STATEMENT OF ROBERT J. HALSTEAD ON BEHALF OF THE STATE OF NEVADA AGENCY FOR NUCLEAR PROJECTS REGARDING U.S. DEPARTMENT OF ENERGY'S DRAFT ENVIRONMENTAL IMPACT STATEMENT FOR A GEOLOGIC REPOSITORY FOR THE DISPOSAL OF SPENT NUCLEAR FUEL AND HIGH-LEVEL RADIOACTIVE WASTE AT YUCCA MOUNTAIN, NEVADA

PRESENTED AT THE PUBLIC HEARING IN
CRESCENT VALLEY, NEVADA
DECEMBER 9, 1999

Transportation of spent nuclear fuel (SNF) and high-level radioactive waste (HLW) is inherently risky business. At previous hearings, our preliminary transportation comments have addressed specific deficiencies in DOE's Draft Environmental Impact Statement (DEIS) regarding the radiological hazards of the SNF and HLW that DOE proposes to ship to Yucca Mountain, the shipment modes and routes, the risks associated with legal weight truck (LWT) transport, the vulnerability of shipments to human initiated events including terrorism and sabotage, DOE's failure to identify a preferred rail access corridor to Yucca Mountain, and DOE's failure to demonstrate the feasibility of heavy haul truck (HHT) transportation from an intermodal transfer station to the proposed repository. These statements are available on the web at www.state.nv.us/nucwaste. At upcoming hearings we will address radiological health effects of routine transportation. radiological consequences of severe accidents, and social and economic impacts of public perception of transportation risks.

1 Today our focus is on the impacts of rail access construction, and the risks and impacts of rail transportation of SNF and HLW in Nevada. The Yucca Mountain site has no access to the national rail system. The nearest railroad is in Las Vegas, almost one hundred miles away. The DEIS identifies and describes four potential corridors, one-quarter mile in width, which DOE could use to construct a rail line connecting Yucca Mountain to the Union Pacific mainline in southern Nevada: Valley Modified (98 miles), Jean (112 miles), Caliente-Chalk Mountain (214 miles), and Caliente (319 miles). [The DEIS designates the Caliente-Chalk Mountain corridor as a "non-preferred alternative."] A fifth potential corridor, Carlin (323 miles) would connect Yucca Mountain with the Union Pacific mainline in north central Nevada.

The DEIS underestimates the difficulty of constructing a new rail line to Yucca Mountain. The Carlin, Caliente, or Caliente-Chalk Mountain routes would constitute the longest new rail construction project in United States since the World War I era. Construction of the Jean or Valley modified routes would be the second longest U.S. new rail construction project in the past 70 years. The DEIS assertion that rail line construction along any of the

routes would take an estimated 2.5 years is unjustifiably optimistic considering the difficult terrain, environmental sensitivity, and high probability that previously unidentified Native American religious and cultural resources will be discovered only after construction activities begin. The construction period could be 5 to 7 years for the longer routes.

2 The DEIS further underestimates the difficulty of rail access preconstruction activities, especially environmental reviews and approvals, acquisition of rights of way across both public and private lands, and unresolved Native American rights issues regarding ceded treaty lands. Legal challenges could easily delay construction for 5 to 10 years.

3 The cost estimate of $800 million for Nevada transportation, apparently based on an estimate for the Caliente route, is completely unrealistic unless DOE plans to sacrifice safety by constructing a rail line which barely meets the minimum Federal Railroad Administration requirements. Nevada is particularly concerned that DOE contractor studies have recommended operating the line without a state of the art computerized train control system. DOE's cost saving measures include shipping rail casks loaded with highly radioactive spent fuel in general freight trains, which will require switching cars at the connection point. DOE's proposal to routinely park loaded rail cask cars on a side track, for up to 48 hours, is unprecedented, and will result in a separate legal challenge.

4 The DEIS provides insufficient information about rail access spur system specifications, construction, and operations to allow the complete assessment of impacts and risks required under the National Environment Policy Act (NEPA). The DEIS provides insufficient information on cut and fill requirements; ballast, rail weight, and tie materials; platform, ditch, and bench dimensions; grade crossing separations (DOE contractors have recommended rail over road), crossing signals and road crossings; administration and maintenance facilities, including remote water supplies and sanitation; seismic hazard standards; and train control signal systems. The DEIS should have assumed that fencing would be required for the entire length of the rail spur, and assessed the environmental and socioeconomic impacts of fencing.

5 The DEIS provides incomplete and contradictory information on rail operating assumptions, particularly regarding maximum operating speeds, crew change and waystation requirements, and potential shared use of the rail line. In particular, the DEIS fails to address the safety and environmental implications of potential shared use of the rail line for shipments of commercial explosives, military weapons and munitions, petroleum products, and other hazardous materials. These DEIS deficiencies, combined with DOE's failure to designate a preferred rail route, result in a legally insufficient assessment of rail transportation risks and impacts.

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