

independently verified by experts outside the cask designers and the utility.

*Response:* TS 5.2.2 requires licensees to train and verify the expertise of personnel to maintain and operate the Standardized Advanced NUHOMS® System at nuclear plants. CoC Condition #8 requires that the licensee perform a full dry run of loading and unloading operations prior to first fuel loading of the cask. The NRC conducts independent inspections of dry run activities at ISFSIs.

*Comment 26:* One commenter asked what agency approves transportation methods.

*Response:* Transportation issues are beyond the scope of this rulemaking. The NRC is not certain of the commenter's request when it refers to "transportation methods." For the selection of routes, mode of transportation, or physical protection and control of material, the NRC, in conjunction with the Department of Transportation (DOT) and the Department of Energy (DOE), regulates the safe transport of high level radioactive material from beginning to final destination. It is, however, the responsibility of the shipper to choose the mode of transportation along with routes to be used in accordance with applicable regulations and guidance.

*Comment 27:* One commenter asked for information as to how transportation methods are independently confirmed to be safe. The commenter cited an incident which occurred in late March in which a truck hauling radioactive waste blew over in Wyoming. The incident was supposedly due to high winds. Regarding this incident, the commenter questioned what would happen in an earthquake and if high winds are considered when licenses for transport are granted. The commenter questioned that if this were considered, how did the incident happen. If it were not considered, why wasn't it?

*Response:* This comment, which deals with transportation issues, is beyond the scope of this rule which is for approval of a storage cask design. The NRC, DOE, and DOT have comprehensive and stringent regulations for the safe transport of high level radioactive waste. These regulations address the packaging that must be used and, in the case of spent nuclear fuel, a package would be a cask that would need to be reviewed and approved for safety considerations by the NRC. Choosing a mode of transportation (rail, truck, or barge) would be made by the shipper, and safety in each mode is addressed by DOT and its independent activities. However, the NRC and DOT rely on the

robust design of shipping packages to provide reasonable assurance of safe transportation during routine or accident conditions. The packages protect the contents from damage and release and protect the public from unnecessary exposure to radiation. (See also Comment 26.)

*Comment 28:* One commenter stated that transportation of high level radioactive waste has been postponed several times since 9/11 due to possible terrorist threats. The commenter also stated that one shipment, in the planning stages for years, to ship 125 spent fuel rods on a 2,360-mile journey, was delayed due to 9/11. The casks, unable to be certified in temperatures below 10 degrees Fahrenheit, had to be removed from the train and stored inside for the winter. The commenter stated that the NRC has approved casks for storage and transportation that are unable to hold up to wind and temperature. The commenter questioned how transportation out of their earthquake-prone coastal zone will ever be assured by SCE, by DOE, or by the NRC.

*Response:* Transportation and site-specific issues are beyond the scope of this rulemaking which deals with the approval of a design for dry storage of spent nuclear fuel. See response to Comments 21 and 23, above, for a discussion of security concerns. The NRC has reviewed the cask design capability to withstand forces of wind and temperature during storage as documented in the SER.

*Comment 29:* One commenter questioned how leaking casks could be unloaded if the spent fuel pool were no longer available after the reactor shut down operations.

*Response:* A licensee who uses an approved spent fuel cask at its storage facility is responsible for continually monitoring the conditions of each of its casks and the radiation levels around the casks. In addition, it must develop procedures to deal with off-normal events and accidents including dealing with the event of a cask that has lost its confinement capability. In the situation where a plant was decommissioned and no longer had a spent fuel pool available, the licensee would have contingency plans in place to deal with a leaking cask on site. Such a plan would include actions to minimize dose to workers and to the public in accordance with NRC regulations.

*Comment 30:* The commenter asked if the design basis for the outer cement covering for NUHOMS casks has been approved for transportation.

*Response:* The Standardized Advanced NUHOMS® System is

designed for dry storage of spent nuclear fuel, and not for transportation of spent nuclear fuel. If a component of the Standardized Advanced NUHOMS® System were to be transported, it would need to be approved by the NRC for use in the transportation system being used.

*Comment 31:* One commenter requested that NRC address the concerns about the risks of operating nuclear generating stations, especially spent fuel pools which will remain totally vulnerable to terrorist attack. Another commenter referenced a September 2000 report by the National Council on Radiation Protection and Measurements dealing with the threat of nuclear terrorism that warned that "Targeting nuclear spent fuel elements kept in a storage facility would be an easier target than an operating plant." A successful attack on such a facility using 1,000 pounds of high explosives could cause radiation contamination over a wide area. This commenter asked what the additional costs and requirements of county, State, and military personnel would be should there be a terrorist attack of vulnerable irradiated fuel pools. The commenter also asked who will bear the additional costs should there be a terrorist attack, especially after termination of operations when irradiated fuel must remain in pools for at least 5 years for cooling.

*Response:* Comments related to spent fuel pools and security provisions for protection of licensed facilities are beyond the scope of this rulemaking. The NRC reviewed potential issues related to possible radiological sabotage of storage casks at reactor site ISFSIs in the 1990 rulemaking that added Subparts K and L to Part 72 (55 FR 29181; July 18, 1990). NRC regulations in Part 72 establish physical protection requirements for an ISFSI located within the owner-controlled area of a licensed power reactor site. Spent fuel in the ISFSI is required to be protected against radiological sabotage using provisions and requirements as specified in § 72.212(b)(5). Further, specific performance criteria are specified in Part 73. Each utility licensed to have an ISFSI at its reactor site is required to develop physical protection plans, response plans, and to install systems that provide high assurance against unauthorized activities that could constitute an unreasonable risk to public health and safety.

The physical protection systems at an ISFSI and its associated reactor are similar in design features to ensure the detection and assessment of unauthorized activities. Alarm annunciations at the general license