

13 BOB HALSTEAD: Thank you everyone who's here
14 tonight. We have a handout that summarizes the
15 points I'm going to make, and on that handout you'll
16 find our website for the State of Nevada Agency for
17 Nuclear Projects and our phone number.

18 And we'd like to remind anyone who wants to
19 make comments, written comments for the record that
20 there is an opportunity to do that through January
21 10th. We would be happy to provide any information
22 to help you make your comments. We'll be posting
23 some documents on our website as our contractors
24 develop them looking at specific aspects of both the
25 rail line and the TAD canister system.

1

[Let me begin by making a few general
2 comments on the draft EIS for the rail alignment and
3 the draft supplemental EIS. It's important to
4 remember that the TAD canister system, as interesting
5 and possibly beneficial as it appears in concept,
6 exists only as a concept. And, indeed, it's not
7 clear that the vendors working on this for the
8 Department of Energy will actually have NRC certified
9 safety analysis reports for that system available by
10 June of 2008. So the first thing to remember is
11 sometimes a silver bullet is just a silver bullet on
12 paper.]

2

[Second, the focus on rail transportation
14 certainly has some advantages, and the State of
15 Nevada has been an advocate of rail transportation as
16 the least bad way to do transportation for about 15

17 years comes up against the fact that Yucca Mountain
18 lacks rail transportation, and 25 of the shipping
19 sites lack rail access as well.]

3

20 [Specifically on EISs we're concerned that
21 DOE is continuing to study the Mina corridor as a
22 nonpreferred alternative, given that the Walker River
23 Paiute tribe council has withdrawn their support.
24 And I think that raises some confusion in everybody's
25 minds as to whether, in fact, there is a future for a

1 Mina route or not.]

4

2 [We believe the selection of the shared use
3 option the DOE has made has a jurisdictional
4 implication. It means that the Surface
5 Transportation Board, which normally issues
6 construction authorizations for rail projects, should
7 actually be the lead agency preparing this EIS.]

5

8 [We believe there's no basis for the DOE's
9 statement that if they are not able to get rail
10 access they would have to use overweight trucks for
11 non-rail shipments. In fact, they established a
12 legal weight truck alternative in their 2002
13 Environmental Impact Statement and we think that
14 that, in fact, should be their no action alternative.]

6

15 [The reason that we're here tonight and the
16 reason that DOE has been charged by Congress with
17 running a program for spent fuel and high-level waste
18 disposal and the reason that it's controversial,
19 quite frankly, is that spent fuel is dangerous. It's

20 very dangerous and it remains very dangerous for a
21 very long time.

22 Now, I have only a few minutes tonight so
23 I'm not going to spend too much time on the details.
24 The details we've documented in materials on our
25 website and we're writing a new conference paper

1 where we look at the evolution of fuel management

2 practices in the nuclear industrial. And the way in
3 which the fuel that the industry wants to send to
4 Yucca Mountain is literally getting hotter and
5 hotter, both thermally and radioactively.

6 The best way to put this into language that
7 the average person can understand, instead of saying
8 the contact surface dose rate on the design basis
9 spent fuel assemble is 35,000 REM per hour is to tell
10 you that if you stood next to one of these fuel
11 assembles for one or two minutes you'd receive a
12 lethal dose of radiation.

13 The second point to keep in mind is that the
14 inventory of dangerous radionuclides, fission
15 products, particularly Cs-137, is very, very large.
16 We haven't calculated the exact inventories for the
17 design basis fuel in the new cask design, but I think
18 we're safe in saying that we've analyzed in the past
19 we're talking about in excess of 650,000 curies in
20 the rail cask and 135,000 curies in the truck cask.

21 And what does that mean? It means that in a
22 horrific accident or in a successful terrorist attack
23 it's credible that one percent of that Cs-137 could

24 be released, and it's possible that the cleanup cost
25 could be as low as \$100 million but it's more likely
1 that it would be several hundreds of millions of
2 dollars or even billions of dollars.

3 Yet there's a way to deal with the dangerous
4 spent nuclear fuel directly, it's to take advantage
5 of the fact that this is one of those cases where the
6 risk goes down as you procrastinate and keep the fuel
7 on site. If the fuel is kept on site for 50 years
8 before it's shipped, there's a 50 percent -- I'm
9 sorry, after 50 years there's a 90 percent reduction
10 in the inherent radiological hazard.

11 The State of Nevada has urged the Department
12 of Energy to go back to its original plan, which was
13 to ship the oldest fuel first. The National Academy
14 of Sciences has recently urged that DOE ship the
15 older fuel first. The general accounting office, in
16 its report on terrorism risk, said it also would be a
17 good idea to ship the oldest fuel first.

18 The only point I want to make about this,
19 and I've taken some time to talk about it, is that I
20 think DOE does a disservice to themselves and to the
21 nuclear power industry by not having a clearer
22 up-front description of exactly what spent nuclear
23 fuel is and exactly what its radiological hazard is.

24 Every form of generating electricity has an
25 environmental downside. There's no free lunch in the
1 electricity business. And the State's view is that

2 it's better to acknowledge those risks and then talk
3 about the way those risks are going to be managed.
4 It does no service to anyone to pretend that spent
5 fuel is less dangerous than it really is.]

6 Now, I want to talk about a few specific
7 issues relating to the Mina rail proposal. And I can
8 summarize those in a few words. And, as I said, I
9 have a handout that explains these points in greater
10 detail, and you can also access these materials on
11 our website.

7 [Issue number one, the draft EISS
12 underestimate the potential for shipments through
13 Reno and Sparks if the Mina corridor were to be
14 developed. Now, this isn't a liars bout in a bar
15 that DOE has decided to lowball the numbers and we've
16 decided to highball them. In fact, DOE used a method
17 basically running the computer models that are used
18 in routing and concluded that about 21 percent of the
19 rail shipments would come through Reno to Mina -- or
20 to Yucca Mountain if Mina is constructed.

22 We used a different approach. We used the
23 same models but we also looked at what the railroads
24 have told DOE about what their actual preferred
25 routes would be. We've looked at DOE's program
policy positions which have a so-called suite of

2 routes with multiple carriers, and the DOE does not
3 want to tell the railroads in their contracts which
4 routes to use.

5 Bottom line is our method concludes that it

6 could be up to 45 percent of the shipments through
7 Reno if Mina is developed. And it's one of the
8 things that we hope we can get DOE to take another
9 look at when they do the final EIS, that, in fact,
10 there's usually a range of answers to these questions
11 rather than a single answer.]

8

[Secondly, DOE has appropriately described
12 what they call the radiological region of influence,
13 the area one half mile, or 800 meters, on each side
14 of the centerline of the rail alignment, and that's
15 the area where most of the impacts, the radiological
16 impacts are concentrated.
17

18 We believe they need to extend that concept
19 and look at the radiological region of influence
20 along the existing lines that come in from the east
21 and west that would supply shipments to the spur.
22 And you'll find that tens of thousands of Nevadans
23 live within that half mile area across Northern
24 Nevada. In fact, many of them live in this region.
25 One area we've looked at closely is Sparks, and there

1 are about 22,000 people living within a half mile of
2 the rail line.

3 Third, I have a picture, and you can see it
4 poorly on the handout, sometimes there are unique
5 local conditions that are really unique. One of them
6 on the northern route here is the Union Pacific Rail
7 Trench through Reno.

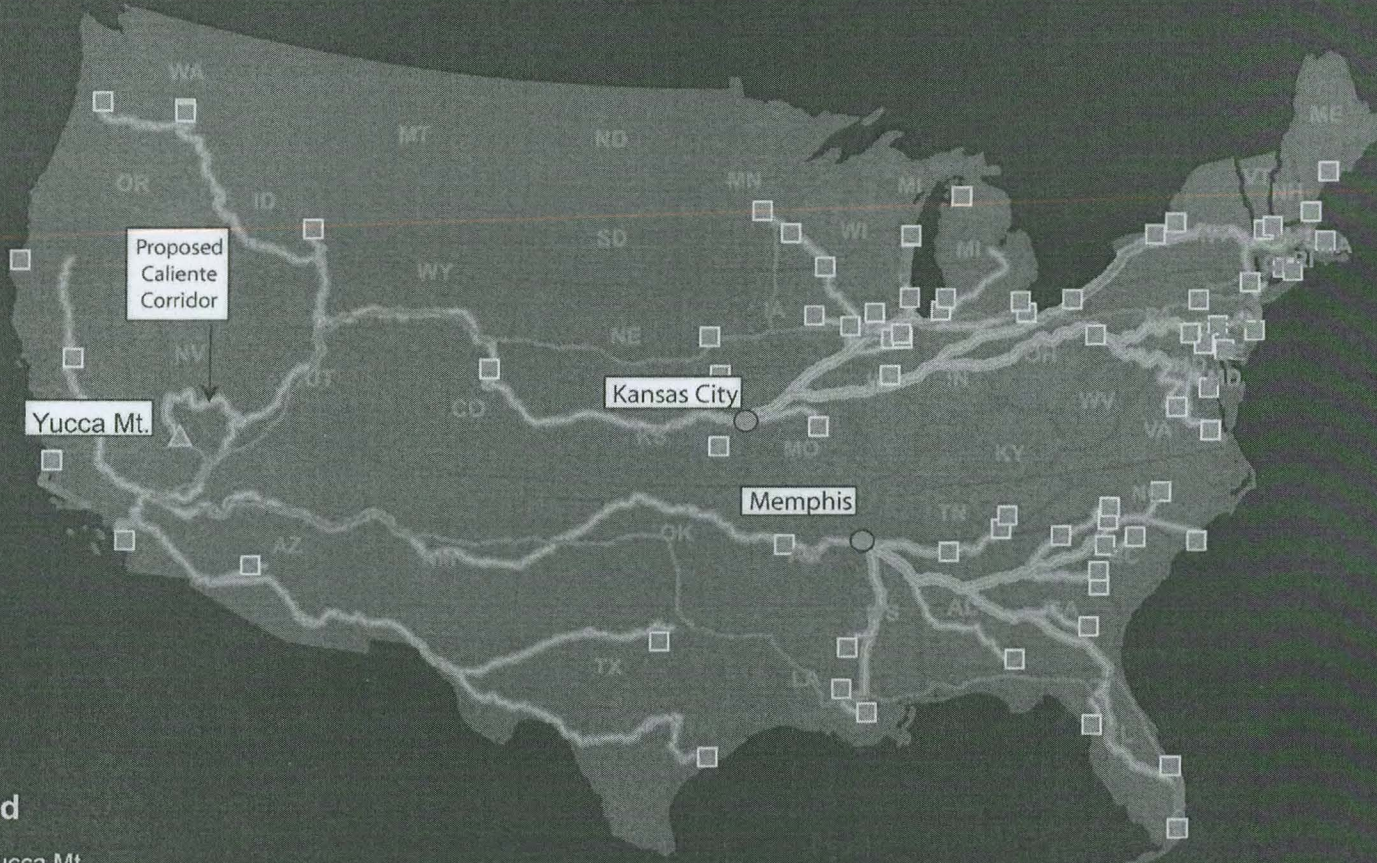
8 Now, I don't know exactly how shipments

9 through that trench would affect routine doses to
10 workers and the public. I don't know exactly how it
11 would affect stigma perceived risk impacts, impacts
12 on downtown tourism. I don't know exactly how it
13 would affect accident security and emergency response
14 planning, the probability and consequences the
15 accidents are terrorist attacks, but I do know that
16 it's an example of the kind of unique local condition
17 that DOE has to look at in the draft EIS.

18 I make this point because DOE says
19 specifically in the EIS that they don't have to look
20 at human factors, human errors, and they don't have
21 to look at unique local conditions because the
22 approach they take in the generic accident analysis,
23 the buzz word we use in the business is bounds the
24 risks and impacts. I don't think that's always the
25 case. I think the Reno rail trench is a good example
of a unique local condition that needs to be added.]

2 We will, of course, be submitting detailed
3 comments on all these issues to the department. We
4 urge everyone who is concerned about this to also
5 take that opportunity and get their written comments
6 in by January 10th. Thank you very much.

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.