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May 11, 2011

Cindy Bladey, Chief
Rules, Announcements, and Directives Branch (RADB)
Office of Administration
Mail Stop: TWB-05-B01M
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

Re: Docket NRC-2010-0340

Dear Ms. Bladey:

On behalf of the Council of State Governments' Midwestern Radioactive Materials Transportation Committee, we are writing to submit comments on the Nuclear Regulatory Commission's (NRC) draft guidance document "Physical Protection of Shipments of Irradiated Reactor Fuel" (NUREG-0561, Revision 2) (75 FR 67636). On December 16, the committee requested an extension of the public comment period for the draft guidance document to allow us to conduct a thorough review of the document. We appreciate the NRC's decision to grant an extension of the comment period so that the Midwest and other stakeholders could complete their reviews.

The committee includes gubernatorial and legislative appointees from the 12 Midwestern states: Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, and Wisconsin. Our comments reflect the input of the committee members; individual Midwestern states may provide additional comments separately.

We appreciate the Commissioners' ongoing commitment to protect the health and safety of the public as well as to engage stakeholders in the rulemaking process. If you have any questions pertaining to our comments, please contact Lisa Janairo at CSG Midwest at 920.458.5910.

Sincerely,

Paul Schmidt
Co-Chair, CSG Midwestern Radioactive
Materials Transportation Committee

Tim Runyon
Co-Chair, CSG Midwestern Radioactive
Materials Transportation Committee

**Comments on Physical Protection of Shipments of Irradiated Reactor Fuel
(NUREG-0561, Rev. 2)**

General Comment: The Midwestern Radioactive Materials Transportation Committee requests the opportunity to review the guidance document after it is revised to incorporate any changes to the proposed rule (10 CFR Part 73) as well as comments from stakeholders on the draft guidance document.

p. 1 “These regulations apply to irradiated reactor fuel from either power or non-power reactors that is contained in a domestic shipment or the domestic portions of import or export shipments (i.e., while the shipment is within U.S. territory or U.S. territorial waters).”

Comment: It appears to be inconsistent for the NRC to regulate physical protection requirements for the “domestic portions of import or export shipments” of spent fuel, but *not* for the domestic portion of “transshipments” of category 1 and 2 quantities of radioactive material. To fully protect the common defense and security, as well as public health and safety, the same stringent requirements should apply to the domestic portions of all shipments that potentially have negative homeland security implications.

p. 2 “The requirements of 10 CFR 73.38 do not apply to members of LLEAs while they are performing SNF transport escort duties.”

Comment: The wording of this sentence creates the impression that background checks and other requirements in 10 CFR 73.38 could apply to LLEA members called upon to perform other duties, such as monitoring shipments. LLEAs should be exempt from 10 CFR 73.38 while they are performing any duties related to SNF transport, not just escort duties.

p. 3 “For purposes of SNF fuel transportation, the definition of radiological sabotage also considers deliberate acts that cause or are intended to cause economic damage or social disruption, regardless of the extent to which public health and safety are endangered by exposure to radiation.”

Comment: The Midwestern states agree with the amended definition of “radiological sabotage” to include “deliberate acts that cause or are intended to cause economic damage or social disruption, regardless of the extent to which public health and safety are actually endangered by exposure to radiation.” The definition should omit the word “fuel” after “SNF.”

p. 5 “Whenever possible, licensees should request approval of two routes (i.e., a primary and an alternative) when transporting SNF by road or rail.”

Comment: This section should emphasize that the new requirement for licensees to preplan and coordinate with states applies to both primary and alternative routes.

p. 6 “If the licensee is planning to ship to the same destination for multiple shipping campaigns, the licensee should propose alternative routes and varying shipping schedules such that each shipment departs at a different time of the day. Shipping operations should not appear routine, transparent, or predictable.”

Comment: Licensees that plan to use alternative routes should preplan and coordinate with all potentially affected states. In addition, while the Midwestern states agree with the principle of using alternative routes, the states recognize the practical difficulty of identifying multiple routes that avoid areas of high population, particularly for shipments traveling by rail.

p. 6 “The NRC will approve road routes for 5 years and rail routes for 7 years of use.”

Comment: Under 49 CFR 172, rail carriers are required, “at least annually,” to “review and select the practicable route posing the least overall safety and security risk.” The review must be based on the “rail transportation route analysis” required under the same part. Because of the potential for annual changes to the carriers’ selection of rail routes, the NRC should consider asking licensees to verify with the rail carrier that a route previously approved by the NRC is still the “route posing the least overall safety and security risk.” It will be important for the NRC to coordinate closely with the Federal Railroad Administration when approving routes for rail shipments.

p. 8 2.1.2.1 Route Plan and Mileage: Two pieces of information to be included in the route approval request to the NRC are “escort arrangements for each proposed route and alternative route” and “firearms to be carried by armed escorts, if private guards are employed.”

Comment: Licensees should be required to affirm that their use of private guards will be in compliance with applicable state laws.

p. 8 “During the course of an actual shipment, circumstances may arise that preclude the use of some portion of the approved route for an extended period of time. In this case, detours may be taken provided that certain procedures are followed....”

Comment: The wording of this section is somewhat confusing. If a detour becomes necessary while a shipment is in transit, it is acceptable for the licensee to follow the procedures identified on pages 8-9. If the planned route becomes unusable for any period of time, however, and there are more shipments planned during that time, the licensee should use the alternative route that has been approved by the NRC and for which preplanning and coordination with the states has already taken place. In keeping with the NRC’s intent for licensees to preplan and coordinate with the states, licensees should also be required to inform the NRC and the affected states of the decision to use the alternative route. Such notification should be separate from the required written advance notification.

p. 9 Section 2.1.2.2 Safe Havens

Comment: “Safe haven” is defined by the U.S. Department of Transportation in connection with Class 1 Explosive materials as “an area specifically approved in writing by local, State, or Federal governmental authorities for the parking of unattended vehicles containing Division 1.1, 1.2, or 1.3 materials.” While it is possible for the NRC to use its own definition of “safe haven,” inconsistency between agency definitions could lead to confusion. The Midwestern states recommend that the NRC use a new term such as “safe parking area” and define the term in the guidance document and in 73.37(b)(1)(vi)(A).

In addition, the states recommend substituting the following wording for the first sentence in this section: “For road shipments, the licensee shall coordinate with the State(s) through which the shipment will pass to identify acceptable safe parking areas along the route for temporary refuge or emergency assistance.” The suggested wording makes it clear that the states, not the licensees, have the responsibility for choosing safe parking areas.

p. 10 “Before each shipment of SNF, the licensee is responsible for ensuring that all the contact information along the route is current.” “As part of the review, the NRC staff will verify that the contact information is correct and current.”

Comment: Is the licensee required to affirm in the route approval request that the contact information is correct and current?

p. 10 “The route applications should describe armed escort arrangements..., contacts, and coordination with State Governors.”

Comment: This sentence should end with “state Governors or their designees.” More guidance is necessary to help licensees understand what kind of “coordination” is expected (see our comment below). Making arrangements to provide advance notification, for instance, would not be considered a sufficient level of preplanning and coordination from the states’ perspective. Additional steps will be necessary to meet the intent, stated in the “Notice of Proposed Rule” (75 FR 62695) of ensuring that states “have early and substantial involvement in the management of spent nuclear fuel shipments.”

p. 11 Preplanning and Coordination of Shipments

Comment: This section does not give any indication that “preplanning and coordination” is intended to “ensure that the affected States have early and substantial involvement in the management of spent nuclear fuel shipments,” as stated in 75 FR 62700. Also missing is any suggested timeline for involving states “in the initial stages of the planning, coordination, and implementation of the shipment” (ibid). To make sure licensees fully understand their obligations under the new section, the document should provide more information on what would be considered “early and substantial involvement.” The CSG Midwest *Planning Guide for Shipments of Radioactive Material through the Midwestern States* provides information to shippers regarding the states’ expectations for shipment planning. The section on “Transportation Planning” (attached) describes the timeframes and the process that the Midwestern region has found to be workable. All recommendations in the *Planning Guide* are based on the states’ experience working with U.S. Department of Energy programs that have shipped spent fuel and other radioactive material through the region.

p. 12 “The licensee should document the preplanning and coordination activities and protect this information as SGI.”

Comment: The word “activities” needs clarification. A summary description of how and when the licensee interacted with states would be useful information for documenting the licensee’s compliance with the new preplanning and coordination requirement. Such a summary should not contain

safeguards information, however. The details of discussions with states and the outcomes of those interactions – e.g., plans for escorting – should be considered safeguards.

p. 14 2.3 “Before the transport or delivery to a carrier for transport of the licensed material outside the confines of the licensee’s facility or other place of use or storage, the licensee shall provide advance notification to the NRC and to the Governor of the State, or the Governor’s designee, of the SNF shipment moving through or across the boundary of the State.”

Comment: Consistent with the comments the Midwestern Radioactive Materials Transportation Committee submitted on the proposed rulemaking, the states suggest revising the wording of this section to make it clear that licensees must provide advance notification to *all* affected states, not just the state in which the licensee’s facility is located: “Prior to the spent nuclear fuel shipment moving through or across the boundary of any State, outside the confines of the licensee’s facility or other place of use or storage, a licensee subject to this section shall provide notification of the spent nuclear fuel shipment to NRC, under 73.72 of this part, and to the governor of the State(s) or the governor’s designee.”

pp. 14-15 2.3.1 “...any advance notification of a State delivered by mail must be postmarked at least 7 days before transport of a shipment within or through the State. If a notification is delivered by any other method it must reach the office of the Governor, or the Governor’s designee, at least 4 days before the scheduled transport of a shipment within or through the State.”

2.3.2.1 “...the licensee must notify the NRC at least 10 days before transport of the shipment commences at the shipping facility.”

Comment: It would be helpful to make the requirements for advance notification of states and the NRC more consistent. First, it should be specified in both cases whether the notice must be *issued* or *received* within the specified number of days. The states prefer to have it received. Second, unless there is a clear reason for the NRC to receive the notification before states do, it would be useful to have licensees provide notifications 10 days in advance to both states and the NRC. As the Midwestern states noted in comments on the proposed rule, giving states 10 days advance notice will help them make the necessary arrangements for inspections and/or escorts and otherwise prepare for shipments.

p. 16 “If a shipment is lost or unaccounted for after the designated no-later-than arrival time in the advance notification...the licensee shall immediately conduct an investigation as required by 10 CFR 73.37(f).”

Comment: There are two references to “no-later-than arrival time” in the guidance document (p. 16 and p. 21), but Section 2.3 (“Advance Notification of Shipments”) does not use the term in describing the information to be provided in advance notifications to states or to the NRC. Instead, these sections reference “the estimated date and time of entry into the Governor’s State” and the “estimated time and date of arrival of the shipment at the destination.” The proposed 10 CFR 73.37(b)(2) itself likewise does not use the term. The term “no-later-than arrival time” is consistent with the proposed requirements for shipments of byproduct material in 10 CFR 37, therefore it would make sense to adopt this same

terminology for spent fuel shipments. The proposed rule and the guidance document should be revised to include the term in the appropriate sections. In addition, the guidance document should specify whether the reference to “the advance notification” is the notification to the NRC, to the states, or both. That is, if a shipment did not arrive at a state’s border as expected, would the licensee be obligated to start an investigation? Or is the failure of the shipment to arrive at its final destination the only event that would trigger an investigation?

p. 16 “If the schedule changes by more than 6 hours from the notification provided to the State, the licensee must provide a revised notice.”

Comment: The Midwestern states would like to see the guidance document specify a limit of two revisions before a licensee must issue a cancellation.

p. 16 “If a shipment is cancelled after the advance notifications have been made, the licensee must send a cancellation notice to the Governor of each State, or to the Governor’s designee, previously notified and to the NRC’s Director, Division of Security Policy, Office of Nuclear Security and Incident Response.”

Comment: The Midwestern states request that the wording be revised in order to convey a sense of urgency to licensees. The requirement should be for licensees to issue a cancellation notice “as soon as possible” so as to avoid state resources being committed unnecessarily.

p. 27 “A copy of the route overview data (route identification; mileage data; LLEA identification, jurisdiction, and response centers; LLEA telephone numbers; communication channels monitored by LLEAs; cellular and satellite phone coverage along the route) should be readily available to the escorts at all times.”

Comment: Why does this requirement apply only to rail shipments? The Midwestern states believe this information should be provided to escorts for shipments traveling by any mode.

p. 27 “The escorts should maintain close cooperation with the train’s crew to ensure adherence as close as practicable to the shipment schedule and to ensure that the crew remains aware of all safeguards requirements as the shipment progresses.”

Comment: The Midwestern states believe this requirement should apply to all shipments regardless of mode. Adhering to schedules and being aware of safeguards requirements are desirable no matter what mode is used for transport.

p. 31 “The requirements of 10 CFR 73.38 do not apply to Federal, State or local law enforcement personnel while performing SNF transport escort duties, nor do they apply to any other persons identified in 10 CFR 73.59.”

Comment: As noted earlier, the requirements of 10 CFR 73.38 should not apply to LLEA personnel while performing any duties related to the spent fuel shipment, not just escort duties.

Excerpt from the CSG Midwest *Planning Guide for Shipments of
Radioactive Material through the Midwestern States*

Transportation Planning

Shippers should begin the transportation planning process two years prior to the anticipated commencement of shipments. This recommended time frame will ensure that the institutional aspects of the shipping campaign are addressed in tandem with technical ones. A first step in the transportation planning process would be to present preliminary information to the potentially affected states—either individually or, if more than one Midwestern state will be affected, through the biannual meetings of the Midwestern Radioactive Materials Transportation Committee.

Coordination and consultation with the affected states should take place through the regularly scheduled meetings of the Midwestern Radioactive Materials Transportation Committee, conference calls, and/or meetings involving more than one of the regional cooperative-agreement groups (when states in more than one region will be affected). Under certain circumstances, shippers might convene a separate meeting specifically for the purpose of planning a shipment or shipping campaign.

Shippers and states would benefit from the preparation of transportation plans for all spent nuclear fuel, high-level radioactive waste, transuranic waste, and HRCQ shipments through the Midwestern region. The Midwestern corridor states must review and provide input on at least one draft of each transportation plan. The review process will involve the members of the Midwestern Radioactive Materials Transportation Committee from the affected states and be coordinated through CSG Midwest. For all shipping campaigns, a final transportation plan—having undergone review by the corridor states—should be in place at least two weeks prior to the first shipment.

The timeline for finalizing the transportation plan is lengthier for long-term, large-scale shipping campaigns, such as the program to ship spent nuclear fuel and high-level radioactive waste to a national repository or temporary storage facility. In such situations, the states should have an opportunity to review the draft plan one year prior to shipment, with the final plan in place six months prior to the first shipment. The shipper should then annually update the state-related information in the plan in consultation with CSG Midwest. The affected states must have an opportunity to provide input into any substantive changes to the plan, including route identification.

Acceptable transportation plans will adhere to the guidelines laid out in this planning guide. Elements of an acceptable transportation plan include:

- an explanation of the purpose of or need for the shipments;
- a definition of the roles and responsibilities of all parties involved;
- an emergency management plan (see the section on Emergency Management Plan);
- a communications plan, including an approach to provide information to the public and the media;
- shipping mode and carriers to be used;

- preferred route and alternatives, if any;
- a general description of security considerations, as well as a detailed security plan (the latter to be distributed only to those with a “need to know”);
- an incident or accident recovery plan, including a list of local response contractors;
- a copy of the NRC or DOE Certificate of Compliance for the shipping container (if applicable); and
- a list of lead points of contact for the shipper, the carrier, and the corridor states and tribes.

In addition to the transportation plan, which may be available to the public, the shipper will provide corridor states with a complete description of the package, its contents, and the calculated curie content and dose rates.

To the extent practicable, shippers should use as a model other transportation plans that directed successful shipping campaigns of radioactive waste or material through the Midwestern region (see Appendix D). An example of one such plan for spent nuclear fuel shipments is the *U.S. Department of Energy Foreign Research Reactor Spent Nuclear Fuel Shipments: Transportation Plan for Motor Carrier Transport, Savannah River Site to Idaho National Engineering and Environmental Laboratory* (Rev. 6, July 2008).

Following the completion of a shipment or shipping campaign, shippers should compile the lessons learned from the experience for the purpose of improving future shipments. These lessons learned reports should be shared with the affected states. To assist in the compilation of lessons learned, CSG Midwest will solicit input from the Midwestern states.