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**Subject:** NEI Comments on RAMQC

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Please find attached NEI's comments in response to the January 4, 2008 Federal Register notice request for comments on Transportation of Radioactive Material in Quantities of Concern.

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February 8, 2008

Chief, Rules and Directives Branch  
Division of Administration Services  
Office of Administration  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555-0001

**Subject:** Transportation of Radioactive Material in Quantities of Concern Request for Comments, 73 FR 826 (January 4, 2008).

**Project Number: 689**

Dear Sir/Madame:

The Nuclear Energy Institute (NEI)<sup>1</sup> is submitting the following comments in response to the January 4, 2008, Federal Register request for comments in the development of the technical basis for rulemaking to revise the security requirements for the transportation of Radioactive Materials in Quantities of Concern (RAMQC). These comments are submitted on behalf of the members of NEI. NEI members are shippers of Class 7 – Radioactive Materials including RAMQC and some members are also carriers of Radioactive Material including RAMQC.

NEI and its member companies have repeatedly expressed the need for collaboration between the Nuclear Regulatory Commission (NRC), the Department of Homeland Security (DHS), Department of Transportation (DOT), and the US Coast Guard to avoid conflicting or duplicative regulations. In addition, due to international transportation of radioactive materials, the regulations must be implemented to reduce transition into or out of the United States to minimize concerns with other countries and modal organizations in order to ensure effective and efficient compatibility. Further, rulemaking should operate from a common set of definitions and operating principles to maintain equitable trade opportunities.

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<sup>1</sup> NEI is the organization responsible for establishing unified nuclear industry policy on matters affecting the nuclear energy industry, including the regulatory aspects of generic operational and technical issues. 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, materials licensees, and other organizations and individuals involved in the nuclear energy industry.

DOT already has imposed hazardous material transport security regulations (HM-232). DHS/TSA, in consultation with DOT and the NRC, is in the process of developing transportation security requirements for "Security-Sensitive Materials" which includes radioactive materials defined by the IAEA Code of Conduct as Category 1 and/or 2. Avoidance of duplication or conflict is critical. The DOT and NRC have entered into a Memorandum of Understanding in which DOT did not cede authority for security during the transportation of radioactive materials to the NRC. Neither has DHS ceded security of any radioactive material in transit to the NRC. This has occurred in order to assure a consistent level of security for any and all security sensitive materials while in transit. Hence, DHS/TSA/DOT has the legal basis for jurisdiction while in transit, not NRC. The NRC's regulatory jurisdiction ends when the shipment is turned over to the carrier and begins again when the shipment is accepted at the facility. In the development of NRC regulations for RAMQC, it should work with DOT/DHS/TSA to codify in 49 CFR, not 10 CFR, the security requirements for RAMQC while in transit. DOT/DHS jurisdiction will also establish pre-emption to avoid state-by-state variations.

NEI encourages the NRC to work closely with the Nuclear Sector Coordinating Council – Radionuclides (NSCC-R) which has already completed work on this topic. Please see the recommendations in the Nuclear Sector-Specific Infrastructure Protection Plan. NRC also needs to become more engaged with the Government Sector Coordinating Council – Radionuclides (GCC-R) transport working groups to gain greater appreciation for the transportation security issues. To this point, the NSCC-R has been disappointed in the level of progress and failure of the GCC-R to engage both the NRC and DOT.

The NRC needs to recognize the difference between what it is recommending and the IAEA Code of Conduct along with the Guidance. The Code of Conduct, with respect to Category 1 and 2, applicability is limited to sealed source transport security as well as is the guidance. NRC is misusing the IAEA Code of Conduct. The Code of Conduct limits applicability to sealed sources while the NRC regulations/Orders do not differentiate. There is considerable difference between 30 TBq in a sealed source than that same 30 TBq spread inside a reactor vessel or mixed throughout resins on the way to a disposal facility. The NRC regulations do not provide for this variation. DOT, the national competent authority, appears to understand the distinction. In addition, due to international transport DOT/DHS needs to develop the security transit regulations to be consistent with global requirements

There is a need for strict compatibility between the states and the federal government involving any regulations related to the transportation of radioactive materials. DOT/DHS has the ability to require and ensure strict compatibility on a national basis; if the NRC were to propagate transit regulations under health and safety requirements, it can not dictate strict compatibility nationwide. Also, if the NRC were to impose the regulations under common defense and security it does not have the regulatory authority over the carriers of radioactive materials to enforce the requirements.

Transportation of security-sensitive materials involves multi-modal carriers, the RAMQC request for comment has limited the regulatory development to land based carriers. Security-Sensitive Materials regulations must address all modes of transport. If rulemaking is not applicable to air/maritime transport (per Federal Register notice) then requirements will be problematic for multi-modal shipments including motor vehicles.

For all of the above cited reasons the NRC should rescind the current Orders and not impose any new requirements on RAMQC while the shipment is in transit but instead work with DOT/DHS/TSA in establishing consistent requirements for security sensitive materials while in transit.

Proposed requirements for Planning and Coordination are problematic. Under the current Orders, licensees have had problems with verification of receiving licensee due to reluctance of states to provide the information. NEI encourages the NRC to work with its state partners to help facilitate the necessary information exchange.

The identification and viability of safe-havens has been an issue. Routing and the identification of alternative routes along with coordination of escorts at state borders have resulted in confusion and delays. Licensees have received verification of background checks on the drivers, assistants, dispatchers, but not necessarily for every individual who has contact with or control over the shipment. In most cases neither the licensee nor the carrier knows who all will be involved during transit. There are many levels of package tracking and even the best have failures, the regulator needs to clearly define its expectations. Similarly for driver communications, is a company radio and a cell phone sufficient? Until some of the routes are driven more than once, communication issues will not be identified such as radio or cell phone dead spots. Driver reporting to communication center, stops during transit, checks during stops, etc. all of these requirements plus the others in this paragraph are better defined by DOT/DHS in addressing security-sensitive materials in total in 49 CFR, rather than establishing RAMQC category 1 and 2 transit specific requirements in 10 CFR.

The following correspond to the questions posed in the notice:

*Which part of Title 10 of the Code of Federal Regulations (CFR) should the staff revise to include requirements to enhance security during transportation of RAMQC? At this time, the staff is considering revising either the requirements of 10 CFR 20 or Part 73.*

Response

The requirements to enhance security during transportation of RAMQC should be in 10 CFR 73 which relate to security before and upon completion of the shipment. Any regulations concerning security of RAMQC during transportation should be under the jurisdiction of DOT/DHS/TSA codified in 49 CFR.

*Should the NRC issue these requirements under its authority to protect public health and safety or under its authority to promote the common defense and security?*

Response

The NRC should issue the requirements under common defense and security since this rule is being developed in response to the events of September 11, 2001 which has a direct common defense and security tie. Therefore, using the requirements under public health and safety is not a viable option.

*What technologies are in use to track the location of sources, packages or vehicles carrying radioactive material in quantities of concern?*

Response

There is currently technology to track various size packages. There are active and passive devices. An active device sends out a signal, continuously or at a pre-set interval. A passive device requires some form of reader or activator. Both of these devices have limitations. The principal limitations are range of signal and life time of power supply. In the case of a radioactive source, there is no device small enough to be effective in the tracking of the source. It would be limited to tracking the package the source is in, which could be opened and source removed. Global positioning systems can be used to track packages but have similar limitations and maybe ineffective under ground (tunnels) or under water (truck/train runs off bridge, plane crashes, or boat sinks and is submerged in the lake, river, or ocean).

International harmonization of the hazardous material transportation regulations, based on one common set of requirements, such as the United Nations Recommendations on the Transport of Dangerous Goods, is critical to ensure the safe and effective movement of hazardous materials and achieve fair and equitable commerce.

If you have any questions or need any additional information concerning NEI's comments, please contact me at 202.739.8126; [fmk@nei.org](mailto:fmk@nei.org).

Sincerely,



Felix M. Killar, Jr.