

**STATEMENT OF ROBERT J. HALSTEAD ON BEHALF OF  
THE STATE OF NEVADA AGENCY FOR NUCLEAR PROJECTS  
REGARDING U.S. DEPARTMENT OF ENERGY (DOE) DRAFT ENVIRONMENTAL  
IMPACT STATEMENT (DEIS) 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  
CHICAGO, ILLINOIS  
FEBRUARY 1, 2000**

Today our comments focus on DOE's failure over most of the past six months to identify the cross-country truck and rail routes evaluated in the DEIS. The shipping routes used in the DEIS make Illinois the third most heavily impacted corridor state, after Nevada and Utah, but the DEIS makes no specific reference to transportation impacts in Illinois. The draft EIS fails to identify the specific transportation routes for spent nuclear fuel (SNF) and high-level radioactive waste (HLW) shipments from specific reactor and storage locations to Yucca Mountain, despite the fact that these routes were evaluated as part of the analyses contained in the transportation appendix. Until last Thursday (January 28) DOE had, in effect, chosen to hide these routes and simply report the analyses in a generic fashion. Now, barely two weeks before the end of the public comment period, DOE has decided to reveal state maps of the routes analyzed in Chapter 6 of the DEIS on its website at [http://www.ym.p.gov/timeline/eis/routes/il\\_b\\_r00.pdf](http://www.ym.p.gov/timeline/eis/routes/il_b_r00.pdf). Attachment 1 shows DOE's map of SNF and HLW shipment routes through Illinois.

DOE has not, however, revealed that up to 75% of all the spent nuclear fuel and high-level nuclear waste shipments to Yucca Mountain will likely travel through Illinois. Based on the DEIS shipment data in Tables J-5 and J-6, the Nevada Agency for Nuclear Projects has calculated the projected SNF and HLW volume flows along each major cross-country route to Yucca Mountain. Under DOE's proposed action, mostly truck national transportation scenario, about 73% of all shipments pass through Illinois. Under DOE's proposed action, mostly rail national transportation scenario, about 75% of all rail shipments and 87% of all truck shipments pass through Illinois.

The manner in which the comment period and public hearings were noticed by DOE was and is misleading and intended to suppress public participation and public comments. Notices make no reference to the specific transportation routes, the types and volumes of shipments along each route, and the impacts to specific communities along identified routes.

The highway routes used in the DEIS make Illinois the major corridor state for truck shipments originating east of the Mississippi River. Shipments from reactors in the Northeastern and Middle Atlantic States plus Ohio and Michigan enter Illinois and the Chicago metropolitan area on I-80/I-94.

Shipments from Wisconsin and Illinois reactors use routes I-39, I-88, and I-74 to connect with the I-80 corridor west of Chicago. Shipments from reactors in the South East and DOE's Savannah River Site enter Illinois from Indiana on I-64 and from Kentucky on I-24/I-57.

Potential truck shipments through Illinois are summarized in Table 1. Under the mostly truck scenario, proposed action, about 36,300 truck shipments traverse Illinois over 24 years. Under the mostly truck scenario, modules 1 & 2, about 59,000 truckloads traverse Illinois over 39 years.

Under either mostly truck scenario, an average of 4 trucks per day would travel through Illinois every day for decades. Shipments through Chicagoland would average more than eleven truckloads per week.

Rail shipments to Yucca Mountain would also heavily impact Illinois. Under the DEIS routing scenarios, five major streams of rail shipments from reactors in Illinois, Wisconsin and the East converge in Chicago, and proceed West on the Union Pacific mainline. Two other major streams from Southeastern reactors and DOE's Savannah River Site traverse Southern Illinois on the Norfolk Southern and CSXT. Two Illinois reactors use the BNSF.

Rail shipments are summarized in Table 2. Under DOE's proposed action, mostly rail scenario, about 8,100 rail shipments traverse Illinois over 24 years. Under DOE's module 1 and 2, mostly rail scenario, more than 12,600 rail shipments traverse Illinois over 39 years. Additionally, I-80 from Chicagoland to the Quad Cities would be traversed by 1,600 to 2,300 truck shipments from reactors in New England and New York which cannot economically ship by rail. Between 700 and 1,000 truck shipments from Florida reactors would travel through the East St. Louis area on I-255 and I-270. Under either mostly rail scenario, an average of one shipment per day would travel through Illinois every day for three or four decades.

Transportation of SNF and HLW is inherently risky business. The DEIS systematically and significantly understates the risks associated with shipments to the proposed repository in the following ways:

1. The DEIS mostly rail scenario significantly misrepresents the extent to which legal-weight truck (LWT) shipments to the repository can be reduced by unrealistically assuming major investments at reactor sites and unprecedented use of heavy haul truck (HHT) and barge transport.
2. The DEIS misrepresents the radiological characteristics of the spent fuel that would be transported, using reference fuel that is older, cooler, and less radioactive.
3. The DEIS grossly underestimates routine radiation exposures to transportation workers, safety inspectors, and members of the public, especially along highway routes in Nevada.
4. The DEIS significantly underestimates the human health consequences of severe transportation accidents resulting in release of radioactive materials, and ignores the social and economic impacts of severe accidents and post-accident cleanup activities.
5. The DEIS significantly underestimates the human health consequences of successful terrorism and sabotage incidents involving high-energy explosive devices, and ignores the social and economic impacts of successful terrorism and sabotage incidents and post-incident cleanup activities.
6. The DEIS completely ignores the social and economic impacts of public perception of transportation risks, including adverse impacts on property values and business activities along shipping corridors.

Nevada's comprehensive comments on high-level nuclear waste transportation impacts are available on the web at [www.state.nv.us/nucwaste](http://www.state.nv.us/nucwaste).

**TABLE 1**  
**YMDEIS TRANSPORTATION IMPACTS**  
**TOTAL TRUCK SHIPMENTS THROUGH ILLINOIS**  
**DOE MOSTLY TRUCK SCENARIO**  
**DOE BASE CASE ROUTING**

	<b>Proposed Action</b>	<b>Modules 1&amp;2</b>
Truck Shipments from Illinois Reactors	5079	8609
Truck Shipments from Wisconsin Reactors	863	1143
Truck Shipments from Indiana on I-80	12814	21513
Truck Shipments from Indiana on I-64	3094	5269
Truck Shipments from Kentucky on I-24	14434	22386
<b>Truck Shipments Total</b>	<b>36284</b>	<b>58920</b>

**TABLE 2**  
**YMDEIS TRANSPORTATION IMPACTS**  
**RAIL AND TRUCK SHIPMENTS THROUGH ILLINOIS**  
**DOE MOSTLY RAIL SCENARIO**  
**DOE BASE CASE ROUTING**

	<b>Proposed Action</b>	<b>Modules 1&amp;2</b>
Rail Shipments from Illinois Reactors	1298	1991
Rail Shipments through Chicago	3125	4914
Rail Shipments through S. Illinois	3678	5744
<b>Rail Shipments Total</b>	<b>8101</b>	<b>12649</b>
Truck Shipments on I-80	1581	2265
Truck Shipments on I-57, I-64, I-255, I-270	672	1013
<b>Truck Shipments Total</b>	<b>2253</b>	<b>3278</b>