



Winning In Washington



The Facts About Transporting Used Nuclear Fuel

(NAPSA)—Now that Congress has approved Yucca Mountain as a safe repository for nuclear waste, a number of people have expressed concern about the transportation of radioactive materials to that site. However, according to many experts, this concern is both unfounded and unjustified.

Over the past 40 years, there have been more than 3,000 used fuel shipments in and around the United States—and not a single report of fatalities, injuries or environmental damage due to the radioactivity of the cargo. In addition, security measures have been increased to further protect the public.

For example, regulations established by the Nuclear Regulatory Commission (NRC) require that no radiation of any consequence be emitted during shipments—even at distances as close as six feet. Most of the shipments will be done by rail, but even so, pedestrians on sidewalks and passengers in vehicles next to nuclear transport trucks are always safe.

What does radiation “of any consequence” mean? Radiation exposure is measured in rem—which is based on the effect of radiation on the human body—and, more commonly, millirem, or 1/1000 of a rem. Many years of international studies show that there are no negative effects on humans exposed to less than 10,000 millirem of radiation.

In the U.S., the average person is exposed to 360 millirem of radiation per year—300 from natural sources and 60 from manmade sources. A dental X-ray, for instance, delivers 10 millirem. On the other hand, a person who eats just one or two bananas a week would receive as much radiation as a pedestrian watching a year’s worth of used nuclear fuel shipments pass by.

Robust transport container design provides the first level of



The containers used for transporting used nuclear fuel are subjected to numerous safety tests.

security. These containers meet rigorous engineering and safety criteria, and pass a sequence of hypothetical accident conditions that create forces greater than containers will experience in actual accidents. These include:

- A 30-foot free fall onto an unyielding surface, which is equivalent to crashing into a concrete bridge abutment at 120 miles per hour;
- A puncture test in which the containers fall 40 inches onto a steel rod six inches in diameter;
- A 30-minute exposure to a 1,475°F fire that engulfs the entire container; and
- Submergence of that same container under three feet of water for eight hours.

The routes and security plans for the transportation of used nuclear fuel are approved by both the NRC and the Department of Transportation and are updated periodically. The shipments are tracked via satellite, and have armed escorts in urban areas.

Anyone can express an opinion, or learn where a legislator stands, on this or any other issue by writing to the House of Representatives, Washington, D.C. 20515 and the U.S. Senate, Washington, D.C. 20510.