

## **Comments to the State of Nevada Commission on Nuclear Projects**

**Bob Halstead, Transportation Advisor**

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The U.S. Department of Energy began working on a repository transportation plan in 1983. In January of this year, more than 25 years and three-quarters of a billion dollars later, DOE issued what it calls a national transportation plan for public comment. The Nevada Agency for Nuclear Projects has prepared detailed comments on DOE's so-called plan. The handout materials for this meeting include the full comments we have filed with DOE and a condensed version.

Before answering your questions, let me give you an overview of what is lacking in the DOE Plan. Three big "Ds" are missing from the Plan – D for dangerous, D for dollars, and D for details.

Let's start with D for dangerous. Nowhere in the plan does DOE mention that spent nuclear fuel and high-level radioactive waste are dangerous. In fact, both are lethal to humans for decades, and remain extremely dangerous for a long time. DOE's plan does not even

mention the regulatory requirement that radiation exposures be kept as low as reasonably achievable below the allowable standards. Routine radiation from casks is a matter of regulatory concern even when shipments are safe and uneventful. In a very severe accident cleanup costs could be \$10 billion, and even more in the event of a successful terrorist attack. In our comments, we provide the information on radiological hazards that DOE has ignored. We recognize that the nuclear industry has a good transportation safety record, in terms of avoiding catastrophic accidents, but otherwise the safety record is about average in terms of accidents per shipment-mile. We believe more stringent safety and security precautions are required, and we describe the needed safety and security measures, like full-scale cask testing, in our comments.

The second missing D is for dollars. Nowhere in the Plan does DOE reveal the cost of the Yucca Mountain transportation plan - \$20 billion, yes 20 billion dollars, about 20 percent of the entire cost of the waste management system. In a report issued last year, DOE provided cost details for every major transportation component, from \$2.7 billion to build the Caliente rail line to 700-800 thousand dollars for each TAD canister. So why aren't those dollar numbers in the Plan?

The third missing D is for details. There are virtually no meaningful details in the DOE Plan. The plan does not mention that DOE proposes 2,800 to 7,000 cross-country train shipments, with 3 to 5 casks per train, and 2,600 to 5,000 cross-country truck shipments, over 50 years. The plan does not mention that each of those shipping casks would contain hundreds of thousands of curies of radioactive cesium and strontium, 20-100 times the amount of those fission products released by the Hiroshima bomb. The Plan does not mention that the “representative routes” for shipments would affect 44 States, 41 Indian Tribes, 950 counties with about 160 million residents, and 3 out of 4 congressional districts in the United States.

Nor does the Plan discuss transportation impacts in Nevada. DOE proposes to funnel up to 80 percent of the rail shipments and all of the truck shipments through the Las Vegas Valley. Let me say that again – in spite of Nevada telling DOE for two decades that shipments through Las Vegas are not acceptable, DOE intends to ship at least 8 percent of the trains, and possibly 40-80 percent of the trains to Yucca Mountain, through down town Las Vegas if the Caliente rail line is built. DOE proposes to send all of the truck shipments to Yucca Mountain using

the I-215 beltway from I-15 to US 95. We're talking about 1 or 2 trucks, and up to 1 or 2 trains, per week, every week, for 50 years, through the Las Vegas Valley.

The Plan of course does not discuss radiological regions of influence around the railroads and highways used for Yucca Mountain shipments. In the Final Supplemental EIS for Yucca Mountain, DOE defines the radiological region of influence for routine shipments as 800 meters or one-half mile on either side of a shipping route, and the region of influence for accidents and sabotage as 80 kilometers or 50 miles.

In Clark County, about 95,000 people live within one-half mile of the DOE rail route and more than 100,000 live within one-half mile of the DOE truck routes. Another 40,000 visitors and workers would likely be within one-half mile of the DOE routes at any hour of the day. About 1.9 million people are within the 50 mile region of influence for accidents and sabotage.

So what does it mean to live within the one-half mile region of influence? In the worst case scenario, a radioactive release from an accident or terrorist attack could result in a life-threatening exposure, contamination of personal property, the trauma of emergency evacuation, and community disruption for a year or more during

cleanup and recovery. Under the best of circumstances, decades of uneventful DOE shipments could stigmatize communities near routes, lower property values, affect business location decisions and tourism visits, and cause mental distress. Between the best case and the worst case, there would likely be one-time incidents like gridlock exposures, and recurrent events like cumulative, low-level radiation exposures at specific locations, that could cause adverse human health effects that would be difficult or impossible to prove.