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NEVADA'S TEN POINTS FOR ASSURING  
SAFE TRANSPORTATION OF SPENT NUCLEAR FUEL  
AND HIGH-LEVEL RADIOACTIVE WASTE

1. Nevada has recommended that DOE ship *the oldest fuel (SNF) first*, or at least ship older fuel first. Shipping fuel 30-40 years out of reactor, compared to shipping 5-year cooled fuel, could reduce radiological hazards by 40-50%.
2. Nevada has recommended that DOE *select rail as the preferred mode* of transportation, but DOE must be forthcoming and honest about the serious and possibly prohibitive impediments to developing rail access to Yucca Mountain as well as realistic about the percentage of SNF and HLW that could likely to be shipped by rail (65-75% of the shipments). DOE must be realistic in planning for large numbers of truck shipments under the "mostly rail" shipment scenario. Also, under the "mostly rail" scenario, truck shipments would probably make up all of the shipments in the first five years or more - given the rail line in Nevada is unlikely to be finished by 2010 (if ever).
3. Nevada has recommended that DOE base its transportation system on *use of dual-purpose (transportable storage) casks* of a standardized design, with a range of capacities (resulting in loaded cask weights of 125, 100, and 70 tons). Nevada later endorsed the DOE proposal for a similar approach using a multi-purpose canister system for storage and transport.
4. Nevada has recommended that DOE *use dedicated trains* for all rail shipments. Until DOE commits to use dedicated trains only, all DOE routing studies and risk analyses must address use of both dedicated and mixed (general freight) rail shipments.
5. Nevada has recommended that DOE and/or NRC conduct a *meaningful full scale testing* program. DOE/NRC should conduct full-scale regulatory confirmation tests on each cask design (or in some cases, for similar designs like the GA-4 and GA-9 truck casks, test one cask from each representative grouping). DOE/NRC

should also conduct a combination of extra-regulatory, full-scale testing (fire), scale model testing, component testing, and computer simulations to determine cask failure thresholds. In addition, DOE/NRC must ensure meaningful stakeholder participation in all aspects of the cask testing program.

6. Nevada has recommended that DOE use *a credible NEPA process to select a preferred Yucca Mountain rail access corridor* in Nevada; DOE failure to do this as part of the Yucca Mountain Final EIS is the basis of Nevada's current transportation lawsuit against DOE.
7. Nevada has recommended that DOE *select routes for the national transportation system following a process like that proposed by WIEB* in the mid-1990s. DOE should follow a 3 step process: DOE would designate "straw man" routes, preferably in the Yucca Mountain FEIS or another NEPA document; WIEB member states would individually and collectively evaluate the DOE routes, and designate preferred routes on a regional basis; DOE would then formally adopt the routes selected by WIEB, and designate these routes (allowing exceptions for use of designated alternative routes in emergency situations) in DOE contracts with rail and highway carriers.
8. Nevada has recommended that DOE *implement the Section 180 (c) program through rulemaking*. If not, the State of Nevada believes that congressional action might be needed to implement the program, as was the case with the WIPP DOE-State cooperative transportation planning program.
9. Nevada has recommended that DOE *support state regulatory enhancements* to manage transportation risks and address public perception of transportation risks. These would include, but not be limited to, port-of-entry inspections and state escorts for DOE shipments at DOE expense. States, in conjunction with local governments, may also impose seasonal, day-of-week, and time-of-day restrictions on DOE to address unique local conditions. Tribal governments may also regulate DOE shipments.
10. Nevada has recommended that DOE *address potential terrorism and sabotage against repository shipments*. DOE has acknowledged, in the Yucca Mountain Final EIS, the potential vulnerability of shipments to such attacks. DOE- and NRC-sponsored analyses have indicated that use of military weapons against a shipping cask could result in a one-percent or greater release of cask contents, including a significant release of radio-cesium in a respirable form. Analyses by Nevada contractors have concluded that the releases and consequences could be tens of times greater, resulting in catastrophic cleanup and recovery costs. DOE needs to fully address terrorism issues in development of repository transportation operational protocols. It is disturbing that NRC has not responded to the specific terrorism risk and impacts documented in Nevada's 1999 petition for rulemaking (Docket PRM 73-10)