

1 MR. DEAKHOUSE: [My name is Daniel
2 Deakhouse, I'm an associate with Hahn
3 Associates, providing consulting service to
4 the state of Nevada. I'm here to read a
5 statement by Robert Halstead, who's the
6 transportation adviser for the Nevada Agency
7 for Nuclear Projects. Spent nuclear fuel is
8 lethal. Spent nuclear fuel from nuclear power
9 plants would comprise about ninety percent of
10 the waste shipped to the repository. The
11 spent nuclear fuel that DOE plans to ship is
12 so radioactive that even after ten years of
13 cooling, unshielded exposure to a single fuel
14 assembly could deliver a lethal dose of
15 radiation in one to two minutes.

16 Each shipping cask would contain
17 an enormous amount of radioactive material.
18 Fission products, especially Strontium-90,
19 with a half-life of twenty-eight years, and
20 Cesium-137, with a half-life of thirty years,
21 account for most of the radioactivity in spent
22 nuclear fuel for the first hundred years after

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 removal from reactors. Each truck cask of
2 commercial spent nuclear fuel would contain
3 more than 350,000 curies of radioactive Cesium
4 and Strontium, about twenty to thirty times
5 the amount of those fission products released
6 by the Hiroshima bomb.

7 Every dedicated train hauling
8 three or four rail casks would contain more
9 Cesium-137 than the total amount released
10 during the Chernobyl accident. The shipping
11 casks will not be tested to determine accident
12 failure thresholds. The Nuclear Regulatory
13 Commission, NRC, does not currently require
14 full-scale physical testing of shipping casks.

15 None of the spent nuclear fuel shipping casks
16 currently used in the United States have ever
17 been tested full scale.

18 NRC has developed a plan for
19 demonstration testing of the new rail casks
20 for DOE TAD canisters, but the tests are
21 designed to promote public confidence and will
22 not actually determine cost failure

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 thresholds, will not include a fire test, and
2 will not include truck casks. DOE and the
3 nuclear industry oppose mandatory full-scale
4 impact and fire tests for new cask designs.

5 The consequence of a severe
6 transportation accident could be much more
7 severe than DOE estimates. In the draft SEIS
8 for Yucca Mountain, DOE chose not to evaluate
9 "Worst case accidents in which all factors
10 combine in the most disadvantageous way,"
11 because "such events are not reasonably
12 foreseeable." Moreover, the DOE accident
13 analysis did not include consideration of
14 human error in the design, fabrication, and
15 loading of shipping casks.

16 DOE also chose not to consider
17 unique local conditions that could result in
18 more severe accidents or consequences. DOE
19 does acknowledge that cleaning costs following
20 a transportation accident resulting in the
21 release of radioactive materials could range
22 from 300,000 to \$10 billion. The consequences

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 of a successful terrorist attack could be much
2 more severe than DOE estimates.

3 DOE acknowledges in the FEIS and
4 the draft SEIS that both truck and rail casks
5 are vulnerable to terrorist attacks or
6 sabotage involving certain types of military
7 and commercial explosive devices. However,
8 DOE has chosen not to consider attack
9 scenarios involving multiple weapons or
10 combinations of weapons that could result in
11 radioactive releases. Human health effects
12 and cleanup costs that could be ten to
13 hundreds of times greater than DOE estimates.

14 Nevada's sponsored studies have
15 concluded that a credible attack scenario in
16 an urban area could release enough radioactive
17 material to cause thousands of latent cancer
18 fatalities and require cleanup and recovery
19 costs exceeding \$10 billion.] Thank you very
20 much.

21 MR. BROWN: Thank you. Our next
22 speaker is Brian O'Connell. And he will be

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

followed by Aja Binette, and then Kevin Kamps.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com