendor must obtain independent storage and transportation certificates. These certificates are seldom issued at the same time and could have differing content descriptions or conditions for use. Better integration between the storage and transport regulations could provide predictable transition from storage to transport and potentially minimize future handling needs and regulatory uncertainty.

CONSIDERATIONS:

A goal of the regulatory process improvement review is to identify enhancements for the spent nuclear fuel package certification review processes, including storage and transportation compatibility, that improve regulatory effectiveness and predictability. The NRC staff is considering:

1. Development of more detailed requirements regarding the aspects of transportation which should be considered as a part of storage licensing.
2. Revision of Part 72 to incorporate the preliminary determinations required under Part 71 prior to a package being used for transport.
3. Identification of common technical analyses within the storage and transportation regulations and incorporation of the different analyses into one regulation.
4. Revision of storage and transportation requirements to allow the issuance of a combined Certificate of Compliance.
5. Revision of Part 71 regulations to address unique aspects of the safe transportation of spent nuclear fuel after it has been in dry cask storage for a specified period.
6. Consideration of the impact Part 71 revisions would have on the ability of cask vendors to use storage systems for international transport.

ISSUE 2: STREAMLINING THE PROCESS FOR SPENT FUEL STORAGE CASK DESIGN CERTIFICATION

BACKGROUND

In 1990, the U.S. Nuclear Regulatory Commission (NRC) amended 10 CFR Part 72 to grant a general license for storage of spent fuel in an independent spent fuel storage installation (ISFSI) at power reactor sites with a 10 CFR Part 50 license, without the need for site-specific NRC approval, provided that storage is in casks approved by the NRC and that certain other conditions are met. This general license meets the requirements of the Nuclear Waste Policy Act of 1982.

The NRC also established a process for approving spent fuel storage cask designs. The NRC performs the safety review of new cask designs and subsequent changes under the applicable regulatory requirements in 10 CFR Part 72, Subpart L. The NRC uses the direct final rulemaking process to certify storage cask designs. If there are no significant adverse public comments on the direct final rule, the rule becomes effective 75 days after its publication in the Federal Register, in which the newly approved cask design is added to the list in 10 CFR 72.214 of approved casks, available for use by general licensees.

ISSUE DESCRIPTION

Over the past two decades, the NRC has promulgated several dozen rulemakings to approve new cask designs and amendments to existing cask designs that range from minor to major changes. Some rulemakings involve consideration of new cask designs, significant design or contents changes in approved cask designs, or minor changes in cask design or contents. Additionally, some amendments may have different design and operational controls than earlier amendments. Addressing changes or making corrections to an approved CoC amendment listed in 10 CFR 72.214 requires rulemaking under the current regulatory scheme. The current rulemaking process for cask certification takes between four and six months beyond the completion of staff's safety review of a cask design. In addition, the number and significance of public comments have generally diminished. Thus, the NRC is examining the cask certification process to determine whether improvements can be made by streamlining the process to develop a more efficient NRC review and certification process. The staff will review both processes within the NRC and processes involving applicants and stakeholders.

CONSIDERATIONS

Areas where there may be opportunity to streamline the current cask design certification process include:

1. Changing the timing of the cask certification rulemaking process and the opportunity for public comment by commencing the rulemaking process prior to the completion of the NRC staff review.
2. Developing a technical basis to demonstrate some dry cask storage amendments do not constitute a new technology, and exploring whether these amendments could be approved without rulemaking.

ISSUE 3: INSPECTION PROGRAM REVIEW FOR SPENT FUEL STORAGE AND TRANSPORTATION

BACKGROUND

On December 6, 2010, the Commission issued "Staff Requirements Memorandum (SRM) – COMSECY-10-0007 – Project Plan for Regulatory Program Review to Support Extended Storage and Transportation of Spent Nuclear Fuel." In the SRM, the Commission specifically approved the staff advancing the regulatory process improvement review to identify near-term efficiency and effectiveness enhancements to the licensing and inspection programs.

ISSUE DESCRIPTION

The NRC staff is reviewing the inspection program for storage and transportation activities conducted under the requirements of 10 CFR Parts 71 and 72 to increase efficiency and effectiveness enhancements.

CONSIDERATIONS

The NRC staff is reviewing the NRC Inspection Manual Chapter 2690, "Inspection Program for Dry Storage of Spent Reactor Fuel at Independent Spent Fuel Storage Installations and for 10 CFR Part 71 Transportation Packagings" (ML092730246) and associated inspection procedures and guidance documents to identify possible efficiency and effectiveness enhancements. Inspections apply primarily to fabricators, certificate holders, and licensees conducting storage and transportation activities. The staff is considering the following potential storage and transportation inspection program efficiency and effectiveness enhancements

1. Revise the storage and transportation Inspection Manual Chapter and inspection procedures to define the frequency of routine inspections, identify inspection requirements and acceptance criteria, incorporate inspection checklists as appropriate, and provide for a uniform approach to documenting inspection results.
2. Develop a storage and transportation database containing licensing and inspection information, technical and quality attributes requiring verification during inspections, and inspection results for tracking, trending, analysis, and future actions.
3. Conduct storage and transportation inspection process reviews to identify potential efficiency and effectiveness enhancements.

ISSUE 4: ESTABLISHING A POSITIVE SAFETY CULTURE FOR 10 CFR PARTS 71 AND 72

BACKGROUND

On June 14, 2011, the Commission published the "Final Safety Culture Policy Statement" (SCPS) in the Federal Register (76 FR 34773). This policy statement, and two other policy statements, "Freedom of Employees in the Nuclear Industry to Raise Safety Concerns Without Fear of Retaliation; Policy Statement" (61 FR 24336; May 14, 1996) and "Policy Statement on the Conduct of Nuclear Power Plant Operations" (54 FR 3424; January 24, 1989), describes the Commission's expectations regarding safety culture and emphasizes the importance that the NRC places on the development and maintenance of a positive safety culture for all NRC-regulated activities. In addition to approving the SCPS, the Commission directed the NRC staff to ensure that the individuals and organizations performing regulated activities have the necessary support to effectively employ the policy statement as they deem appropriate. The June 2011 SCPS applies to all licensees, certificate holders, permit holders, authorization holders, holders of quality assurance program approvals, vendors and suppliers of safety-related components, and applicants for a license, certificate, permit, authorization, or quality assurance program approval, subject to NRC authority.

The policy statement defines nuclear safety culture as the core values and behaviors resulting from a collective commitment by leaders and individuals to emphasize safety over competing goals to ensure protection of people and the environment. This definition includes safety and security issues. The policy statement also includes a set of traits that describe important areas of a positive safety culture, while acknowledging that other traits may also be important in a positive safety culture. The SCPS traits are: (1) Leadership Safety Values and Actions, (2) Problem Identification and Resolution, (3) Personal Accountability, (4) Work Processes, (5) Continuous Learning, (6) Environment for Raising Concerns, (7) Effective Safety Communication, (8) Respectful Work Environment, and (9) Questioning Attitude. The Commission's expectation is that all individuals and organizations performing or overseeing regulated activities should take the necessary steps to promote a positive safety culture by fostering these traits as they apply to their organizational environments.

ISSUE DESCRIPTION

The Office of Nuclear Materials Safety and Safeguards (NMSS) will evaluate the oversight programs for independent spent fuel storage installations (ISFSI), and cask vendors to identify appropriate means to incorporate safety culture into these programs. This evaluation will include outreach to the affected licensees and certificate holders to understand the safety culture measures already in place and to determine how best to consider these activities in the oversight programs to develop and maintain a positive safety culture.

In addition, the staff will determine appropriate follow-up activities for all spent fuel storage and transportation certificate holders and licensees to ensure effective implementation of a corrective action process that identifies, follows, and corrects conditions adverse to quality. The staff is considering modifying inspection areas (or components) to review licensee and certificate holders' implementation of an effective safety culture program (ensuring a safety/quality conscious work environment).

The purpose of this effort is (1) to gather information on how these SCPS characteristics can be applied at regulated facilities, and (2) identify potential inspection areas to assess whether a positive safety culture exists.

CONSIDERATIONS

As part of efforts to increase awareness of safety culture and to address safety culture in Part 71 and Part 72 licensing and inspection programs, the staff is considering:

1. Discussing the SCPS with licensee/certificate holder senior management and workers
2. Evaluating the effective use of corrective action programs through the quality assurance program reviews
3. Developing an inspection program to include additional areas to examine whether a positive safety culture exists.
4. Considering frequency of inspections based on level of safety culture at sites
5. Evaluating how safety culture can be included in NRC staff guidance such as standard review plans

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Key References from Presentations

Near-Term Program Improvements:

- <http://www.nrc.gov/waste/spent-fuel-storage/public-involvement.html>
- COMSECY-10-0007 "Project Plan for the Regulatory Program Review to Support Extended Storage and Transportation of Spent Nuclear Fuel"

Other Activities:

- SECY-11-0029 "Plan for the Long-Term Update to the Waste Confidence Rule and Integration with the Extended Storage and Transportation Initiative"
- SECY-11-0093 "Near-Term Report and Recommendations for Agency Actions Following The Events in Japan"
- PRM-72-6 "C-10 Research and Education Foundation, Inc.: Upgrade Interim Dry Cask Storage Code Requirements / ISFSI Security Rulemaking," www.regulations.gov, Docket ID: NRC-2008-0649
- "Rulemaking Revising Security Requirements for Facilities Storing Spent Nuclear Fuel and High-Level Radioactive Waste," www.regulations.gov, Docket ID: NRC-2009-0558
- Spent Nuclear Fuel Transportation Security Rulemaking - "Requirements for Physical Protection of Irradiated Reactor Fuel in Transit," www.regulations.gov, Docket ID: NRC-2009-0163
- NEI Issue Resolution Protocol: ADAMS: ML02640080
- EPRI Extended Storage Collaboration Program: www.epri.com
- Blue Ribbon Commission: www.brc.gov

Regulations and Guidance:

- Title 10 Code of Federal Regulations (CFR) Part 71 "Packaging and Transportation of Radioactive Material"
- 10 CFR Part 72 "Licensing Requirements for the Independent Storage of Spent Nuclear Fuel, High-Level Radioactive Waste, and Reactor-Related Greater than Class C Waste"
- Regulatory Guide 3.72 "Guidance for Implementation of 10 CFR 72.48, Changes, Tests, and Experiments"
- NUREG-1536 - "Standard Review Plan for Dry Cask Storage Systems"

- NUREG-1567 – “Standard Review Plan for Spent Fuel Dry Storage Facilities”
- NUREG-1617 – “Standard Review Plan for Transportation Packages for Spent Nuclear Fuel”
- NUREG-1927 – “Standard Review Plan for Renewal of Spent Fuel Storage System Licenses and Certificates of Compliance”
- NUREG-1745, “Standard Format and Content for Technical Specifications for 10 CFR Part 72 Cask Certificates of Compliance”
- “Final Safety Culture Policy Statement” (SCPS) in the Federal Register (76 FR 34773)

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Future Interactions and Milestones

Future Public Interactions:

- September 19-20 – Waste Confidence and Extended Storage and Transportation
- November 2-3 – SFST Regulatory Conference
- Jan/Feb 2012 – Additional meeting on near-term program issues

Key Milestones: Licensing Review

- Spring 2012 – Complete internal review and initial stakeholder interactions
- Summer 2012 – Issue Federal Register Notice for formal comments on regulatory issues
- 2012 – 2013 – Develop recommendations for improving the licensing framework
- 2012 – 2015 – Guidance updates
- 2013 – 2016 – Rulemaking (if needed)

Key Milestones: Inspection Review

- FY 2011 – Complete internal review and develop recommendations for improving the inspection program
- Additional outreach
- FY 2012 – Begin implementing approved recommendations

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Detailed Safety Culture Traits

Leadership Safety Values and Actions Leaders demonstrate a commitment to safety in their decisions and behaviors	Problem Identification and Resolution Issues potentially impacting safety are promptly identified, fully evaluated, and promptly addressed and corrected commensurate with their significance	Personal Accountability All individuals take personal responsibility for safety
Work Processes The process of planning and controlling work activities is implemented so that safety is maintained	Continuous Learning Opportunities to learn about ways to ensure safety are sought out and implemented	Environment for Raising Concerns A safety conscious work environment is maintained where personnel feel free to raise safety concerns without fear of retaliation, intimidation, harassment or discrimination
Effective Safety Communications Communications maintain a focus on safety	Respectful Work Environment Trust and respect permeate the organization	Questioning Attitude Individuals avoid complacency and continually challenge existing conditions and activities in order to identify discrepancies that might result in error or inappropriate action

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