# UNITED STATES NUCLEAR REGULATORY COMMISSION OFFICE OF NUCLEAR REACTOR REGULATION OFFICE OF NUCLEAR MATERIALS SAFETY AND SAFEGUARDS WASHINGTON, DC 20555

January 24, 2006

## NRC REGULATORY ISSUE SUMMARY 2006-01 EXPIRATION DATE FOR NRC-APPROVED SPENT FUEL TRANSPORTATION ROUTES

#### **ADDRESSEES**

The U.S. Nuclear Regulatory Commission (NRC) licensees who transport, or deliver to a carrier for transport, irradiated reactor fuel (spent nuclear fuel (SNF)).

#### INTENT

The NRC is issuing this regulatory issue summary (RIS) to notify the addressees of a change to the approval period for Title 10 of the *Code of Federal Regulations* (10 CFR) Section 73.37(b)(7) advance approval of the ports handling SNF and of transportation routes for road and rail shipments of SNF for future approvals. The intent of this change is to reduce the unnecessary burden on NRC staff and licensees associated with submitting and reviewing proposed transportation routes. This RIS provides licensees the opportunity to request an expiration date extension of routes or ports approved in CY 2005, if desired. However, no specific action or written response is required.

#### **BACKGROUND**

As part of the physical protection system for shipments of SNF under 10 CFR 73.37(b)(7), licensees must obtain advance approval from the NRC of the (highway or rail) transportation route or port used to ship the SNF. The duration of NRC staff's approval is not specified in 10 CFR Part 73. The NRC staff initially approved shipment routes and ports for all shipments, whether single or multiple shipments. In 1989, to reduce this burden the approval period was extended to 2 years for individual shipments, single campaigns with multiple shipments, and multiple campaigns with multiple shipments. At that time, the NRC staff determined that 2 years allowed for periodic re-review of the approved routes. This 2-year limit was intended to ensure that the information contained in the approvals did not become obsolete.

Licensees request approval of a transportation route or port for a single shipment of SNF or for multiple shipments using that same transportation route or port. Shipments to multiple destinations from a single point of origin require an individual approval and are assigned a unique route number. Until now, licensees could request that a currently active, or previously expired, transportation route or port be renewed for an additional 2 years by submitting updated

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information to the NRC staff for review and approval. Since this process began in the 1980's, the NRC staff has approved over 200 transportation routes or ports. Approximately 30 transportation routes, including highways, rail lines, and ports, are currently active for shipments of SNF meeting the irradiated reactor fuel criteria of 10 CFR 73.37(a).

#### **SUMMARY OF ISSUES**

Based on the NRC staff's experience with route approvals over the past decade, the NRC considers that limiting the renewal period to 2 years is no longer necessary for three reasons: (1) the interstate highway and rail systems in the United States are essentially complete, which allows for fewer changes to the routes over time; (2) State emergency contact numbers rarely change; and (3) the in-transit security controls of spent fuel shipments have become much tighter since the terrorist attacks of September 11, 2001. Specifically, on October 3, 2002, NRC issued Orders imposing additional security measures (ASMs) for the transportation of SNF.

The regulations in 10 CFR Part 73 and the October 3, 2002, ASMs continue to provide reasonable assurance that licensees involved in spent fuel transportation will provide adequate physical protection for spent fuel shipments. Over the last few years, the NRC staff has not noted significant changes in the information content of requests to renew transportation route or port approvals. Extending the effective period of these transportation route or port approvals will reduce burden while continuing to provide reasonable assurance that the licensee's protective measures will adequately protect shipments of SNF.

Accordingly, all future requests for highway routes will be approved for 5 years and all rail route and port approvals will be approved for 7 years. Highway route approvals are limited to 5 years rather than 7 years because the information is more likely to change. Licensees with a transportation route or port approval from CY 2005 may request an extension of the current 2-year approval period to a 5- or 7- year approval (from the date of the NRC staff's original approval). Additionally, licensees may submit a request to renew a current transportation route or port approval before its expiration. Licensee requests for such extensions or renewals should be submitted in accordance with 10 CFR 73.4.

#### **BACKFIT DISCUSSION**

This RIS requires no action or written response and is, therefore, not a backfit under 10 CFR 50.109. Consequently, the NRC staff did not perform a backfit analysis.

#### FEDERAL REGISTER NOTIFICATION

A notice of opportunity for public comment on this RIS was not published in the *Federal Register* because the RIS is informational and does not represent a departure from current regulatory requirements.

#### SMALL BUSINESS REGULATORY ENFORCEMENT FAIRNESS ACT OF 1996

The NRC has determined that this action is a rule under the Congressional Review Act.

#### PAPERWORK REDUCTION ACT STATEMENT

This RIS does not contain information collections and, therefore, is not subject to the requirements of the Paperwork Reduction Act of 1995 (44 U.S.C. 3501, et seq.)

#### CONTACT

This RIS requires no specific action nor written response. Please direct any questions about this matter to the technical contacts listed below.

/RA/

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Enclosure: "List of Recently Issued NMSS Generic Communications"

Note: NRC generic communications may be found on the NRC public website, <a href="http://www.nrc.gov">http://www.nrc.gov</a>, under Electronic Reading Room/Document Collections.

### **Recently Issued NMSS Generic Communications**

Date	GC No.	Subject	Addressees
2/11/05	BL-05-01	Material Control and Accounting at Reactors and Wet Spent Fuel Storage Facilities	All holders of operating licenses for nuclear power reactors, decommissioning nuclear power reactor sites storing spent fuel in a pool, and wet spent fuel storage sites.
01/13/06	RIS-05-27, Rev. 1	NRC Regulatory Issue Summary 2005-27, Rev. 1, NRC Timeliness Goals, Prioritization of Incoming License Applications and Voluntary Submittal of Schedule for Future Actions for NRC Review	All 10 CFR Parts 71 and 72 licensees and certificate holders.
12/22/05	RIS-05-31	Control of Security-related Sensitive Unclassified Non- safeguards Information Handled by Individuals, Firms, and Entities Subject to NRC Regulation of the Use of Source, Byproduct, and Special Nuclear Material	All licensees, certificate holders, applicants, and other entities subject to regulation by the U.S. Nuclear Regulatory Commission of the use of source, byproduct, and special nuclear material, except for those as covered by provisions of Regulatory Issue Summary (RIS) 2005-26 for nuclear power reactors.
11/23/05	RIS-05-24	Control of Radiation Dose to Visitors of Hospital Patients	All medical licensees.
11/14/05	RIS-05-21	Clarification of the Reporting Requirements in 10 CFR 20.2201	All U.S. Nuclear Regulatory Commission licensees and Part 76 certificate holders authorized to possess licensed material.
11/08/05	RIS-05-27	NRC Timeliness Goals, Prioritization of Incoming License Applications and Voluntary Submittal of Schedule for Future Actions for NRC Review	All 10 CFR Parts 71 and 72 licensees and certificate holders.
10/28/05	RIS-05-22	Requirements for the Physical Protection During Transportation of Special Nuclear Material of Moderate and Low Strategic Significance: 10 CFR Part 72 vs. Regulatory Guide 5.59 (1983)	All holders of licenses for the possession of special nuclear material (SNM) that ship Category II and III quantities of this material.
10/07/05	RIS-05-23	Clarification of the Physical Presence Requirement During Gamma Stereotactic Radiosurgery Treatments	All gamma stereotactic radiosurgery (GSR) licensees.
09/27/05	RIS-04-17, Rev. 1	Revised Decay-in-Storage Provisions for the Storage of Radioactive Waste Containing Byproduct Material	All licensees regulated under 10 CFR Parts 30, 32, 33, 35, 39, and 50.

Date	GC No.	Subject	Addressees
08/25/05	RIS-05-18	Guidance for Establishing and Maintaining a Safety Conscious Work Environment	All licensees, applicants for licenses, holders of certificates of compliance, and their contractors subject to NRC authority
08/10/05	RIS-05-16	Issuance of NRC Management Directive 8.17, "Licensee Complaints Against NRC Employees"	All licensees and certificate holders.
08/03/05	RIS-05-15	Reporting Requirements for Damaged Industrial Radiographic Equipment	All material licensees possessing industrial radiographic equipment, regulated under 10 CFR Part 34.
07/13/05	RIS-05-13	NRC Incident Response and the National Response Plan	All licensees and certificate holders.
07/11/05	RIS-05-12	Transportation of Radioactive Material Quantities of Concern NRC Threat Advisory and Protective Measures System	Licensees authorized to possess radioactive material that equals or exceeds the threshold values in the Additional Security Measures (ASM) for transportation of Radioactive Material Quantities of Concern (RAMQC) under their 10 CFR Part 30, 32, 50, 70, and 71 licenses and Agreement State licensees similarly authorized to possess such material in such quantities under their Agreement State licenses.
07/11/05	RIS-05-11	Requirements for Power Reactor Licensees in Possession of Devices Subject to the General License Requirements of 10 CFR 31.5	All holders of operating licenses for nuclear power reactors and generally licensed device vendors.
06/10/05	RIS-05-10	Performance-Based Approach for Associated Equipment in 10 CFR 34.20	All industrial radiography licensees and manufacturers and distributors of industrial radiography equipment.
04/18/05	RIS-05-06	Reporting Requirements for Gauges Damaged at Temporary Job Sites	All material licensees possessing portable gauges, regulated under 10 CFR Part 30.
04/14/05	RIS-05-04	Guidance on the Protection of Unattended Openings that Intersect a Security Boundary or Area	All holders of operating licenses or construction permits for nuclear power reactors, research and test reactors, decommissioning reactors with fuel on site, Category 1 fuel cycle facilities, critical mass facilities, uranium conversion facility, independent spent fuel storage installations, gaseous diffusion plants, and certain other material licensees.

Date	GC No.	Subject	Addressees
02/28/05	RIS-05-03	10 CFR Part 40 Exemptions for Uranium Contained in Aircraft Counterweights - Storage and Repair	All persons possessing aircraft counterweights containing uranium under the exemption in 10 CFR 40.13(c)(5).
12/23/05	IN-05-32	Product Alert for Fire Hydrants	All holders of operating licenses for nuclear power reactors and fuel cycle facilities, except those who have permanently ceased operations and have certified that fuel has been permanently removed from the reactor vessel.
11/17/05	IN-05-31	Potential Non-conservative Error in Preparing Problem-dependent Cross Sections for use with the KENO V.a or KENO-VI Criticality Code	All licensees using the KENO V.a or KENO-VI criticality code module in Version 5 of the Standardized Computer Analyses for Licensing Evaluation (SCALE) software developed by Oak Ridge National Laboratory (ORNL).
10/31/05	IN-05-28	Inadequate Test Procedure Fails to Detect Inoperable Criticality Accident Alarm Horns	All licensees authorized to possess a critical mass of special nuclear material.
10/07/05	IN-05-27	Low Dose-Rate Manual Brachytheraphy Equipment Related Medical Events	All medical licensees.
07/29/05	IN-05-22	Inadequate Criticality Safety Analysis of Ventilation Systems at Fuel Cycle Facilities	All licensees authorized to possess a critical mass of special nuclear material.
06/23/05	IN-05-17	Manual Brachytherapy Source Jamming	All medical licensees authorized to possess a Mick applicator.
05/17/05	IN-05-13	Potential Non-conservative Error in Modeling Geometric Regions in the Keno-v.a Criticality Code	All licensees using the Keno-V.a criticality code module in Standardized Computer Analyses for Licensing Evaluation (SCALE) software developed by Oak Ridge National Laboratory (ORNL)
05/17/05	IN-05-12	Excessively Large Criticality Safety Limits Fail to Provide Double Contingency at Fuel Cycle Facility	All licensees authorized to possess a critical mass of special nuclear material.
04/07/05	IN-05-10	Changes to 10 CFR Part 71 Packages	All 10 CFR Part 71 licensees and certificate holders.
040/01/05	IN-05-07	Results of HEMYC Electrical Raceway Fire Barrier System Full Scale Fire Testing	All holders of operating licenses for nuclear power reactors, except those who have permanently ceased operations and have certified that fuel has been permanently removed from the reactor vessel, and fuel facilities licensees.

Date	GC No.	Subject	Addressees
03/10/05	IN-05-05	Improving Material Control and Accountability Interface with Criticality Safety Activities at Fuel Cycle Facilities	All licensees authorized to possess a critical mass of special nuclear material.

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