Preliminary Comments on DOE Draft SEIS for Yucca Mountain & Draft Nevada Rail Corridor SEIS and Rail Alignment EIS

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Additional documentation available at http://www.state.nv.us/nucwaste/trans.htm
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General Comments on the Draft Rail Corridor SEIS & Rail Alignment EIS

• TAD canister system exists as concept only
• Yucca Mountain & 25 shipping sites lack rail access
• DEISs do not support selection of the Caliente Corridor
• Study of the Mina Corridor as a “nonpreferred alternative” unwarranted given Walker River Paiute Tribal Council withdrawal of support
• Selection of the “Shared Use” option - Surface Transportation Board prepare the Rail Alignment EIS
• No basis for proposed use of over-weight trucks
• The No Action Alternative should be Mostly Legal-weight Truck scenario per 2002 FEIS
Spent Nuclear Fuel is Dangerous

- Commercial SNF would make up 90% of shipments
- Nevada evaluated representative SNF: PWR, 4.2% initial enrichment, 50,000 MWDt/MTHM, 10 years cooling time
- Contact surface dose rate about 35,000 rem/hour
- Unshielded SNF results in lethal exposure in 1-2 minutes
- 1% release of Cs-137 could result in cleanup costs of $100 million to more than $1 billion
- DOE could ship much hotter SNF (60,000-70,000 MWDt/MTHM, 5-year cooled)
- Nevada, NAS, & GAO urge DOE to ship oldest fuel first
- Proposed action may not comply with ALARA (as low as reasonably achievable)
DSEIS Does Not Adequately Address Transportation Safety and Security

- Does not consider worst case accidents - such combinations of factors “are not reasonably foreseeable”
- Underestimates consequences of severe accidents involving long duration fires (no DOE or NRC plans for full-scale cask testing in severe fire)
- Underestimates consequences of terrorist attack
- Dismisses potential for human error to exacerbate consequences of accidents or terrorist attacks
- Dismisses potential for unique local conditions to exacerbate consequences of accidents or terrorist attacks
- Acknowledges clean-up costs could reach $10 billion
DSEIS Does Not Fully Evaluate Repository Shipments into NV from CA

• Under Proposed Action, 9,500 rail casks and 2,700 truck casks to Yucca Mountain over 50 years; if no second repository, 24,000 rail casks and 5,000 truck casks
• 8% of rail shipments enter NV from CA if Caliente rail line is developed, compared to 21% if Mina rail line is developed; 32% of truck casks enter NV from CA
• DSEIS ignores potential for larger number of rail cask shipments into NV from CA for Caliente or Mina options (>4,400, or >45% of total under proposed action)
• DSEIS Ignores potential for large number of LWT shipments into NV from CA if no rail access (>24,000, >45% of total under proposed action)
Potential Rail Routes to Yucca Mt. via Proposed Caliente Spur
(Suite of Routes from Kansas City and Memphis Gateways)

Legend
- Yucca Mt.
- Shipping Sites
- Rail routes to Yucca Mt.
- FEIS barge routes
- Truck Routes used under Mostly Rail Scenario

This map depicts routes for the Mostly Rail Scenario from nuclear waste shipping sites to the proposed Yucca Mt. repository via the proposed Caliente spur. It shows routes on Class I Track from the shipping sites to the gateways of Kansas City and Memphis. The map also depicts likely highway routes from six reactor sites that ship by legal weight truck under the Mostly Rail Scenario.

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Potential Rail Routes to Yucca Mt. via Proposed Mina Spur
(Suite of Routes from Kansas City and Memphis Gateways)

Legend:
- ▲ Yucca Mt
- □ Shipping Sites
- Purple: Rail Routes to Yucca Mt.
- Blue: FEIS barge routes
- Red: Likely Truck Routes under Mostly Rail Scenario

This map depicts routes for the Mostly Rail Scenario from nuclear waste shipping sites to the proposed Yucca Mt. repository via the proposed Mina spur. It shows routes on Class I Track from the shipping sites to the gateways of Kansas City and Memphis. The map also depicts likely highway routes from six reactor sites that ship by legal weight truck under the Mostly Rail Scenario.
General Comments on the Evaluation of the Caliente Rail Corridor

• DOE has not adequately assessed the environmental impacts of developing the Caliente rail corridor, particularly land use conflicts with ranching, mining, recreation, and cultural resources.
• Some of the alternative segments that might reduce land use conflicts appear to have been eliminated from further consideration based on solely or primarily of construction costs.
• DOE has not assessed the environmental impacts of developing the Caliente rail corridor on Clark County communities along the existing Union Pacific rail line through Las Vegas.
• DOE has not assessed the potential for larger than projected numbers of rail shipments through Clark County, and failed to evaluate unique local conditions such as the proximity of the existing rail line to the Las Vegas Strip.
Specific Concerns about Land Use Conflicts

• Failure to adequately consider the railroad as a physical barrier to the movements of humans, livestock, and wildlife

• Projected construction water use and the proposal to obtain construction water from new wells

• Proposed construction of quarries for obtaining railroad track ballast and construction aggregates
Potential Role for Surface Transportation Board (STB)

- DOE “shared use” decision should give STB lead agency status to prepare EIS
- DOE should evaluate STB final decisions regarding DME & Tongue River III rail projects
- STB EIS should evaluate alternative routes and approve selection of preferred route
- STB EIS should identify conditions to mitigate adverse impacts
- STB construction authorization, if granted, should ensure conditions are met
Overweight Trucks (OWT) vs Legal-weight Trucks (LWT)

- DSEIS says non-rail shipments by OWT
- DSEIS contradicts previous DOE studies that assume LWT for non-rail shipments (1986 EA, 2002 FEIS, 2007 Transportation Concept of Operations, 2007 Draft National Transportation Plan)
- DSEIS ignores past U.S. nuclear industry reliance on LWT for SNF shipments
- OWT permit requirements would likely prevent cross-country shipments
Key Recommendations of the NAS Transportation Study

• Independent examination of security should be carried out before the commencement of repository shipments
• Risks can be reduced by shipping the older fuel first
• DOE should identify and make public preferred highway and rail routes to the repository as soon as possible
• Potential adverse social and economic impacts of repository shipments are, for many members of the public, as important as health and safety impacts, and special government efforts will be needed to manage social and economic impacts.
• Serious consideration be given to taking the transportation program out of the DOE repository program, or out of DOE altogether