Mr. Ralph Landers 5381 East Grain Mill Road Pahrump, NV 89061-7700

SUBJECT: RESPONSE TO FEBRUARY 17, 2003, LETTER REGARDING ISSUES

RELATED TO NUCLEAR MATERIAL SAFETY

Dear Mr. Landers:

I am responding to your letter of February 17, 2003, in which you discussed several issues of concern to you regarding nuclear material transportation safety.

With respect to transportation employee training, the U.S. Department of Transportation (DOT) specifies significant training requirements in its regulations. The DOT requires training of employees who affect the safe transportation of hazardous materials, including radioactive materials. These employees are defined as HazMat employees and include anyone who: loads, unloads, or handles hazardous materials; is responsible for the condition of containers used to transport hazardous materials; prepares hazardous materials for transportation; is responsible for the safety of hazardous materials; or operates a vehicle used to transport hazardous materials. The DOT training requirements include: general awareness/ familiarization training (addresses DOT regulations and recognition and identification of hazardous materials); function-specific training (addresses the job function(s) related to the transportation of hazardous materials); and safety training (addresses emergency response information, personal protection and proper handling of hazardous materials packages). HazMat employee training is required within 90 days of employment or change of job function and again every three years. Employers are required to maintain written records of HazMat employee training. Employees who have completed this training are well-equipped to engage in radioactive material transport activities. Both the U.S. Nuclear Regulatory Commission (NRC) and DOT inspect for compliance with these training requirements by NRC licensees.

You expressed concern about the criticality hazard in a multiple-cask train accident scenario, suggesting the consequence might compare to a nuclear detonation. NRC certification of the transportation cask design is required before any casks can be used to make shipments. The NRC's staff of engineering experts perform these design reviews. The review of a cask design for structural integrity and criticality control, under both routine and hypothetical accident conditions, is an important component of our review process. We only approve cask designs that can be demonstrated to our satisfaction to pose no threat of criticality under either routine or hypothetical accident conditions. Regardless of the number of spent fuel casks involved or the severity of the accident scenario, spent fuel cannot behave like a nuclear weapon.

You also inquired as to who would pay for accident response expenses. Carriers of hazardous materials are required by DOT to carry liability insurance to cover the costs associated with

potential transportation accidents. Should that coverage be exhausted, a much larger insurance pool, over \$9 billion, is provided under the Price-Anderson Act, initially passed by Congress in 1957.

Regarding NRC meetings on these topics in your area, on March 12 and 13, 2003, the NRC held public meetings on transportation cask testing in Las Vegas and Pehrump, respectively. Please monitor NRC's website for meeting announcements at http://www.nrc.gov/public-involve/public-meetings/meeting-schedule.html.

I hope you continue to participate in the important discussions on spent fuel transportation safety.

Sincerely,

/RA/ Martin J. Virgilio, Director Office of Nuclear Material Safety and Safeguards R. Landers -2-

potential transportation accidents. Should that coverage be exhausted, a much larger insurance pool, over \$9 billion, is provided under the Price-Anderson Act, initially passed by Congress in 1957.

Regarding NRC meetings on these topics in your area, on March 12 and 13, 2003, the NRC held public meetings on transportation cast testing in Las Vegas and Pehrump, respectively. Please monitor NRC's website for meeting announcements at http://www.nrc.gov/public-involve/public-meetings/meeting-schedule.html.

I hope you continue to participate in the important discussions on spent fuel transportation safety.

Sincerely,

/RA/ Martin J. Virgilio, Director Office of Nuclear Material Safety and Safeguards

**DISTRIBUTION: NMSS 200300048** 

PUBLIC SFPO r/f NMSS r/f NMSS Dir. Off. r/f

BFleming CJensen SMetzger

C:\ORPCheckout\FileNET\ML030700008.wpd **ML030700008** \*See Previous Concurrence

| OFC:  | SFPO        | SFPO      | SFPO      | NMSS       |  |
|-------|-------------|-----------|-----------|------------|--|
| NAME: | JCook:*dmd1 | RLewis*   | EWBrach*  | MJVirgilio |  |
| DATE: | 03/06 /03   | 03/07 /03 | 03 /10/03 | 03/12 /03  |  |

**OFFICIAL RECORD COPY**