



NUCLEAR ENERGY INSTITUTE

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OFFICE OF SECRETARY
RULEMAKINGS AND
ADJUDICATIONS STAFF

Rod McCullum
DIRECTOR
USED FUEL PROGRAMS

April 8, 2011

Ms. Annette Vietti-Cook
Secretary
U.S. Nuclear Regulatory Commission
Washington, DC 20005-0001

ATTN: Rulemakings and Adjudications Staff

Subject: Nuclear Energy Institute Comments on U.S. Nuclear Regulatory Commission Proposed Rule 10 CFR Part 73 *Physical Protection of Irradiated Reactor Fuel in Transit* (75 Fed. Reg. 62695); Docket ID: NRC-2009-1063

Project Number 689

The Nuclear Energy Institute (NEI),¹ on behalf of the nuclear energy industry, is pleased to comment on the subject rulemaking. We commend the U.S. Nuclear Regulatory Commission (NRC) for proactively addressing the secure transportation of irradiated reactor fuel (including commercial used nuclear fuel) in this rulemaking. Industry is currently seeking an alternative used nuclear fuel management framework, in conjunction with the forthcoming recommendations of the *President's Blue Ribbon Commission on America's Nuclear Future*, to expedite the movement of used nuclear fuel away from the 72 commercial reactor sites in 33 states where it is currently stored. By providing a timely opportunity for stakeholder input on the security regulations under which used nuclear fuel will be transported, the NRC is helping to assure that a sound and predictable regulatory framework will be in place at the time when significant numbers of future shipments will be underway.

¹ NEI is the organization responsible for establishing unified nuclear industry policy on matters affecting the nuclear energy industry. NEI's members include all utilities licensed to operate commercial nuclear power plants in the United States, nuclear plant designers, major architect/engineering firms, fuel fabrication facilities, nuclear material licensees, and other organizations and individuals involved in the nuclear energy industry.

While we believe that this proposal is a credible beginning to the establishment of the necessary regulatory framework, we also believe that considerable additional work is needed to make it an effective and reasonably implementable rule. We recommend that the NRC convene a series of stakeholder workshops to obtain a full range of views prior to revising and then re-proposing this rule. This is particularly important given that, following recent events at the Fukushima Daiichi nuclear station in Japan, there is likely to be considerably more interest among stakeholder groups in the safe and secure movement of used nuclear fuel away from reactor sites. We also believe that there are several positive attributes to this rule. Our views in both respects are summarized by the following general comments:

- The Design Basis Threat (DBT) needs to be clearly defined to ensure that armed escorts are adequately able to counter the force directed at them. What is proposed currently does not address this need, which is of foundational importance because the appropriateness of the NRC's requirements for protection of irradiated fuel in transit can only be evaluated in the context of the threat against which these requirements are intended to protect. The definition of the DBT should recognize that the protection against malevolent groups is a shared responsibility between licensees and law-enforcement authorities.
- The rule needs to clearly delineate the relationship between the roles of the NRC and the U.S. Department of Transportation (DOT) in the protection of irradiated reactor fuel in transit. It is important that the NRC not make new requirements that could potentially conflict with DOT responsibilities concerning approval of routes.
- The rule's ability to appropriately address the selection of shipping routes would be significantly enhanced by specifying that route selection should be based on a vulnerability assessment.
- The rule, in its reliance on pre-planning by and coordination between entities involved in shipments, provides desirable flexibility within which reactor licensees, common carriers, along with federal, state and local authorities, can work together to develop effective plans and protocols to assure the security of irradiated reactor fuel in transit. This flexibility should be preserved as the rule is refined.

We believe that, in addressing these comments, the NRC will arrive at a significantly improved rule. To further assist in this regard, we have also attached specific detailed comments, many of which serve as examples of and expand upon the general concerns expressed above.

It is the industry's expectation that this rule can and will be shaped into a stable, predictable, efficient and durable platform for assuring the security of irradiated reactor fuel shipments over the

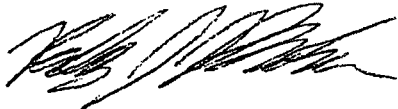
Ms. Annette Vietti-Cook

April 8, 2011

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long-term future during which these shipments will be underway. Because state governments will play a significant role in these shipments, we encourage the NRC to significantly involve the states in its efforts to finalize this rule. We look forward to working with NRC staff and other stakeholders towards this goal. If you have any questions, please do not hesitate to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Rod McCullum", written in a cursive style.

Rod McCullum

Attachment

c: Ms. Vonna Ordaz, NMSS/DSFST, NRC
Mr. Earl Easton, NMSS/DSFST/LID, NRC

NEI Specific Comments on Proposed Rule: Physical Protection of Irradiated Reactor Fuel in Transit

Docket ID: NRC-2009-0163 (75FR62695, Oct 13, 2010)

Comment Number	Section	Comment
1	73.37(b)(1)	<p>The NRC should more clearly articulate its basis for requiring advance approval of routes to the extent any such pre-approval is necessary. The NRC should assure that such approval is not based on any route selection criteria that might conflict with DOT requirements. NRC should also specifically recognize the role that DOT plays in routing decisions and clearly delineate how the roles of the two agencies will be coordinated. For example, NRC regulations require the licensee to select shipping routes and obtain NRC route approval. DOT gives (49CFR397 Subpart D) the carrier / driver or State routing agency responsibility for selection of shipment routes of Class 7 (radioactive) materials. DOT does not require route approval. These regulatory conflicts require resolution.</p> <p>Routing decisions can be most effectively made if they are based on a comprehensive vulnerability assessment. For example, shipments through heavily populated areas should be minimized but this decision should be made in the shipment security planning stage based on a vulnerability assessment and not arbitrarily excluded as alternative routes may present a higher security risk. NRC should enhance this section of the rule by specifically requiring that a vulnerability assessment be conducted.</p>
2	73.37(b)(1)	<p>A Federal use-of-force law needs to be implemented as State statutes vary greatly. It is not reasonable to train armed escorts to legal requirements in each jurisdiction through which a shipment passes when those requirements may vary.</p>
10	73.37(b)(1)(i)	<p>It is unclear if the armed escorts, provided by licensee or LLEA, are considered Hazmat Employees (49CFR171.8) and require DOT training (49CFR172 Subpart H) including 172.704(a)(5) – In-depth security training. Such training and associated record keeping costs are in addition to cost of the escorts. This issue can only be addressed if there is a clear understanding of the roles and responsibilities of all involved in the shipment which, in turn, requires careful coordination between licensees, shippers, federal, and state authorities. The NRC should set requirements that assure that this will be appropriately addressed in the context of such coordination. This is an issue that should be discussed in stakeholder workshops prior to formulating rule language.</p>

Comment Number	Section	Comment
11	73.37(c)(3) 73.37(d)(3) 73.37(e)(4)	<p>Elimination of a mandatory CB radio requirement is an improvement given the present vastly improved state of communication capabilities in the US. In general, we agree with the use of general performance requirements in lieu of prescribing the use of specific equipment which may be obsolete in the relatively near future. This is an example of the type of flexibility that should be broadly preserved in this rulemaking.</p> <p>Conversely, the requirement specified in 73.37(c)(3) that requires redundant communication capability "at all times" is overly prescriptive – as it has the potential to overly complicate plans to mitigate a loss of communications equipment – and it should be changed to require "reasonable assurance" of redundancy.</p>
12	73.38	<p>It is unclear as to what constitutes unescorted access to SNF in transit. For example is a state or federal DOT inspector while performing his/her duties considered to have unescorted access? For example, do DOT inspectors have unescorted access. Clearly they must have direct access to the shipment but they will not have control of the shipment nor would armed escorts be expected to leave their post during an inspection. However, some inspectors may feel that an armed escort overseeing the inspection is a form of intimidation. The subject of those who might have access to a shipment other than armed escorts should be specifically addressed and background check requirements set accordingly. It should also be made clear that only armed escorts have responsibilities with respect to protecting a shipment.</p> <p>The proposed regulations make the NRC licensee responsible for background investigation. This may not be possible for common carrier's and LLEA's employees or for federal / state inspectors. The regulation should provide the flexibility for this to be worked out cooperatively between the carrier and the customer. For example, carriers could do it with licensees verifying that the background investigations were properly done.</p>
14	73.37(b)(3)(ii)	<p>The proposed rule states that personnel will in the movement control center have the authority to direct physical protection activities. This is vague and raises the question of who is in command (i.e. -whether on-scene escort personnel direct physical protection activities or whether this is done by control center personnel). We believe that it is important that personnel on the scene should have command during a tactical situation.</p>

Comment Number	Section	Comment
15	73.37(b)(1)(iii)	This requires written certification of any transfer of custody. We interpret this to mean that the regulation as proposed leaves it up to the preplanning referred to throughout 73.37(b)(1) to define the written certification required. This is another positive example of the type of flexibility that is desirable and should be broadly preserved in this rulemaking.
16	73.37(b)(3)(iii) 73.72(a)(4)	<p>The term "shipment commences" is too vague. We recommend that the start of shipment be defined as when (1) the transport vehicle(s) are cleared for departure by shipping site personnel and any pre-departure regulatory inspectors, (2) the DOT Shipping Papers are in possession of the vehicle's / carrier's personnel in accordance with DOT regulation, (3) communication has been established between shipment and movement control center, (4) escorts are ready and in place and (5) transport vehicle(s) begin movement on the approved route.</p> <p>Similarly, shipment delivery / arrival would have occurred when (1) transport vehicle(s) have arrived at the receiving site's receipt area, (2) site personnel have accepted the shipment (e.g. - by receipt of the Shipping Papers), (3) escorts have turned over responsibility to site security personnel (4) transport vehicle's motive power has been secured or departed and (5) movement control center personnel has been advised of shipment completion.</p>
17	Item 4 on page 75FR62715	It appears that Section 73.71 on Federal Register page 62715 should be Section 73.72, in order to be consistent with the current structure of the rule and with the discussion on Federal Register pages 62707-62708.

Draft Environmental Assessment and Finding of No Significant Impact for the Proposed Rule Amending
10 CFR 73.37 and 73.72 and Adding New 10 CFR 73.38 Requirements for Physical Protection of
Irradiated Reactor Fuel in Transit

(ML092710448)

Comment Number	Section	Comment
		No comments

Regulatory Analysis for Proposed Rule – Transportation of Spent Nuclear Fuel in 10 CFR Part 73

(ML102710278)

Comment Number	Section	Comment
1	Executive Summary	The Total Cost to Industry is taken from Table 4-2 which shows results from the Main Analysis. Significantly higher and more realistic costs, assuming the underlying assumptions are correct, are shown in Table 4-3 which shows results for the Pre-Order Analysis. This is more realistic since it provides a comparison to a time when the NRC orders were not in effect and thus shows the full impact of the NRC orders, plus improvements, being placed into regulations.
2	4	The results are based on the Main Analysis. The results should have been based on the Pre-Order Analysis to show the full impact of the NRC orders, plus improvements, being placed into regulations.
3	5	The conclusion of low cost associated with the proposed rule is driven by the assumption of full compliance with previously issued NRC orders. While this may be true going forward, it does not show the full cost of implementing the proposed rules. This is significant if the analysis compared the proposed requirements with security requirements imposed on other hazardous materials in transportation.

Rulemaking Comments

From: McCULLUM, Rodney [rxm@nei.org]
Sent: Friday, April 08, 2011 9:54 AM
Subject: Nuclear Energy Institute Comments on U.S. Nuclear Regulatory Commission Proposed Rule 10 CFR Part 73 Physical Protection of Irradiated Reactor Fuel in Transit (75 Fed. Reg. 62695); Docket ID: NRC-2009-1063
Attachments: 04-08-11_NRC_Comments on Physical Protection of Irradiated Reactor Fuel in Transit.pdf; 04-08-11_NRC_Comments on Physical Protection of Irradiated Reactor Fuel in Transit_Attachment.pdf

April 8, 2011

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It is the industry's expectation that this rule can and will be shaped into a stable, predictable, efficient and durable platform for assuring the security of irradiated reactor fuel shipments over the long-term future during which these shipments will be underway. Because state governments will play a significant role in these shipments, we encourage the NRC to significantly involve the states in its efforts to finalize this rule. We look forward to working with NRC staff and other stakeholders towards this goal. If you have any questions, please do not hesitate to contact me.

Sincerely,

Rod McCullum
Director, Used Fuel Programs

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